# REPORT FOR AN INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT 

FOR THE SOUTH BEND AREA A PROPERTIES

Located at: SOUTH OF SAMPLE STREET, EAST OF PRAIRIE AVENUE, NORTH OF CONRAIL, AND WEST OF FRANKLIN STREET SOUTH BEND, INDIANA

Prepared for: THE CITY OF SOUTH BEND DEPARTMENT OF COMMUNITY AND ECONOMIC DEVELOPMENT 1200 COUNTY-CITY BUILDING SOUTH BEND, INDIANA 46601

FEBRUARY 2002

VOLUME 1
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### 1.0 INTRODUCTION

### 1.1 General

Hull \& Associates, Inc. (Hull) was retained by the City of South Bend Department of Community and Economic Development (City) to complete an initial Phase II Environmental Site Assessment (ESA) for the Area A properties of the Studebaker Corridor. This assessment was conducted as part of a beneficial reuse study for Area $A$ and to investigate recognized environmental conditions (RECs) that were identified during a Phase I ESA (Hull Document \#SBI002.100.0001) for Area A, completed by Hull in January 2001.

Work for the initial Phase II ESA was conducted in general conformance with the initial Phase II ESA Work Plan (Hull Document \# SBIO02.100.0003) that was prepared in December 2000. The initial Phase II ESA Work Plan was prepared, and field work was performed, consistent with Indiana Department of Environmental Management's (IDEM's) Voluntary Remedial Program (VRP) guidance and a Quality Assurance Project Plan (QAPP) dated August 2001 (Hull Document \# SBI002.300.0008). Following completion of fieldwork and due to a variety of circumstances, the City elected to evaluate risk at the Site consistent with Indiana's Risk Integrated System of Closure (RISC) non-rule policy. For this reason, the scope of work completed at the Site slightly differs from protocols recommended under RISC. Hull has made an attempt to point out these differences where applicable in this report.

### 1.2 Site History

Area A, shown on Figure 1, comprises four contiguous properties that occupy approximately 88 acres. The properties are located south of Sample Street, east of Prairie Avenue, north of Conrail and west of Franklin Street. The properties included in Area A are the Underground Pipe \& Valve property located at 1100 Prairie Avenue, the Huckins Tool \& Die property located at 1010 Prairie Avenue, the South Bend Lathe property located at 400 West Sample Street and the Allied Products Corp. property located at 601 West Broadway Street. Cumulatively, these properties make up Area A.

The above properties have been historically used as a lumber yard and in the manufacturing and supplying parts for the automobile industry. Operations under the Studebaker Corporation began as early as 1927 and consisted of a foundry and manufacturing facilities. During subsequent years, numerous buildings were added to the Facility. Operations of the properties,
apparently ceased in the early 1960's and the majority was subdivided and sold to Mr. Jay Huckins, ARG Corporation (South Bend Lathe), Allied Products Corporation, and Cummins Engine Co, Inc.

Based on the Phase I ESA Report, the following RECs were revealed:

RECOGNIZED ENVIRONMENTAL CONDITIONS

| REC | REC ITEM | POTENTIAL CHEMICALS OF CONCERN |
| :---: | :---: | :---: |
| Huckins Tool \& Die Property(Property A) |  |  |
| A1 | 10,000-gallon UST reportedly stored oil was located on the north portion of the Huckins Tool \& Die property | Total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs) |
| A2 | Drywell located north of the Huckins building | VOCs, semivolatile organic compounds (SVOCs), TPH, metals |
| A3 | 10,000-gallon UST reportedly stored oil was located near the exterior northeast corner of the Huckins Tool \& Die building | TPH, VOCs |
| A4 | Drywell located east of the east building addition | VOCs, SVOCs, TPH, metals |
| A5 | Dust collector and metal shavings located at the exterior southwest corner of the east building addition | metais, VOCs |
| A6 | 5,000-gallon UST reportedly stored gasoline is located east of the south portion of the building | TPH, VOC, lead |
| A7 | Former hydraulic lift located centrally in the Huckins Tool \& Die building | TPH, VOCs, PCBs |
| A8 | Former rails located on the east portion of the property | metals, SVOCs |
| Underground Pipe \& Valve Property (Property B) |  |  |
| B1 | 500-gallon UST reportedly stored gasoline, located north of the west portion of the main building | TPH, VOCs, lead |
| B2 | 10,000-gallon UST reportedly stored fuel oil, located north of the east portion of the main building | TPH, VOCs |
| B3 | Three, 10,000-gallon core oil tanks located north of the east portion of the main building | TPH, VOCs |
| B4 | A pit with a steel-plate cover located northwest of the former pumphouse | TPH, VOCs, SVOCs |
| B5 | Former rails located on the east and north portions of the property | metals, SVOCs |
| B6 | Two outfalls from the direction of the facility to the reservoir located on the southwest portion of the property | metals, VOCs, SVOCs |
| B7 | Half-buried metal structure (potential tank) located in the east wall of the reservoir | VOCs, TPH, lead |
| B8 | Numerous pits located inside the foundry filled with wood and metal debris | VOCs, SVOC,s metals |


| REC | REC ITEM | POTENTIAL CHEMICALS OF CONCERN |
| :---: | :---: | :---: |
| Underground Pipe \& Valve Property (Property B) (cont.) |  |  |
| B9 | Bins with sand and potential historic coke pits located at the eastern portion of the Underground Pipe \& Valve building | metals, VOCs, SVOCs, TPH |
| B10 | Four historic ASTs located at the south end of the Underground Pipe \& Valve building | metals, VOCs, SVOCs, TPH |
| South Bend Lathe (Property C) |  |  |
| C1 | 2 5,000-gallon USTs with unknown contents located east of the southern portion of the building | VOCs, SVOCs, metals, TPH |
| C2 | 3,000-gallon gasoline tank located south of the Engineering Building | VOCs, SVOCs, TPH, lead |
| C3 | 2 8,000-gallon USTs of unknown contents located south of the Engineering Building | VOCs, SVOCs, metals, TPH |
| C4 | 25,000 -gallon USTs reportedly containing motor oil, located south of the eastern portion of the building | VOCs, SVOCs, TPH |
| C5 | 20,000-gallon UST reportedly containing fuel oil, located north of the AEP property | VOCs, SVOCs, TPH |
| C6 | 2 20,000-gallon USTs reportedly containing fuel oil, located west of the AEP property | VOCs, SVOCs, TPH |
| C7 | Heavy oil staining by the trash bin containing metal shavings and associated catch basin | VOCs, SVOCs, metals, TPH |
| C8 | Oil staining by the wood bins located east of the chip house on the south side of the main building and associated catch basin | VOCs, SVOCs, metals, TPH |
| C9 | Areas of stressed vegetation and bare soil located between the AEP property and the metal storage building | VOCs, SVOCs, metals, TPH |
| C10 | 6,000-gallon UST reportedly containing waste oil, located south of the west portion of the building | VOCs, SVOCs, TPH |
| C11 | Former rails located on the west and east portions of the property | metals, SVOCs |
| C12 | Pit located in the heat treat room located in the south portion of the main building | VOCs, SVOCs, metals |
| C13 | Potential releases from PCB-containing transformers located in the building | PCBs |
| Allied Products Corporation Property (Property D) |  |  |
| D1 | 20,000-gallon UST reportedly containing heating oil located near the northwest corner of Building 78 | VOCs, SVOCs, TPH |
| D2 | Potential UST of unknown size and contents located south of Building 78 approximately 130 ft . west of the southeast corner of the building | VOCs, SVOCs, metals, TPH |
| D3 | 10,000-gallon enamel reducer tank (removed), located on the northeast portion of the property | VOCs, SVOCs, TPH |
| D4 | Former and current rails located on the property | metals and SVOCs |
| D5 | 6,000-gallon enamel reducer tank, located west of the south end of Building 79 | VOCs, SVOCs, TPH |


| REC | REC ITEM | POTENTIAL CHEMICALS OF CONCERN |
| :---: | :---: | :---: |
| Allied Products Corporation Property (Property D)(cont.) |  |  |
| D6 | Tank farm formerly comprised ten USTs reportedly containing gasoline and kerosene | VOCs, SVOCs, TPH, lead |
| D7 | Catch basin with an oily sheen located west of Building 80 | VOCs, TPH |
| D8 | 4 4,000-gallon USTs reportedly containing trichloroethene and fuel oil locate west of Building 86 | VOCs, SVOCs, TPH |
| D9 | 5,000-gallon UST reportedly containing gasoline, located east of the central portion of Building 86 | VOCs, SVOCs, TPH, lead |
| D10 | 5,000-gallon UST reportedly containing diesel fuel, located east of Building 93 | VOCs, SVOCs, TPH |
| D11 | Potential releases from PCB-containing transformers | PCBs |
| D12 | Press pits with petroleum product located inside building 80 | VOCs, TPH, metals |
| D13 | Oil change pit located near the northeast corner of Building 93 | VOCs, TPH |
| D14 | Former die wash area located at the south end of Building 142 | VOCs, TPH, SVOCs |
| D15 | Press pits with petroleum product located in Building $142$ | VOCs, TPH, SVOCs |
| D16 | Press pits with petroleum product located in Building 86 | VOCs, TPH, SVOCs |
| D17 | Three potential drywells located in the southern portion of Building 79. | VOCs, TPH, SVOCs, metals |
| D18 | Potential releases from ASTs and 55-gallon drums located south of Building 93. | VOCs, TPH, SVOCs |
| D19 | Potential releases from ASTs that were historically located at the south end of Building 93. | VOCs, SVOCs |

The locations of these RECs and other pertinent Site features and property usage are shown on Figure 2. A detailed description of the Site history and background is presented in the Phase I ESA (Hull document \#SBI002.100.0001).

### 1.3 Previous Environmental Site Assessments

A number of Phase I and II ESAs have been completed on Area A and adjacent properties. These investigations were reviewed as part of the Phase I ESA. It should be noted that the reviewed information is not a complete package of previous studies performed at Area A. The provided previous investigation information is discussed below. A copy of the reviewed previous reports is provided in Appendix L of the Phase I ESA.

An "Interim Phase I Environmental Site Assessment" for the Studebaker Corridor, prepared by ATEC (September 21, 1990) was reviewed for the Assessment. The report discussed the area to the east of the Site. The report states that eight USTs containing petroleum, kerosene and fuel oil are located at the Allied Products Corp. property. The report also cited the Michiana Area Council of Governments, stating that several potential sites impacting groundwater south and east of the Site include South Bend Auto Parts, Bush Auto Salvage, Steve and Jean's Junk Yard and AM General LTV. Based on'the Phase I information, an initial Phase II Study was performed under a separate cover at Lot One Site, which refers to the previous Avanti Manufacturing Plant located north of the Site where Franklin Street dead-ends into Sample Street (presently the site of the new County Detention Center). This report is discussed below.

The "Initial Phase II Final Report" for the Lot One Studebaker Corridor, prepared by ATEC in March of 1991, was reviewed for the Phase I ESA. Four groundwater-monitoring wells (MW-1 through MW-4) were installed near a U-shaped building located on the northern portion of the property. The locations of these wells are shown on Figure 3 of the report. One well was installed south and west of the U-shaped building and three wells were installed north of the Ushaped building. Soil samples were collected during the installation of the monitoring wells and were sent to a laboratory for analysis. Partial laboratory results for total heavy metals were included in the provided information. The report indicates that barium, chromium and lead were detected in the soil samples. The highest concentration of barium was detected at MW-3 at 6.7 $\mathrm{mg} / \mathrm{kg}$ (depth of 23.5 to 25.0 ft . below ground surface (bgs)). The highest concentration of chromium was detected at MW-4 at $5.8 \mathrm{mg} / \mathrm{kg}$ (depth of 21.0 to 22.5 ft . bgs). The highest concentration of lead was detected in MW-1 at $3.5 \mathrm{mg} / \mathrm{kg}$ (depth of 23.5 to 25.0 ft . bgs). Groundwater samples were also collected from the monitoring wells. Partial laboratory results for volatile organic compounds (VOCs) were included in the provided information. Four compounds were listed in the report. The highest concentration of trans-1,2-dichloroethene (trans-1,2-DCE) was detected in MW-2 at $37 \mathrm{ug} / \mathrm{L}$. The highest concentration of 1,1,1trichloroethane ( $1,1,1-\mathrm{TCA}$ ) was detected in MW-3 at $10 \mathrm{ug} / \mathrm{L}$. The highest concentration of trichloroethene (TCE) was detected in MW-2 at $<5 \mathrm{ug} / \mathrm{L}$. The highest concentration of tetrachloroethene (PCE) was detected in MW-2 at 10 ug/L. Soil boring logs were also included in the provided information for the Lot 1 Phase II Study.

A report titled "Environmental Investigation South Bend Lathe" was prepared by EIS Environmental Engineers, Inc. in July of 1992. Only portions of this report were received for this Assessment. This report was prepared to address potential impact to soil and groundwater from five USTs and an associated fuel oil piping track and to analyze possible asbestoscontaining roofing materials. Four of the USTs investigated are located on the south side of the South Bend Lathe building near the chip house. The remaining UST is located at the east portion of the South Bend Lathe property, south of the Engineering Building. The approximate locations of these USTs are shown on Figure 2. According to the report, eight borings were installed near the five tanks and soil and groundwater samples were collected from each boring location and were submitted to a laboratory. The report states that soil samples were analyzed only for total petroleum hydrocarbons (TPH), groundwater samples were analyzed for TPH and VOCs. The report also states that 24 samples of pctential asbestos-containing roofing material were collected for analysis.

Borings 1 and 2 ( $B-1$ and $B-2$ ) were installed near the waste oil UST located approximately 135 ft . east of the southwest corner of the South Bend Lathe building. The higher concentration of TPH in soil from these two borings is $10,400 \mathrm{mg} / \mathrm{kg}$ from B-2 at a depth of 16.5 to 18 ft . bgs. The higher concentration of TPH in groundwater is $124 \mathrm{mg} / \mathrm{L}$ from $\mathrm{B}-2$. Xylenes were detected in B-2 at $0.013 \mathrm{mg} / \mathrm{L}$ and $1,1-\mathrm{DCA}$ was detected in B-1 at $2.9 \mathrm{ug} / \mathrm{L}$. The following chemicals of concern (COCs) were detected in B-2; p-isopropyltoluene was detected at $24 \mathrm{ug} / \mathrm{L}$, naphthalene was detected at 20 ug/L, 1,2,4-trimethylbenzene was detected at $125 \mathrm{ug} / \mathrm{L}, 1,3,5-$ trimethylbenzene was detected at $40 \mathrm{ug} / \mathrm{L}$ and xylenes were detected at $12.5 \mathrm{ug} / \mathrm{L}$.

Borings 3 and 4 (B-3 and B-4) were installed near a 20,000-gallon fuel oil UST located southwest of the chip house on the south side of the South Bend Lathe building. TPH and benzene, toluene, ethylbenzene, and xylenes (BTEX) results were below the laboratory's detection limit. The higher concentration of 1,1-DCA was collected from B-3 at $2.0 \mathrm{ug} / \mathrm{L}$. The higher concentration of cis-1,2-DCE was collected from $B-3$ at 4.6 ug/L. The higher concentration of $1,1,1$-TCA was collected from $\mathrm{B}-3$ at $3.1 \mathrm{ug} / \mathrm{L}$ and the higher concentration of TCE was collected from B-3 at $15 \mathrm{ug} / \mathrm{L}$.

Boring 5 was installed north of the piping track and east of the previously mentioned chip house. Two soil samples were submitted from B-5 for TPH. One sample was collected 1.5 to 3.0 ft . bgs $(2,550 \mathrm{mg} / \mathrm{kg})$ and one sample was collected 16.5 to 18.0 ft . bgs ( $112 \mathrm{mg} / \mathrm{kg}$ ). Groundwater
analysis results from B-5 include the following; TPH at $0.44 \mathrm{mg} / \mathrm{L}$, toluene at $0.010 \mathrm{mg} / \mathrm{L}$, xylenes at $0.008 \mathrm{mg} / \mathrm{L}, 1,1-\mathrm{DCA}$ at $1.5 \mathrm{ug} / \mathrm{L}$, cis-1,2-dichloroethene (cis-1,2-DCE) at $3.5 \mathrm{ug} / \mathrm{L}$, 1,1,1-TCA at $1.4 \mathrm{ug} / \mathrm{L}$ and TCE at $11 \mathrm{ug} / \mathrm{L}$.

Borings 6 and 7 (B-6 and B-7) were installed near a 20,000-gallon fuel oil UST located approximately 105 ft . east of the chip house on the south side of South Bend Lathe. TPH and BTEX results of the soil and groundwater samples were below the laboratory's detection limit. Remaining VOC analytical information was either not provided or was not included in the parameter list for analysis.

Boring 8 was installed near 5,000-gallon gasoline UST located on the South Bend Lathe property, approximately $\dot{6} 0 \mathrm{ft}$. south of the Engineering Building. The only result above the laboratory's detection limit for the soil and groundwater collected from B-8 is TPH in groundwater at $0.59 \mathrm{mg} / \mathrm{L}$. Remaining VOC analytical information was either not provided or was not included in the parameter list for analysis.

A report titled "Site Remediation, 10,000-Gallon Underground Storage Tank, 32,000-gallon Cistern" was prepared by Warner \& Sons, Inc. in June of 1993 and was reviewed for this Assessment. The report states that during demolition of the Avanti building located north of Area A, a 10,000-gallon heating oil UST and a large cistern with obviously contaminated materials were encountered. The UST was removed in December of 1992 and approximately 200 cubic yards of impacted soil was excavated from near the UST. The UST reportedly stored heating oil. Less than 50 gallons of sludge were removed from the tank prior to the tank's removal. Five confirmation soil samples were collected following the removal of the UST. The samples were submitted to a laboratory and analyzed for TPH. One sample resulted in a TPH concentration of 14 PPM and the other four samples were below the laboratory's detection limit. The impacted soil was disposed of as special waste at Prairie View Landfill on April 20, 1993. An approximately 32,000-gallon cistern, located at the Avanti property, was discovered during demolition operations. A dark, oily, aqueous solution was observed in the cistern. The source of the material is unknown. On December 2, 3, and 4, 1992 and on April 20 and 22, 1993, a total of 20,432 gallons of the material were removed from the cistern and disposed of at SER Oil Services. A sample of the material was collected and analyzed for TPH, ignitability, paint filter testing, TCLP volatiles and semivolatiles, total PCBs, reactivity, cyanide, total phenolics, pH , and TCLP metals. A TPH concentration of $190,000 \mathrm{PPM}$, a barium concentration of $9.0 \mathrm{mg} / \mathrm{L}$, a
cadmium concentration of $0.15 \mathrm{mg} / \mathrm{L}$ and a lead concentration of $1.4 \mathrm{mg} / \mathrm{L}$ were detected in the sample. The concrete material associated with the cistern was also sampled prior to removal. The material was found to be a special waste and was disposed of at Prairie View Landfill on April 20 and 21, 1993. No visual impact was detected in soils adjacent to the cistern.

A letter prepared by APT in April of 1994 was reviewed for this Assessment. The letter was prepared for IDEM concerning a historic release from the four USTs located on the west end of Building 86 on the Allied Products Corp. property. The report indicates that, during the closure in-place of four USTs, Allied temporarily stored fuel oil and Studebaker reportedly used to store solvents. Soil samples were therefore collected near the USTs. These samples were submitted to a laboratory for TPH and VOC analysis. Results indicated elevated concentrations of PCE in soil near the tank. The report also indicated that no product was located in the tank prior to closure activities. The report states that IDEM incident number 94031118 was issued for the incident. No further action regarding remediation activities is stated in the letter.

A report titled "Site Investigation Report," prepared by APT in May of 1995 was reviewed for this Assessment. A portion of the report was received from the City of South Bend; however, this copy of the report did not include figures that showed the locations of the USTs that were removed from the Site (as discussed below), nor did it contain the majority of laboratory data from the on-Site investigations. A copy of what is believed to be the full report was received from IDEM on January 18, 2001. A review of the report and associated figures and laboratory data follows.

The report discusses potential releases associated with seventeen UST systems. Thirteen of the tanks were reportedly closed by Petroleum Equipment, Inc. during June 1989 to October 1991 and the remaining four tanks were closed by APT in March 1994. Ten USTs were reportedly removed from a tank farm located between Building 86 and 79. The tank farm consisted of six-10,000-gallon tanks, one-8,000-gallon tank, and three-12,000-gallon tanks that reportedly stored gasoline, kerosene and heating oil prior to closures. However, based on the age of the USTs the tanks may have stored several different materials in their lifetime. Soil samples were collected near the USTs and were sent to a laboratory and analyzed for TPH. The report stated that, based on the results of these samples, a release did not occur from this UST system. The report also stated that groundwater was not sampled in this area since it was not encountered during the UST excavation.

One 5,000-gallon UST, which was reportedly used to store gasoline, was located approximately midway along the outside of the east wall of the east building (Building 86). The report does not indicate if the tank was removed or closed in-place. Soil samples were collected near the UST and were sent to a laboratory for TPH analysis. Sample results indicated that releases had occurred from the UST and, therefore, soil was overexcavated and disposed of. Groundwater was not sampled at this time because it was not encountered during tank closure. The report does not state whether confirmatory samples were collected following excavation.

One 20,000-gallon UST that reportedly stored heating oil prior to its closure was located near the northwest corner of the west building (Building 86). The tank was abandoned in-place and soil samples were collected near the tank and sent to a laboratory for TPH analysis. It is not stated how many samples were collected; however, the report did state that two of the soil samples exhibited concentrations of TPH at $62 \mathrm{mg} / \mathrm{kg}$ and at $17 \mathrm{mg} / \mathrm{kg}$. No remedial action was discussed in association with this tank. Groundwater was not sampled at this time because it was not encountered during tank closure.

According to the report, a 10,000-gallon UST that reportedly stored mineral spirits and kerosene was removed from the Site in October of 1991. The tank was located north of the east building. Strong petroleum odors were noted during the excavation of the UST. Soil samples were collected and sent to a laboratory for TPH and VOC analysis. A sample collected from the soil stockpile produced during the excavation exhibited a TPH concentration of $6,300 \mathrm{mg} / \mathrm{kg}$ and a soil sample collected from the floor of the excavation exhibited a TPH concentration of $31 \mathrm{mg} / \mathrm{kg}$ and a 1,2,4-trimethylbenzene concentration of $1,052 \mathrm{ug} / \mathrm{kg}$. 2,264 cubic yards of soil near the tank was excavated, bioremediated, and returned to the excavation after concentrations of constituents were below the detection limit.

Four 4,000-gallon USTs historically containing PCE and fuel oil at different times of their operational use were closed in 1994. One monitoring well was installed near the tanks and one sample analyzed from the monitoring well indicated a release of PCE from the UST. The report also states that soil samples collected near the UST system confirmed a release of material with concentration of PCE and TPH. Table 1 through Table 3 in the report lists the parameter and the concentration of the respective COC. A narrative of the tables is provided below.

Samples were collected from the sidewalls and bottoms of the tank excavations and were analyzed for TPH diesel range organics (TPH-DRO). The laboratory's lower detection limit in these samples ranged from $10 \mathrm{mg} / \mathrm{kg}$ to $5,000 \mathrm{mg} / \mathrm{kg}$. Five of the sample results were above the laboratory's detection limit. Sample T4-SSE (Tank 4 south side, east end) analysis resulted in a TPH-DRO concentration of $2,300 \mathrm{mg} / \mathrm{kg}$. Sample T4-SSW (Tank 4 south side, west end) analysis resulted in a TPH-DRO concentration of $11 \mathrm{mg} / \mathrm{kg}$. Sample T4-WE (Tank 4, west end) analysis resulted in a TPH-DRO concentration of $11 \mathrm{mg} / \mathrm{kg}$. Sample T3-WE (Tank 3, west end) analysis resulted in a TPH-DRO concentration of $11 \mathrm{mg} / \mathrm{kg}$. Sample T4-NSW (Tank 4 north side, west end) analysis resulted in a TPH-DRO concentration of $3,600 \mathrm{mg} / \mathrm{kg}$.

Samples were collected from the sidewalls and bottoms of the tank excavations and were analyzed for VOCs. Acetone was detected in the samples collected from Tanks 1, 2, 3 and 4. The highest concentration of acetone detected was from sample T1-SSE (Tank 1 south side, east end) at $1,000 \mathrm{ug} / \mathrm{kg}$. Acetone was also detected in the laboratory blank indicating that the acetone concentrations may be due to a laboratory contaminant. Acetone is a typical laboratory contaminant. 2-butanone was detected in samples collected from Tanks 1, 2, 3 and 4. The highest concentration of 2-butanone detected was from sample T3-NSE (Tank 3-north side, east end) at $34 \mathrm{ug} / \mathrm{kg}$. Carbon disulfide was detected in one sample collected from Tank 4. The concentration of carbon disulfide detected was from sample T4-NSE (Tank 4-north side, east end) at $2.7 \mathrm{ug} / \mathrm{kg}$. 1,2-dichloroethene (1,2-DCE) was detected in samples collected from Tanks 3 and 4. The highest concentration of 1,2-DCE detected was from sample T3-EE (Tank 3- east end) at $8.7 \mathrm{ug} / \mathrm{kg}$. Ethylbenzene was detected in samples collected from Tanks 3 and 4. The highest concentration of ethylbenzene detected was from sample T4-NSE (Tank 4- north side, east end) at $6.1 \mathrm{ug} / \mathrm{kg}$. 2-hexanone was detected in one sample collected from Tank 4. The concentration of 2-hexanone detected was from sample T4-BE (Tank 4-bottom, east end) at 12 ug/kg. Methylene chloride was detected in samples collected from Tanks 1, 2, 3 and 4. The highest concentration of methylene chloride detected was from sample T3-NSE (Tank 3-north side, east end) at $17 \mathrm{ug} / \mathrm{kg}$. 1,1,2,2-tetrachloroethane was detected in one sample collected from Tank 1. The concentration of 1,1,2,2-TCA detected was from sample T1-SSE (Tank 1south side, east end) at $610 \mathrm{ug} / \mathrm{kg}$. PCE was detected in samples collected from Tanks 1,2,3 and 4. The highest concentration of PCE detected was from sample T2-SSE (Tank 2- south side, east end) at $72,000 \mathrm{ug} / \mathrm{kg}$. Toluene was detected in samples collected from Tanks 3 and 4. The highest concentration of toluene detected was from sample T4-NSE (Tank 4- north side, east end) at $7 \mathrm{ug} / \mathrm{kg}$. TCE was detected in samples collected from Tanks 3 and 4. The highest
concentration of toluene detected was from sample T3-EE (Tank 3- east end) at $6.8 \mathrm{ug} / \mathrm{kg}$. Total xylenes were detected in samples collected from Tanks 3 and 4. The highest concentration of xylenes detected was from sample T4-NSE (Tank 4-north side, east end) at 24 $u g / \mathrm{kg}$. No other VOCs were detected above the laboratory's detection limit.

Samples were collected from the sidewalls and bottoms of the tank excavations and were analyzed for semivolatile organic compóunds (SVOCs). Benzo (a) pyrene was detected in one sample collected from Tank 1 (T1-NSW-north side, west end) at $59 \mathrm{ug} / \mathrm{kg}$. Benzo (b) fluoranthene was detected in one sample collected from Tank 1 (T1-NSW-north side, west end) at $94 \mathrm{ug} / \mathrm{kg}$. Benzo(ghi)perylene was detected in one sample collected from Tank 1 (T1-NSWnorth side, west end) at $55 \mathrm{ug} / \mathrm{kg}$. Benzo (k) fluoranthene was detected in one sample collected from Tank 1 (T1-NSW-north side, west end) at $53^{\prime}$ 'ug/kg. Bis(2-ethylhexyl)phthalate was detected in samples collected from Tanks 1 and 4. The highest concentration of bis(2ethylhexyl)phthalate detected was from sample T4-BW (Tank 4- bottom, west end) at 2,900 ug/kg. Carbazole was detected in one sample collected from Tank 1 (T1-NSW-north side, west end) at $35 \mathrm{ug} / \mathrm{kg}$. Chrysene was detected in samples collected from Tanks 1 and 3. The highest concentration of chrysene detected was from sample T3-NSE (Tank 3-north side, east end) at $930 \mathrm{ug} / \mathrm{kg}$. Di-n-butyl phthalate was detected in samples collected from Tanks 1, 2, 3 and 4. The highest concentration of di-n-butyl phthalate detected was from sample T3-NSW (Tank 3- north side, west end) at $480 \mathrm{ug} / \mathrm{kg}$. Diethyl phthalate was detected in one sample collected from Tank 2 (T2-SS-south side) at $42 \mathrm{ug} / \mathrm{kg}$. Fluoranthene was detected in one sample collected from Tank 1 ( $\mathrm{T} 1-\mathrm{NSW}$-north side, west end) at $160 \mathrm{ug} / \mathrm{kg}$. Indeno ( $1,2,3-\mathrm{cd}$ ) pyrene was detected in one sample collected from Tank 1 (T1-NSW-north side, west end) at 53 $\mathrm{ug} / \mathrm{kg}$. Phenathrene was detected in samples collected from Tanks 1,3 and 4. The highest concentration of phenathrene detected was from sample T4-SSE (Tank 4- south side, east end) at $2,100 \mathrm{ug} / \mathrm{kg}$. Pyrene was detected in samples collected from Tanks 1 and 3. The highest concentration of pyrene detected was from sample T3-NSE (Tank 3- north side, east end) at $670 \mathrm{ug} / \mathrm{kg}$. No other SVOCs were detected above the laboratory's detection limit.

The report also discusses the hydrogeology of the area, stating that, according to referenced materials, there is a shallow, unconfined aquifer located approximately 25 ft . bgs and a generally confined deep aquifer located approximately 100 ft . bgs. The report states that based
on on-Site investigations, a single, unconfined aquifer underlies the facility from ground surface to approximately 76 ft . bgs, followed by a 37 ft . thick interval consisting of interbedded till and sand/gravel units down to bedrock, which occurs at approximately 113 ft . bgs.

As part of the Phase II investigation performed at the Allied Products Corp. property, 24 shallow monitoring wells, 17 deep monitoring wells and nine soil borings were installed on the property. Shallow wells were screened at the water table (approximately 25 ft . bgs) and deep wells were screened at approximately $40-45 \mathrm{ft}$. bgs at a stained interval identified during previous investigations.

A summary of the soil analysis results follows:

1. six of the 71 soil samples analyzed for TPH exceeded the IDEM LUST cleanup objective of $100 \mathrm{mg} / \mathrm{kg}^{1}$, the highest of which was $39,000 \mathrm{mg} / \mathrm{kg}$ in MW1D at 38 ft . bgs; the remaining exceedences were $930 \mathrm{mg} / \mathrm{kg}$ (MW-2 at 21 ft . bgs), 320 $\mathrm{mg} / \mathrm{kg}$ (MW-7 at $40 \mathrm{ft} . \mathrm{bgs}$ ), $290 \mathrm{mg} / \mathrm{kg}$ (MW20D at $42 \mathrm{ft} . \mathrm{bgs}$ ), $2,300 \mathrm{mg} / \mathrm{kg}$ (T4SSE) and 3,600 mg/kg (T4-NSW);
2. VOCs were detected in 46 of the 47 soil samples collected and two VOC constituents were detected in concentration that exceeded the VRP Tier II cleanup objectives ${ }^{2}$. The PCE cleanup objective of $8,010 \mathrm{ug} / \mathrm{kg}$ was exceeded in six samples, and the 1,1,2,2-tetrachloroethane cleanup objective of $210 \mathrm{ug} / \mathrm{kg}$ was exceeded in one of the samples; and,
3. none of the 73 soil samples analyzed for SVOCs exceeded the IDEM LUST nor the VRP Tier II cleanup objectives.

A summary of the groundwater analysis results follows:

1. thirty-four of the 68-groundwater samples were analyzed for TPH and the 18 samples that exhibited concentrations of TPH were above the IDEM LUST cleanup objective of $100 / \mathrm{ug} / \mathrm{L}^{3}$. These samples were collected from MW-E, MW2, MW-3, MW-4, MW-12, MW-7, MW-23S, MW-13S, MW-13D, MW-15S, MW15D, MW-11D, MW-16D, MW-18D, MW-20D, MW-22;

[^0]2. forty of the 43-groundwater samples analyzed for VOCs exhibited concentrations of one or more VOCs. Two constituents of VOCs were detected in concentrations that exceeded the VRP Tier II cleanup criteria ${ }^{4}$. PCE was detected at concentrations that exceeded this criteria in eight samples (MW-1, MW-2, MW-6, MW-13-GW1, MW13D-GW1, MW-15D-GW1, and MW15-GW2). Vinyl chloride was detected in MW17S-GW1 that exceeded the cleanup criteria of $10 \mathrm{ug} / \mathrm{L}$. The concentration of this sample was not provided; and,
3. twenty-one of the 26 groundwater samples analyzed for SVOCs exhibited concentrations of one or more SVOC. Two SVOC constituents were detected in concentrations that exceeded the VRP Tier II cleanup criteria ${ }^{4}$. Bis(ethylhexyl)phthalate was detected at a concentration of $300 \mathrm{ug} / \mathrm{L}$. APT stated that they believe this is a laboratory contaminant. Pentachlorophenol was detected in MW-3 at a concentration of $82 \mathrm{ug} / \mathrm{L}$. This well was then resampled and Pentachlorophenol was not detected.

A portion of a Phase II report prepared by EIS Environmental Engineers, Inc. was made available for review for this Assessment. The report was prepared in August of 1995 and includes two figures. The first figure shows groundwater flow on the properties east of the Site to be towards the northeast. The second figure shows groundwater analytical results of monitoring wells installed off-Site northeast of the Site properties. Elevated concentrations of PCE and TCE were detected in the closest downgradient well to the Site.

A letter prepared by ATEC Associates, Inc. in January of 1996 summarizes the findings of the APT report that was prepared in 1995. It is likely that this is the same report that was reviewed for this Assessment and is summarized previously in this report.

A letter report provided for review included an April 1998 letter prepared by EIS Environmental Engineers, Inc. The cover letter includes a brief narrative describing groundwater sampling and analysis and well abandonment at the Avanti facility, a summary of analytical results, laboratory analytical results, the chain-of-custody for the samples, field sampling forms, and IDNR water well records documenting well abandonment. The letter stated that three of the four wells located on the Avanti property were abandoned and the fourth well was not located. The wells were installed by ATEC in November 1990. Sampling conducted prior to well abandonment indicates that VOCs in the submitted samples were below the laboratory's detectable limit. VOCs was the only parameter analyzed. Field forms for wells 1 and 2 indicate an odor was

[^1]detected during the well abandonment. The type of odor was not specified. One figure was included that showed the location of monitoring wells on the Avanti property located north of Area A.

A report prepared by Grauvogel \& Associates in April of 2000 was reviewed for this Assessment. The report discusses the removal of three USTs and the closure in-place of one UST on the Engineering Building property located adjacent to the west of South Bend Lathe and northeast of Allied Products. Two 8,000-gallon USTs and one 5,000-gallon UST that historically stored gasoline were removed from the property in January of 2000. One 1,500-gallon UST that historically stored, at different periods, lubrication oil and mineral spirits. The 1,500-gallon UST was reportedly closed in-place due to its close proximity to a building foundation. No visual signs of leakage were noted near any of the tanks during excavation. The exca;iated tanks were observed for corroded areas where product might have escaped the tank. No such areas were noted. Approximately 150 gallons of mineral spirits were removed from the 1,500 -gallon UST prior to closure. Approximately 1,120 gallons of water was removed from one of the $8,000-$ gallon USTs and approximately 8,000 gallons of water with trace gasoline was removed from the other 8,000-gallon UST prior to removal. Approximately 5,000 gallons of water with trace gasoline was removed from the 5,000 -gallon UST prior to removal. One excavation was created to remove the two 8,000 -gallon USTs and to expose the 1,500 -gallon UST (east excavation) and another excavation was created to remove the 5,000-gallon UST (west excavation). Groundwater was not encountered during excavation. Soil samples were collected from both excavations. Soil samples from the east excavation were analyzed for lead and TPH. The highest result of lead was collected from the north portion of the west wall at 119 $\mathrm{mg} / \mathrm{kg}$. All TPH results were below the laboratory's detectable limit of $20 \mathrm{mg} / \mathrm{kg}$. All TPH results from the west excavation were below the laboratory's detectable limit of $20 \mathrm{mg} / \mathrm{kg}$. Five samples of the excavated soil was collected and found to be below the laboratory's detectable limit of $20 \mathrm{mg} / \mathrm{kg}$. The excavated soil was returned to the excavation and additional backfill was brought in to return the excavations to grade. One sample was collected from the additional fill material required and was found to be below the laboratory's detectable limit of $20 \mathrm{mg} / \mathrm{kg}$. Additional sampling is recommended for the area of the closed USTs to address the potential for the presence of VOCs and SVOCs.

### 2.0 STATEMENT OF WORK

### 2.1 Phase II Environmental Site Assessment Work Plan

The statement of work and objectives of the Phase II ESA are presented in the Work Plan and Field Sampling and Analysis Plan for a Phase II ESA (Hull Document \#SBI002.100.0003) that was prepared for the City prior to the initiation of field activities. This work plan contained descriptions of the sampling rationale and methods for soil and groundwater investigation during the Phase II ESA.

The Work Plan assumed that environmental data collected as part of the assessment will be compared with Indiana RISC default closure levels. It is Hull's understanding that the Site will be developed for a future commercial/Industrial land use. RIS default closure levels for soils have therefore been considered to be applicable to commercial and industrial land use assumptions. Groundwater analytical data have been compared with closure levels assuming both commercial/industrial and residential land uses. Residential closure levels have been included in the evaluation as the downgradient extent of the COC has not been determined at the time this report was completed. Additional data collected downgradient of the Site would support the determination of applicable closure levels for the off-Site receptors.

### 2.2 Site-Specific Health and Safety Plan

Prior to initiation of the Phase II ESA field activities, Hull prepared a Health and Safety Plan (Hull Document \#SBI001.100.0010) in general conformance with IDEM's Site Safety Plan requirements.

### 2.3 Quality Assurance Project Plan

The field work was performed consistent with U.S. EPA Region V requirements, the Indiana Department of Environmental Management's (IDEM's) VRP Program, and the U.S. EPAapproved Quality Assurance Project Plan (QAPP) dated August 2001 (Hull Document \# SBI002.300.0008).

### 3.0 SITE CHARACTERIZATION INVESTIGATION

### 3.1 Baseline Ecological Assessment

The Site is located within the City of South Bend corporate limits in an urban (commercialized and residential) area. The storm water runoff for Area A is largely controlled by the Site's internal drainage system. Storm water collected by this system is then diverted to the City's combined sanitary and storm sewer system. An apparent retention basin that is located west of the building at the former Studebaker foundry (currently Underground Pipe \& Valve - Property B). Based on observations during the Phase I and II ESA, it appears that this basin is used to management storm water from the roof drain system of the foundry. The nearest surface water body is the St. Joseph River, which is located approximately 1.5 miles northeast of the Site. Based on moderate concentrations of the COC in the subsurface and groundwater at the Site, the potential threat to aquatic wildlife and the river is limited.

There are no wetland areas, riparian areas, or other environmentally sensitive areas on, or adjacent to the Site. The locations of floodplain and wetland areas are described and mapped in the Phase I ESA Report. Environmental conditions at the Site do not appear to represent a threat to the local wildlife or potential endangered species.

### 3.2 Background Concentrations

Hull did not establish background concentrations for soils given the fact that risk-based cleanup goals were available for comparison to sampling data and considering that past industrial activities over most of the surrounding areas. As described in section 3.4, concentrations of the COCs in soil are evaluated based on RISC default closure levels consistent with the intended final use of the Site.

Hull evaluated background concentrations for groundwater based on the analytical results from an upgradient monitoring well. These analytical data, as described in section 3.5, are used to evaluate if the detected concentrations in on-Site wells are from releases on-Site, or are the result of migration onto the Site from on upgradient source.

### 3.3 Background Hydrogeologic Assessment

The Site is located along the southern edge of the Michigan Basin and northeast of the Kankakee Arch that separates the Illinois and Michigan Basins. The surface and near-surface
geology is part of the Kankakee Lowland. This area is characterized by fine-grained Holocene alluvium overlying the outwash sand and gravel deposit, which in turn overlies lacustrine silty clay materials. These unconsolidated materials are approximately 20 to 400 ft . thick, overlying the Devonian Age Ellsworth Shale. The Ellsworth Shale is described as predominantly green marine shale.

The Site lies above the St. Joseph Aquifer System, a highly productive aquifer capable of yielding greater than 250 gallons per minute. The St. Joseph Aquifer System is primarily composed of fine to medium sand with layers of sand and gravel. These granular deposits range in thickness from 20 to 400 ft . Groundwater is typically encountered at depths ranging from 15 to 75 ft . bgs. The regional groundwater flow within the aquifer system is to the northeast at a hydraulic gradient of $0.005 \mathrm{ft} / \mathrm{ft}$ and generally follows the surface topographic expression. The St. Joseph River appears to be the local discharge area for groundwater. Recharge to the aquifer system is primarily through the vertical percolation of the rain through the highly permeable subsurface. Therefore, the aquifer would be highly susceptible to releases of contaminants at the surface.

According to reviewed publications, thin ( 3 to 5 ft . thick) silty clay layers are interspersed within the aquifer and moderately thick deposit of the glacial tills separate the upper sand and gravel aquifer from the lower more productive sand and gravel aquifer. Based upon review of available information, there are no faults beneath, or within the vicinity of the Site.

Geologic information obtained from continuously sampled soil borings and monitoring wells indicate that subsurface soils and the aquifer consist of predominantly medium sand with secondary percentages of gravel and fines (clay and silt). Groundwater in the aquifer was encountered at depth ranging from approximately 20 to 27 ft . bgs. Beneath the aquifer unit, a low permeability layer unit was encountered at a number of deep monitoring well locations. Where present, this unit was encountered at depths ranging from approximately 60 to greater than 120 ft . bgs. In some areas, the unit was described as grey and brown dense sandy silt that was noted as being damp. In other areas, the unit was described as being a dense, grey and brown silty clay with secondary percentage of sand and gravel. Note that this unit was not fully penetrated to preclude creating a pathway to potential lower water bearing zones.

### 3.4 Phase II Environmental Site Assessment Sampling Methodology

The Phase II ESA was designed to evaluate the concentrations of COCs (in surface and subsurface soils and groundwater) and to characterize the geologic and hydrogeologic conditions beneath the Site. Field activities included the installation of the numerous groundwater monitoring wells and soil borings. The locations of these soil borings and monitoring wells are shown on Figure 3. Selected soil borings and monitoring wells were continuously sampled using 24 -inch split-spoon samplers that were decontaminated between each sampling interval. Monitoring wells were installed in boreholes created by advancing 4.25 inch, inside-diameter (ID), hollow stem augers. The wells were constructed of two-inch ID Schedule 40 PVC screen and casing. Soil boring logs and monitoring well construction diagrams are provided in Appendix A. Construction information for the monitoring wells is summarized in Table 1.

As stated in the Initial Phase II ESA work plan, the objectives of the soils investigations were to:

1. evaluate the stratigraphy and textural characteristics of the vadose zone and the unconfined aquifer;
2. collect soil samples and conduct geotechnical analyses to evaluate contaminant transport characteristics;
3. provide initial data to demonstrate the completeness or incompleteness of potential exposure pathways of identified COCs; and,
4. collect soil samples from identified REC areas and additional areas for chemical analyses to evaluate the absence/presence and concentration of COCs.

To address these objectives, continuous sampling was completed at 32 shallow direct-push borings (to a depth of four ft. bgs), five shallow soil borings, and at selected shallow and deep monitoring well locations to characterize the vadose zone stratigraphy and potential exposure pathways. Note that when nested wells were installed, only the deeper of the borings was continuously sampled.

To evaluate the horizontal and vertical extent of COCs in the vadose zone, 98 discrete samples (excluding quality assurance/quality control (QA/QC) samples) were submitted to the analytical laboratory for analyses. In addition, six samples were submitted to a geotechnical laboratory to evaluate the textural composition and physical properties of the unsaturated soils.

The objectives of the groundwater investigation were to:

1. assess the location and stratigraphy of the unconfined aquifer(s) and the presence or absence of confining layers in the unconsolidated material;
2. determine the nature and concentrations of COCs in groundwater;
3. evaluate the groundwater yield and hydraulic characteristics of the unconsolidated aquifer; and,
4. evaluate the general flow direction and gradient of groundwater.

These objectives were achieved by installing 26 shallow monitoring wells, 9 intermediate monitoring wells, and 21 deep monitoring wells. Continuous sampling of the saturated portion of the unconfined aquifer was completed in selected deep monitoring well locations, and at selected intermediate monitoring well locations where no deep monitoring wells were proposed. In addition, continuous sampling of the upper portion of the unconfined aquifer was completed when only a shallow monitoring well was installed.

The newly installed monitoring wells were properly developed in accordance with procedures described in the Initial Phase II ESA Work Plan. Field data sheets for the well development activities are provided in Appendix B.

To determine the extent of COCs in the unconfined aquifer, 72 representative groundwater samples were collected from the newly installed monitoring wells and from selected existing monitoring wells installed by APT, Inc. Field data sheets documenting that the groundwater samples were collected consistent with the procedures in the Work Plan are provided in Appendix C. In conjunction with the groundwater sampling event, static water levels were collected to evaluate horizontal and vertical groundwater flow.

Detailed descriptions of the investigative and sampling rationale, soil and groundwater sampling methods, analytical methods for soil and groundwater, and QA/QC protocols are provided in the Work Plan for a Phase II ESA (Hull Document \# SBI002.100.0003) and the QAPP (Hull Document \# SBI002.300.0008). This Work Plan was prepared prior to completing the field work for the Initial Phase II ESA. Adherence to the procedures in the Work Plan and QAPP provided for collection of representative soil and groundwater samples.

### 3.5 Phase II Environmental Site Assessment Results

### 3.5.1 Sample Analysis Results

Soil
Hull selected at least one representative soil sample from the soil borings and monitoring wells for laboratory analysis based on the results of photoionization detector (PID) headspace screening or by evidence (staining, odors, etc.) of the presence of COCs as observed in the field. If a boring or well did not exhibit any evidence of COCs, Hull submitted the sample from the upper two ft. of the soil column to TestAmerica Laboratories for analysis. In cases where field screening and/or visual observation identified the potential presence of COCs, Hull submitted two soil samples from a boring or well to evaluate the vertical extent of the potential contaminants. In addition to the soil samples, Hull collected trip and field blanks, duplicate samples, and matrix spike/matrix spike duplicate (MS/MSD) samples for submittal to the laboratory as QA/QC measure. During collection, handling, and transportation of these samples, Hull maintained strict chain-of-custody protocols to protect the chemical integrity of the soil samples. Laboratory analytical reports for the soil samples and QA/QC samples along with the chain-of-custody documents are included in Appendix D .

These soil analytical data generated during the course of this investigation were evaluated in accordance with the procedures described in the QAPP. These data were determined to meet the substantive requirements for the precision, accuracy, representativeness, completeness, and comparability (PARCC). An evaluation of field blank (equipment rinseate) samples result indicate that the field decontamination procedures were effective since no target analytes were detected in any of the field blank samples. Similarly, target analytes were not detected in any of the trip blank samples.

Analytical data generated by the subcontracted laboratory were evaluated in accordance with the QAPP. Specifically, laboratory QA/QC samples (i.e., replicates, MS/MSD, calibration checks, etc.) were performed in strict accordance with laboratory's Standard Operating Procedures (SOPs) that were included as Appendix A of the QAPP. Any deviations were clearly indicated in the case narrative for each sample delivery group and the analytical results were qualified as appropriate. Upon receipt, Hull's Quality Assurance Officer reviewed analytical data generated by the laboratory subcontractor prior to distribution. The analytical
reports with case narratives and QC summaries for the soil samples have been included as Appendix D of this report. Level 4 data packages (CLP-like deliverables) were prepared for each sample delivery group and are available upon request.

Tables 2 and 5, summarizes the analytes that were detected above respective method detection limits for the surface soils (i.e., 0 to 0.5 ft . bgs) and subsurface soils (i.e., $>0.5 \mathrm{ft}$. bgs and above the water table smear zone). In addition, Table 2 provides a summary of applicable RISC commercial/industrial default closure levels. These data are also shown on Figure 4 to illustrate the distribution of COCs that exceed RISC commercial/industrial closure levels. As summarized in Tables 2 and 5, COCs at the Site that exceed RISC Commercial/Industrial default closure levels include:

Metals

1. arsenic;
2. cadmium;
3. chromium; and,
4. lead.
sVOCs
5. benzo(a)anthracene;
6. benzo(a)pyrene;
7. benzo(b)fluoranthene;
8. chrysene;
9. dibenzo(a,h)anthracene; and,
10. indeno(1,2,3-cd)pyrene.
vOCs
11. PCE.

Arsenic was detected in 33 samples at concentrations ranging from $3.4 \mathrm{mg} / \mathrm{kg}$ at SB- 6 to 114 $\mathrm{mg} / \mathrm{kg}$ at HA-3. Arsenic exceeded the RISC Commercial/Industrial default closure level of 20 $\mathrm{mg} / \mathrm{kg}$ at 10 locations with concentrations ranging from $21.4 \mathrm{mg} / \mathrm{kg}$ at $\mathrm{HMW}-22 \mathrm{D}$ to $114 \mathrm{mg} / \mathrm{kg}$
at HA-3. Locations where arsenic concentrations exceed closure levels are shown on Figure 4 and are summarized in Table 5. The source of the elevated arsenic concentrations is probably the former railroad spurs and ties.

Cadium was detected in five samples at concentrations ranging from $2.0 \mathrm{mg} / \mathrm{kg}$ at $\mathrm{GB}-19$ to $89.2 \mathrm{mg} / \mathrm{kg}$ at GB-10. Cadium exceeded the RISC Commercial/Industrial default closure level of $77 \mathrm{mg} / \mathrm{kg}$ at GB-10. The location where the cadium concentration exceeds the closure level is shown on Figure 4 and is summarized in Table 5. The source of the elevated cadium concentration is currently unknown.

Chromium was detected in 70 samples at concentrations ranging from $2.8 \mathrm{mg} / \mathrm{kg}$ at HMW-19D to $177 \mathrm{mg} / \mathrm{kg}$ at GB-12. Chromium exceeded the RISC Commercial/Industrial default closure level of $120 \mathrm{mg} / \mathrm{kg}$ only at GB-12 at a concentration of $177 \mathrm{mg} / \mathrm{kg}$. The location where chromium concentration exceeds the closure level is shown on Figure 4 and is summarized in Table 5. The source of the elevated chromium concentration is currently unknown.

Lead was detected at 67 locations at concentrations ranging from $5.9 \mathrm{mg} / \mathrm{kg}$ at $\mathrm{HMW}-6 \mathrm{~S}$ to $13,600 \mathrm{mg} / \mathrm{kg}$ for the duplicate sample at HMW-24D. Lead exceeded or equaled the RISC Commercial/Industrial default closure level of $230 \mathrm{mg} / \mathrm{kg}$ at 19 locations with concentrations ranging from $24.1 \mathrm{mg} / \mathrm{kg}$ at HMW-12S to $13,600 \mathrm{mg} / \mathrm{kg}$ at HMW-24D. Locations where lead concentrations exceed closure levels are shown on Figure 4 and are summarized in Table 5. The source of the elevated lead concentrations is currently unknown. Possible sources could be residual paint chips that were incorporated into the soil during the demolition of the residents that once occupied this portion of Area A, fugitive dust from foundry operations, or paints used in the automobile manufacturing process.

Benzo(a)anthracene was detected in 33 samples at concentrations ranging from $353 \mathrm{ug} / \mathrm{kg}$ at HMW-34S to $29,200 \mathrm{ug} / \mathrm{kg}$ at GB-34. Benzo(a)anthracene exceeded the RISC Commercial/Industrial default closure level of $15,000 \mathrm{ug} / \mathrm{kg}$ only at GB-34. The location where the benzo(a)anthracene concentration exceeds the closure level is shown on Figure 4 and is summarized in Table 5. The suspected source of the benzo(a)anthracene is likely the railroad ties and cutting oil that occupy Area A. Note that at no single location is the total SVOC concentration greater than $10,000 \mathrm{mg} / \mathrm{kg}$.

Benzo(a)pyrene was detected at 39 locations at concentrations ranging from $195 \mathrm{ug} / \mathrm{kg}$ at GB-2 to $30,900 \mathrm{ug} / \mathrm{kg}$ at GB-34. Benzo(a)pyrene concentrations exceed the RISC Commercial/Industrial default closure level of $1,500 \mathrm{ug} / \mathrm{kg}$ at 12 location at concentrations ranging from $1,610 \mathrm{ug} / \mathrm{kg}$ at GB-11 to $30,900 \mathrm{ug} / \mathrm{kg}$ at GB-14. Locations where benzo(a)pyrene concentrations exceed closure levels are shown on Figure 4 and are summarized in Table 5. The suspected source of the benzo(a)pyrene is likely the railroad ties and cutting oil that occupy Area A.

Benzo(b)fluoranthene was detected in 35 samples at concentrations ranging from $415 \mathrm{ug} / \mathrm{kg}$ at SB-3 to $48,600 \mathrm{ug} / \mathrm{kg}$ at GB-34. Benzo(b)fluoranthene concentrations exceed the RISC Commercial/Industrial default closure level of $15,000 \mathrm{ug} / \mathrm{kg}$ at GB-10 ( $16,000 \mathrm{ug} / \mathrm{kg}$ ) and GB-34 ( $48,600 \mathrm{ug} / \mathrm{kg}$ ). Locations where benzo(b)fluoranthene concentrations exceed closure levels are shown on Figure 4 and are summarized in Table 5. The suspected source of the benzo(b)fluoranthene is likely the railroad ties and cutting oil that occupy Area A.

Chrysene was detected in 36 samples at concentrations ranging from $360 \mathrm{ug} / \mathrm{kg}$ at GB-33 to $36,900 \mathrm{ug} / \mathrm{kg}$ at GB-34. Chrysene exceeded the RISC Commercial/Industrial default closure level of $25,000 \mathrm{ug} / \mathrm{kg}$ only at GB-34. The location where the chrysene concentration exceeds the closure level is shown on Figure 4 and is summarized in Table 5. The suspected source of the benzo(a)anthracene is likely the railroad ties and cutting oil that occupy Area A.

Dibenzo( $\mathrm{a}, \mathrm{h}$ )anthracene was detected in five samples at concentrations ranging from $368 \mathrm{ug} / \mathrm{kg}$ at HMW-27S to $2,530 \mathrm{ug} / \mathrm{kg}$ at GB-34. Dibenzo(a,h)anthracene exceeds the RISC Commercial/Industrial default closure level of $1,500 \mathrm{ug} / \mathrm{kg}$ only at GB-34 (2,530 ug/kg). The locations where dibenzo(a,h)anthracene exceeds closure levels is shown on Figure 4 and is summarized in Table 5. The suspected source of the dibenzo( $a, h$ )anthracene is likely the railroad ties and cutting oil that occupy Area A.

PCE was detected at nine locations at concentrations ranging from $9.7 \mathrm{ug} / \mathrm{kg}$ at $\mathrm{HMW}-18 \mathrm{~S}$ to $4,740 \mathrm{ug} / \mathrm{kg}$ at HMW-9I. PCE exceeds the RISC Commercial/Industrial default closure level of $640 \mathrm{ug} / \mathrm{kg}$ only at HMW-91. In addition, based on Hull's experience modeling volatilization to indoor in soils similar to the soils at Area A, the concentration of PCE at HMW-9l would result in
an unacceptable risk should a build be constructed over this area. The likely source of the PCE is spill from prior part degreasing operations. Note that at no single location is the total VOC concentration greater than $1,000 \mathrm{mg} / \mathrm{kg}$.

## Groundwater

The groundwater data generated during the course of this investigation were evaluated in accordance with the procedures described in the QAPP. The data were determined to meet the substantive requirements for the precision, accuracy, representativeness, completeness, and comparability (PARCC). All field measurements were reviewed by the Project Manager or Quality Assurance Officer and any corrections have been clearly documented on the field data sheets that have been included in this report. An evaluation of field blank (equipment rinseate) samples result indicates that the figild decontamination procedures were effective since no target analytes were detected in any of the samples. Similarly, target analytes were not detected in any of the trip blank samples.

Analytical data generated by the subcontracted laboratory was evaluated in accordance with the QAPP. Specifically, laboratory QA/QC samples (i.e., replicates, MS/MSD, calibration checks, etc.) were performed in strict accordance with laboratory's SOPs that were included as Appendix A of the QAPP. Any deviations were clearly indicated in the case narrative for each sample delivery group and the analytical results were qualified as appropriate. Upon receipt, Hull's Quality Assurance Officer reviewed analytical data generated by the laboratory subcontractor prior to distribution. The analytical reports with case narratives and QC summaries for the groundwater samples have been included as Appendix $E$ of this report. Level 4 data packages (CLP-like deliverables) were prepared for each sample delivery group and are available upon request.

Following development and purging, Hull collected groundwater samples from 74 monitoring wells. In addition to the groundwater samples, Hull collected trip and field blanks, a duplicate sample, and a MS/MD sample for submittal to the laboratory as a QA/QC measure. During collection, handling, and transportation of these samples, strict chain-of-custody protocols were maintained to protect the chemical integrity of the groundwater samples. Laboratory analytical reports for the groundwater and QA/QC samples along with the chain-of-custody document are included in Appendix E.

Table 3 summarizes the analytical parameters in groundwater that were detected above their respective method detection limit. In addition, Table 3 provides a summary of applicable RISC commercial/industrial and residential default closure levels. Sampling locations exceeding the RISC default closure levels are shown on Figure 5 to illustrate the lateral extent of groundwater above applicable default closure levels. As summarized on Table 3, several analytical results for groundwater are above the applicable land use closure levels.

Arsenic was detected in 22 groundwater sampling locations at concentrations ranging from 5.3 $\mathrm{ug} / \mathrm{L}$ at $\mathrm{HMW}-33 \mathrm{~S}$ to $2,860 \mathrm{ug} / \mathrm{L}$ at HMW-19S. Of these locations, arsenic concentrations exceeded both RISC commercial/industrial and residential default closure levels ( $50 \mathrm{ug} / \mathrm{L}$ ) at seven locations. Default closure levels were exceeded at HMW-2S, HMW-6S, HMW-19S, HMW-25S through HMW 27S, and HMW-31S. Figure 6 shows the approximate extent of groundwater that exceed commercial/industrial and residential closure levels for arsenic. As shown on Figure 6, there appears to be three separate areas or plumes where arsenic exceeds industrial and residential closure levels. However, it is evident that the arsenic concentrations, above closure levels, are apparently confined to the upper portion of the aquifer.

Barium was detected at 55 groundwater sampling locations at concentrations ranging from 29 ug/L at HMW-4S to 7,030 ug/L at HMW-25S. Of these locations, barium concentrations did not exceed the RISC commercial/industrial default closure levels of $7,200 \mathrm{ug} / \mathrm{L}$. RISC residential default closure levels of $2,000 \mathrm{ug} / \mathrm{L}$ were exceeded at two locations. These locations are HMW$19 \mathrm{~S}(3,100 \mathrm{ug} / \mathrm{L})$ and at HMW-25S in the northeast portion of Area A . The locations of the monitoring wells are shown on Figure 5.

Chromium was detected at 14 groundwater sampling locations at concentrations ranging from $8.8 \mathrm{ug} / \mathrm{L}$ at HMW-33D to $224 \mathrm{ug} / \mathrm{L}$ at HMW-25S. Of these locations, chromium concentrations exceeded the RISC residential default closure level of $100 \mathrm{ug} / \mathrm{L}$ at two locations. No groundwater sample exceeded the RISC commercial/industrial default closure level of $310 \mathrm{ug} / \mathrm{I}$. HMW-2S (163 ug/L) is located in the western portion of Property B and at HMW-25S in the northeast portion of Property D. The locations of these monitoring wells are shown on Figure 6.

Lead was detected at 54 groundwater sampling locations at concentrations ranging from 1.1 $\mathrm{ug} / \mathrm{L}$ at $\mathrm{MW}-1 \mathrm{D}$ to $1,410 \mathrm{ug} / \mathrm{L}$ at $\mathrm{HMW}-25 \mathrm{~S}$. The RISC residential default closure level of 15 ug/L was exceeded at 19 locations. The RISC commercial/industrial default closure level for
lead of $42 \mathrm{ug} / \mathrm{L}$ was exceeded at 11 locations. Figure 7 shows the approximate extent of groundwater that exceeds commercial/industrial and residential closure levels for lead. As shown on Figure 7, there are several apparently non-contiguous areas or plumes where lead exceeds industrial and residential closure levels, thereby indicating several potential source areas. The majority of the exceedances are concentrated in the southeastern half of Area A. It is also evident that the highest lead conceritrations primarily within the upper portion of the aquifer.

One lead plume may originates from the former retention basin located southwest of the Property B building and extend to the northeast. However, as shown on Figure 7, the residential closure level was exceeded in HMW-1I (which is the upgradient well in this area). It is therefore not possible to distinguish whether the former retention basin is the source of the lead or if the lead is migrating onto Area A from an off-Site source. An additional well nest would need to be installed upgradient of the former retention basin to complete this determination. In addition, several monitoring well nests would need to be installed to evaluate the western extent of this lead plume.

A second lead plume appears to have originated from the northern portion of the Huckins Property. Additional monitoring wells would need to be installed to further characterize this plume. A third apparent lead plume appears to be originating from the northeast of the Allied Product Corp. Property. Based on the results of the monitoring wells located north of Sample Street, it appears that this plume is migrating off-Site.

A fourth lead plume appears to have originated from the southwest of the Property $D$ and extended to the northeast. The plume appears to end in the vicinity of monitoring well nest \#13, as shown on Figure 7. This plume is apparently confined within Area A boundaries.

The last lead plume appears to have originated from the southeastern portion of Area A, as shown on Figure 7, and may migrate off-Site. Note that since no monitoring wells have been installed upgradient, it is possible to conclude whether the plume originated from an on- or offSite source. Additional monitoring wells would need to be installed to further characterize the upgradient and downgradient extent of this area.

Mercury was detected at four groundwater sampling locations at concentrations ranging from
$0.3 \mathrm{ug} / \mathrm{L}$ at $\mathrm{HMW}-27 \mathrm{~S}$ to $2.3 \mathrm{ug} / \mathrm{L}$ at HMWW-25S. Of these locations, the mercury concentration exceeded the RISC residential default closure level of $2 \mathrm{ug} / \mathrm{L}$ only at HMW-25S. No groundwater sample exceeded the RISC commercial/industrial default closure level. HMW-25S is located in the northeast portion of Area A, as shown on Figure 5. Note that the detected mercury concentrations are concentrated in the northeast portion of Area A.

PCE was detected at 34 groundwater'sampling locations at concentrations ranging from 1.0 $\mathrm{ug} / \mathrm{L}$ at HMW-28S and HMW-31D to $749 \mathrm{ug} / \mathrm{L}$ at HMW-9S. The RISC residential default closure level of $5 \mathrm{ug} / \mathrm{L}$ was exceeded at 22 locations primarily in the southeastern half of Area $A$. The RISC commercial/industrial default closure level of $55 \mathrm{ug} / \mathrm{L}$ was exceeded at 12 sampling locations. As shown on Figure 8, the sampling locations that exceed the residential and commercial/industrial default closure level apparently coincide with the axis of the plume that appears to have originated from the southern portion of buildings 86 and 93 . Based on the sampling results on the north side of Sample Street, the PCE plume has migrated off-Site. As no VOCs were detected in upgradient monitoring wells MW-8S, MW-8D and MW-30D, it is apparent that the source of PCE is located southeast portion of Area A, as supported by the detection of PCE in unsaturated soil in building 142.

TCE was detected at 35 groundwater sampling locations at concentrations ranging from 1.1 $\mathrm{ug} / \mathrm{L}$ at MW-11S and MW-11D to $386 \mathrm{ug} / \mathrm{L}$ at HMW-13D. The RISC residential default closure level of $5 \mathrm{ug} / \mathrm{L}$ was exceeded at 26 locations. The RISC commercial/industrial default closure level of $260 \mathrm{ug} / \mathrm{L}$ was exceeded only at HMW-13D, located in the northern portion of building 80.

As shown on Figure 9, there appears to be two discrete TCE plumes in Area A. One TCE plume appears to have originated from the southern portion of buildings 86 and 93 and extend to the northeast and migrates off-Site. As no VOCs were detected in upgradient monitoring wells MW-8S, MW-8D and MW-30D, it is apparent that the TCE is originating from the southeast portion of Area A. An additional monitoring well nest would need to be installed to the southeast of building 142 to verify this conclusion.

The second TCE plume appears to have originated from the former retention basin located southwest of the Property B and extended to the northeast. As with the other TCE plume, based on the groundwater sampling results from monitoring wells on the north side of Sample Street, this plume is migrating off Area A. As shown on Figure 9, the residential closure level
goal was exceeded in HMW-11 (which is the upgradient well in this area). Therefore, it is not possible to identify whether the former retention basin is the source of the TCE, or if the TCE is migrating onto Area A from an off-Site source. An additional well nest would be required to be installed upgradient of the former retention basin to complete this determination. In addition, several other monitoring well nests would need to be installed to evaluate the western extent of this TCE plume.

Vinyl Chloride was detected at three groundwater sampling locations at concentrations ranging from $1.3 \mathrm{ug} / \mathrm{L}$ at HMW-31I to $4.1 \mathrm{ug} / \mathrm{L}$ at HMW-14S, exceeding the RISC commercial/industrial and residential default closure levels of $2 \mathrm{ug} / \mathrm{L}$ only at HMW-14S. HMW-14S is located in the northwest portion of Area A south of the western portion of the building on Property C , as shown on Figure 5. Vinyl Chloride may be biodegrad;্গition of TCE/or PCE, and appears to be isolated beneath Area A.

1,2,4-trimethylbenzene was detected at three groundwater sampling locations at concentrations ranging from $1.3 \mathrm{ug} / \mathrm{L}$ at $\mathrm{HP}-2 \mathrm{~d}$ to $7,740 \mathrm{ug} / \mathrm{L}$ at $\mathrm{HMW}-23 \mathrm{~S}$. The $1,2,4$-trimethylbenzene concentration at HMW-23S exceeded the commercial/industrial and residential closure levels that were derived by Hull from equations in Appendix F of the VRP Guidance Document. HMW$23 S$ is located in the northeast portion of Area A, as shown on Figure 5. This COC appears to be related to the oily layer that was periodically encountered below the water table.

1,3,5-trimethylbenzene was detected at four groundwater sampling locations at concentrations ranging from $1.4 \mathrm{ug} / \mathrm{L}$ at $\mathrm{MW}-15 \mathrm{D}$ to $2,330 \mathrm{ug} / \mathrm{L}$ at HMW-23S. The 1,3,5-trimethylbenzene concentration at HMW-23S exceeded the RISC commercial/industrial and residential default closure levels that were derived by Hull from equations in Appendix $F$ of the VRP Guidance Document. HMW-23S is located in the northeast portion of Area $A$ as shown on Figure 5. This COC appears to be related to the oily layer that was periodically encountered below the water table.

### 3.5.2 Hydrogeologic Investigation Results

Based on the geologic information collected from the continuously sampled soil borings and monitoring wells, the Site is underlain by brown fine to medium sand with traces of silt and clay. The geologic conditions are illustrated on the generalized geologic cross sections $A-A^{\prime}, B-B^{\prime}, C-$

C' D-D' shown on Figure 10, 11, 12, and 13, respectively. Detailed descriptions of the unconsolidated materials encountered at each location are described on the Soil borings logs provided in Appendix A.

As shown on the geologic cross-sections and describe on the soil boring/monitoring well logs, the vadose zone ranges in thickness from approximately 20 to 27 ft . thickness. Soil samples collected from this zone were describéd in the field as predominantly brown fine to medium sand with a trace of gravel and fines (silt and clay). Soil samples submitted to the geotechnical laboratory for grain-size distribution analysis indicate that materials in this zone are primarily classified as SP, in accordance with Unified Soil Classification System (USCS), and are described as brown poorly sorted sands with trace to some gravel and trace to little fines.
;

Selected samples were also submitted to the analytical laboratory for total organic carbon (TOC) analysis - Walkley Black Method. The results of this analysis indicates that the TOC in vadose zone ranges from $0.036 \%$ to $0.18 \%$ with an average of $0.072 \%$. This range and average appears to be typical of soil types encountered at Area A.

The saturated portion of the unconsolidated aquifer ranges in thickness from approximately 40 ft . to greater than 100 ft . As with the vadose zone, the aquifer material was described in the field as predominantly a brown fine to medium sand with secondary percentage gravel and fines. In addition, this portion of the unconsolidated deposits was also noted to contain relatively thin layer of sand and gravel and silty sand. These zones were determined to be isolated based on the fact that they were not encountered in adjacent soil borings/monitoring wells. These units are considered minor in term of the overall hydraulics of the aquifer system.

Beneath the aquifer, a lower confining layer was encountered at all locations, except HMW-22D and HMW-28D. Where present, the layer was described in the field as either a very dense, damp, silt or a hard, damp, silty clay. As shown on Figure 14, the top of this unit was encountered at elevations ranging from 631.1 ft . (USGS) at HMW-32D to 678.3 ft . at HMW-21D. Review of the Figure 8 suggests that this surface is likely an erosional surface that was created by fluvial activities prior to the depositional of the unconsolidated aquifer.

Soil samples submitted to geotechnical laboratory for grain-size analysis indicates that the saturated portion of the aquifer exhibit similar grain-size distribution as the unsaturated portion. Results of this analysis indicate that the materials are primarily classified as SP and are described as brown poorly sorted sand with some gravel and a trace of fines.

Selected samples from the aquifer were also submitted to the analytical laboratory for total organic carbon (TOC) analysis - Walkley Black Method. The results of this analysis indicates that the TOC in aquifer ranges from $0.088 \%$ to $0.17 \%$ with an average of $0.13 \%$. This range and average appears to be typical of soil types encountered at Area A.

Legitimate slug tests could not be completed due to extremely fast recovery rates. Published hydraulic conductivity values from laboratory analyses indicate a range of conductivity values from $10^{-3}$ to $10^{-4} \mathrm{~cm} / \mathrm{sec}$ for well sorted sands/glacial outwash (Fetter, 1994). Single well pumping tests may need to be completed to further characterize the hydraulic conductivity of the aquifer.

Static water levels from selected monitoring wells were used to evaluate the groundwater flow conditions in the upper and lower portions of the unconsolidated aquifer. These water levels were collected prior to groundwater sampling event. As shown on Figures 15 and 16, groundwater flow in upper and lower portions of the aquifer is to the northeast at a hydraulic gradient of $0.0007 \mathrm{ft} / \mathrm{ft}$ and is essentially identical. The highly variable nature of the lower confining units does not appear to significantly effect the groundwater flow regime in the lower portion of the aquifer.

### 4.0 CONCLUSIONS AND RECOMMENDATIONS

### 4.1 Summary of Potential Risks

Hull has conducted a preliminary evaluation of risk based on current Site conditions, as determined by the Initial Phase II ESA, available risk-based standards, and assumed future land uses. The evaluation considers:

1. potential receptors;
2. COC transport mechanisms; and,
3. Exposure pathways.

A brief discussion of the above factors follows.

## Potential Receptors

Potential receptors include:

1. on-Site populations;
2. off-Site populations;
3. on-Site ecological resources; and,
4. off-Site ecological resources.

Current on-Site receptors primarily consist of workers at Underground Pipe \& Valve and South Bend Lathe, visitors to these facilities and trespassers. Until recently, only a caretaker was consistently present at the Allied Products Corp. property. Both the Allied Product Corp property and the Huckins Tool \& Die property are currently unoccupied. Trespassers may also be potential receptors.

Future use of the Site is expected to be commercial/industrial, and following development the population of potential receptors is expected to grow. During development activities construction workers are expected to be future on-Site receptors.

Off-Site populations consist of industrial, commercial and residential populations. Transient offSite populations may also be present as construction workers (e.g., sewer repair).

As described in section 3 of this report, there are no known sensitive ecological receptors on the Site. Furthermore, potential off-Site ecological receptors (e.g., the St. Joseph River) are far enough from the Site to pose limited concern.

## COC Transport Mechanisms

The primary transport mechanisms associated with COCs in soil and groundwater at the Site include:

1. direct contact with soil;
2. soil to air (particulates);
3. leaching of soil to groundwater;
4. groundwater migration;
5. migration via buried utilities:
6. vapor migration from soils; and,
7. vapor migration from groundwater.

Current conditions at the Site would greatly inhibit direct contact with soil, considering that most of the land surface is covered by asphalt, concrete and industrial buildings. Assuming that the Site will be developed as a commercial or industrial enterprise, the potential for soil contact or soil transport may be similar to what it is today. However, contact and transport could temporarily increase during demolition and construction activities.

The presence of asphalt, concrete and buildings over the Site probably limits infiltration of water, and thus leaching of COCs from soil to groundwater. However, the potential exists for leaching of COCs from unsaturated soils and migration into groundwater.

Initial Phase II ESA investigations determined that COC concentrations exceed risk-based closure levels in groundwater beneath the Site. Sampling has also determined probable migration from the Site to downgradient properties north of the Site.

Hull has a partial understanding of the utility and tunnel network beneath the Site. However, it is clear that sewers and other buried utilities traverse and leave the Site at several locations (refer to Figure 2). To Hull's knowledge, all utilities beneath and adjacent to the Site are above the
water table, and are therefore not subject to infiltration by groundwater. However, the current and future potential exists for limited infiltration by vapor-phase VOCs into sewers and subsequent transport as vapor or, via partitioning, as water carried by the sewers. Utility backfill materials do not appear to have significantly different permeabilities than the native soils and area fill materials, and are thus not expected to act as preferential pathways.

VOCs were detected in soils and groundwater beneath the Site. The potential therefore exists for vapors to migrate to indoor and outdoor air. Future development of the Site may or may not influence this transport mechanism.

## Exposure Pathways

## Soils

Based on current conditions at the Site, exposure pathways have the potential to result in unacceptable risk. As shown on Figure 4 and described on Table 5, soils exceed RISC commercial/industrial closure levels at 33 locations at the $\mathrm{Site}^{5}$. Of these locations, default direct contact closure levels are exceeded at the following 26 locations $^{6}$ :

1. GB-10;
2. GB-11;
3. GB-12;
4. GB-15;
5. GB-16;
6. GB-17;
7. GB-19;
8. GB-24;

[^2]9. GB-29;
10. GB-31;
11. GB-32;
12. GB-34
13. GB-35;
14. GS-2;
15. GS-3;
16. HA-3;
17. $H M W-2 S$;
18. HMW-15S;
19. HMW-18S
20. HMW-22D;
21. HMW-24D;
22. HMW-27D;
23. HMW-33D;
24. SB-1; and,
25. SB-5.

Fourteen of the locations exceeding single-chemical default closure levels, based on direct contact, are located along former railroad spurs that were paved over following decommissioning of the tracks. The locations exceeding the RISC direct contact exposure level are summarized in Table 5. The primary COCs exceeding closure levels at these locations are arsenic and benzo(a)pyrene, compounds commonly included in preservatives used on railroad ties. Two locations in the vicinity of Building 83 on Property D have lead concentrations ranging from 2,720 to $13,600 \mathrm{mg} / \mathrm{kg}$. One of the samples was collected from beneath the slab in Building 83 and the other sample was collected from beneath the asphalt-covered parking lot.
Other areas containing COCs at concentrations above single-chemical direct contact closure levels include:
three locations south of the building at Property C exhibiting oil staining or stressed vegetation and (benzo(a)pyrene);

1. near USTs on Property C containing (benzo(a)pyrene);
2. one location near the northern boundary of Property A containing (PCBs); and,
3. various locations on Property B - including areas inside the building and in the apparent retention basin'(benzo(a)pyrene and arsenic).

Considering that most of the locations exceeding single-chemical soil closure levels are presently beneath asphalt or concrete which extends at least 100 ft . in all directions from the sampling points, current direct contact and airborne dust exposure pathways appear to be incomplete. Future exposures could occur during construction activities and if cover is not replaced or maintained. Furthermore, soils exceed default construction closure levels at two locations, including:

1. HMW-24D; and,
2. HMW-33D.

Both of the above locations are near locations in the vicinity of Building 83 Property D , and contain elevated concentrations of lead. As described previously, the elevated lead concentrations may be related to painting operations when the facility was used for automobile production.

No samples tested below a depth of two ft. bgs exceeded default leaching closure levels. The location exceeding RISC migration to groundwater closure levels are summarized in Table 5. However, soils within the upper two ft. bgs exceeded leaching closure levels at the following 24 locations:

1. GB-3;
2. GB-10;
3. GB-11;
4. GB-12;
5. GB-15;
6. GB-17;
7. GB-19;
8. GB-24;
9. GB-29;
10. GB-31;
11. GB-33;
12. GB-35;
13. GS-2;
14. GS-3;
15. HA-1;
16. HA-2;
17. HA-3;
18. HMW-4S;
19. HMW-7S;
20. HMW-9I;
21. HMW-12S;
22. HMW-24D;
23. HMW-33D; and,
24. SB-5.

Eleven of the locations that exceed migration to groundwater closure levels are along the former railroad spurs. The primary COCs that exceed closure levels in these locations are lead, arsenic and benzo(a)pyrene. Furthermore, cadmium, chromium, chrysene and indeno(1,2,3cd)pyrene exceed their respective closure levels in at least one location. Two locations described previously near Building 83 on Property D contain lead at concentrations exceeding the migration to groundwater closure levels. Other areas containing soils that exceed migration to groundwater levels include:

1. two locations south of the building at Property C exhibiting oil staining or stressed vegetation (lead at one location chromium at another);
2. one location in building 142 on Property D near the former die washing area (PCE);
3. one location on Property A near an apparent dry well (lead);
4. two locations inside the southwest portion of the building at Property B in residual foundry materials (lead) ${ }^{7}$;
5. beneath the slab in building 80 at Property D (lead);
6. west of building 86 at Property D (lead); and,
7. three locations in, or near the apparent retention basis at Property B (lead at two locations and arsenic at one):

The default migration to groundwater levels are conservative. Further evaluation using Sitespecific factors may result in fewer locations where the closure levels are exceeded.

VOCs were detected in unsaturated soils and groundwater beneath the Site. Surface and subsurface soils are very permeable, and would not form a natural barrier to limit the migration of vapors, although the presence of impervious cover across most of the Site would greatly limit movement to indoor and outdoor air. Nevertheless, potential current and future completed exposure pathways exist. Given the types of COCs detected, their concentrations and their distribution, it is unlikely that volatilization to outdoor air currently poses (or in the future will pose) an unacceptable risk. Volatilization of VOCs from soils to indoor air does not currently appear to pose an unacceptable risk as the highest concentrations are either outside buildings or beneath unoccupied buildings on. Absent remediation, and based on available data, future indoor exposures would likely pose an unacceptable risk in only one location: in the southern portion of Property D in Building 142, where the PCE concentration in surface soil is 4,740 $u g / \mathrm{kg}$. Quantification of the risk would require Site-specific modeling.

## Groundwater

As shown on Figures 6 though 9, various metals and VOCs in on-Site groundwater exceed default closure levels. However, there are no drinking water wells on-Site, and therefore no exposure pathways are currently complete. While unlikely, a water supply well would be
installed on-Site (a scenario that could be eliminated via deed restriction), resulting in a completed exposure pathway.
${ }^{7}$ Materials sampled inside the foundry are unlikely to leach to groundwater as they appear to rest on the building slab.

Figures 6 through 9 and Table 6 indicate that COC concentrations in groundwater downgradient (i.e., north and potentially east) of the Site exceed default closure levels. As the City currently provides off-Site drinking water ${ }^{8}$ completed pathways for exposure to groundwater at off-Site properties are currently unlikely. However, delineation of the extent of COCs exceeding closure levels and a survey of water use within the delineated plume would be required to defiritively exclude the possibility of exposure. As the City currently does not prohibit installation of wells for private use within its corporate limits, there is future potential for creation of exposure pathways.

Based on Hull's experience and these data obtained during this investigation, volatilization from groundwater is unlikely to pose unacceptable risk on- or off-Site. However, as with unsaturated soils, quantification of risk would require Site-specific modeling.

In summary, current on-Site risk is limited due to an absence of receptors in many portions of the Site as well as a prevalence of impervious cover. As discussed in more detail in section 4.2, remediation, engineering controls and/or institutional controls may be used to address future onSite risks.

Consistent with definitions and guidance provided in the RISC technical guide, the perimeter of compliance for a contaminant plume must be within an area of control by the property owner/volunteer. Control is defined by the ability to monitor and restrict access to the contaminated groundwater through engineering or institutional controls. The area that the City could rapidly implement control is assumed to be within the Site boundaries.

Based on analysis of water samples collected from wells north of Sample Street, it is apparent that COCs exceeding RISC commercial/industrial and residential default closure levels have migrated beyond the Site's perimeter of compliance. Furthermore, Initial Phase II ESA data indicate that the COCs originated at least in part from on-Site sources. As shown on Figure 17, historical sampling of monitoring wells indicates the presence of various COCs detected at the Site. While certainly not conclusive, these detections may be related to migration of COCs from

[^3]the Site. Limited knowledge about activities at properties surrounding the Site adds uncertainties to the evaluation of current and future risk. For this reason, the lateral extent of off-Site groundwater contamination is the most significant data gap remaining.

### 4.2 Recommendations

The City has several options in addressing environmental conditions at the Site. Primary among these are:

1. entry into Indiana's VRP and use RISC guidance; or
2. use of a development agreement at the time of property transfer that addresses risk at the Site using RISC guidance ${ }^{9}$.

Participation in the VRP would entail:

1. submittal of a confidential Voluntary Remediation Application (VRA) and a \$1,000 fee to IDEM;
2. upon its review and approval, endorsement of the VRA by IDEM and the volunteer;
3. submittal of a Remediation Work Plan that would include:

- documentation of previous investigations (e.g., Work Plan(s) and Phase I and Phase II ESA reports);
- cleanup criteria selection;
- statement of work;
- risk assessment (as applicable)
- remedial design/planning;
- community relations plan;
- schedule of implementation; and,
- remedial cost estimate.

4. review and approval of the Remediation Work Plan by IDEM;
5. submittal of notice to IDEM of impending implementation of the Remediation Work Plan;
6. implementation of the Remediation Work Plan (with IDEM oversight), including:

- any required supplemental pre-remedial studies;
- selection and placement of land-use restrictions, as appropriate;
- remedial construction;

[^4]- implementation of the remedial action;
- systems operations and maintenance, including ongoing environmental monitoring; and,
- confirmatory sampling.

7. preparation and submittal of a Remediation Completion Report to IDEM;
8. review and acceptance of the Remediation Completion Report by IDEM;
9. issuance of a Certificate of Completion by IDEM's Commissioner; and,
10. issuance of a Covenant not to Sue by the Governor's office ${ }^{10}$.

RISC provides for default and non-default investigative approaches. Default sampling approaches are prescriptive, typically costly, and may be time consuming. Non-default approaches may be less costly and time consiuming, but they may not provide as definitive quantification of risk as would default sampling approach.

Use of a development agreement in which cleanup standards are identified and agreed upon would probably be least costly of the options due to an absence of regulatory oversight costs. Furthermore, elimination of regulatory review periods would probably result in a reduced time period for investigation and cleanup. However, the development agreement would not result in a release of liability via a Covenant not to Sue.

Assuming that the project continues under the VRP, the City will have the opportunity to select source areas to receive a Certificate of Completion and Covenant Not to Sue following cleanup. Based upon information obtained to date, Hull recommends that at a minimum the City obtain liability limitation for those areas of soils known to exceed default closure levels (refer to Table 5) and any other source areas in soils determined through future investigation or identified during structure demolition/Site development. Known source areas will need to be further delineated. Hull recommends that the City meet with IDEM prior to initiating delineation efforts in order to identify non-default sampling strategies that would be suited to the size and complexity of the Site.

[^5]Future opportunities to incorporate development activities (i.e., demolition and/or construction) into remediation and potentially use of engineering controls to eliminate exposure pathways may limit remedial costs for contaminated soils. As described below, the City may wish to defer a decision on seeking a Certificate of Completion and Covenant Not to Sue for groundwater until additional data are gathered.

Uncertainties about the off-Site extent of COCs exceeding closure levels is the most significant data gap at the completion of the Initial Phase II ESA. Furthermore, addressing off-Site contamination is likely to be the most costly component of the environmental component of redevelopment.

Strategies for remediating and/or containing groundwater may be dependent upon the areal extent of off-Site contamination exceeding default closure levels, and may include one or a combination of the following general technologies:

1. groundwater extraction and ex-situ treatment;
2. groundwater extraction and discharge to the public operated treatment works;
3. installation of a reaction wall (or reaction wall in combination with barrier walls as a "funnel and gate" system) at the point of compliance;
4. in-situ chemical application (i.e., chemical oxidation, application of hydrogenand/or oxygen-releasing compounds); and,
5. determination of a stable plume and ongoing monitoring to document stability.

In all cases, it is probable that some efforts in source control/remediation will be necessary. To the extent that unsaturated soils contribute to groundwater contamination, they may require excavation and off-Site disposal and/or treatment and/or in-situ remediation by methods such as soil vacuum extraction or chemical application.

Hydrogeology beneath the Site and in surrounding areas is such that all of the above technologies (with the exception of plume stability) would be effective in removing contaminant mass from the aquifer. To the extent that there are no dense nonaqueous phase liquids in groundwater, attainment of closure levels should be technically practicable, although the length of time and cost to achieve cleanup could be great. On-Site containment of COCs exceeding closure levels should also be achievable. Again, the design and efficacy of various cleanup or
containment strategies is highly dependent on the lateral extent of off-Site contamination and nature of potential exposures. In general, costs for addressing groundwater contarnination will be high and long-term relative to soil contamination at the Site.

Given issues of cost and probable long duration of "active" groundwater remediation, and considering groundwater use within the City of South Bend, Hull recommends that the City consider using institutional controls to limit future exposures to groundwater contamination. Appendix 5 of the RISC Technical Guide (refer to Appendix G of this document) provides guidance on environmental notices (i.e., deed notices) that serve as institutional controls for contaminated sites that: receive a commercial or industrial land-use designation; have a remedy that includes an activity restriction; and/or have a remedy that employs an engineering control. Primary criteria for an institutional control, as described in the guidance document, include:

1. legal notice to current and potential future property owners of the nature and extent of the restrictions;
2. permanence; and,
3. legal validity.

An environmental notice can be applied to the VRP Site or, contingent upon agreement by the property owner, property onto which contamination has migrated. Such a scenario may be feasible when the volunteer and the adjacent property owner share common interests. However, implementation of environmental notices for multiple properties under which contaminated groundwater has migrated could prove cumbersome.

Possibly in consideration of such problems, IDEM has offered an alternative to an environmental notice that addresses groundwater contamination. The alternative approach allows a unit of local government to adopt an ordinance that limits exposure to groundwater (i.e., a prohibition of new drinking water wells within the municipality). IDEM would require documentation supporting the ordinance, including:

1. a copy of the ordinance and a proof of its recordation with the county;
2. mapped delineation of groundwater exceeding closure levels; and,
3. mapped boundaries and ownership of properties overlying the above-delineated plume.

The above information would be provided to all of the affected property owners. The owner of the site from which contamination originated would be required to monitor and notify IDEM of variances and contain or remediate contamination if variances result in unacceptable risks to groundwater users.

In order to delineate groundwater exceeding closure levels, the City would be required to gain access to off-Site properties, install próbes/monitoring wells and collect groundwater samples for chemical analysis. A monitoring program would also need to be established to demonstrate that the plume is stable or diminishing.

### 5.0 REFERENCES

A variety of technical manuals, administrative documents and publications were referred to in preparing this document. Some of the references consulted are presented below. Referenced documents and publications may or may not have been reviewed in their entirety. The guidelines and procedures presented in the documents and publications referenced have been strictly adhered to unless stated otherwise.

Freeze and Cherry. Goundwater. Prentice Hall, Englewood Cliff, NJ. 1979
Hull \& Associates, Inc. July 2001. Quality Assurance Project Plan for an Initial Phase II Environmental Site Assessment of South Bend Area A.

Hull \& Associates, Inc. January 2001. Phase I En*ironmental Site Assessment of the South Bend Area A Properties.

Hull \& Associates, Inc. December 2000. Work Plan and Field Sampling and Analysis Plan for the Initial Phase II Environmental Site Assessment of the South Bend Area A Properties.

Indiana Department of Environmental Management. Voluntary Remediation Program Resource Guide. July 1996.

Indiana Department of Environmental Management. Risk Integrated System of Closure User's Guide. February 2001.

Indiana Department of Environmental Management. Risk Integrated System of Closure Technical Resources Guidance Document. February 2001.

Indiana Department of Natural Resources. Water Resource Availability in the St. Joseph River Basin, Indiana. 1987.

Indiana Department of Natural Resources. Geologic Map of the Fort Wayne Quadrangle, Indiana, Michigan, and Ohio, Showing Bedrock and Unconsolidated Deposits. 1972.

Michiana Area Council of Governments. St. Joseph County Potential Groundwater Contamination Sites. August 1989.

Todd, D. K.. Groundwater Hydrology. J. Wiley and Sons, New York. 1980
U.S. EPA. Interim Guidelines and Specifications for Preparing Quality Assurance Project
Plans. EPA/600/4-83-004. February 1983.
U.S. EPA. Data Quality Objectives for Remedial Response Activities: Development Process. EPA/540/6-87/003. March 1987.
U.S. EPA. Data Quality Obiectives for Remedial Response Activities: Example Scenario. EPA/540/6-87/004. March 1987.
U.S. EPA. A Compendium of Superfund Field Operations Methods. EPA/540/P-87/001. December 1987.
U.S. EPA. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. SW-846, 3rd Edition. Updates II and III, 1998.
U.S. EPA. Methods for Chemical Analysis of Water and Wastes. EPA/600/4-79-020. March 1983.
U.S. EPA. Quality Assurance/ Quality Control Guidance for Removal Activities. EPA/540/G90/004. April 1990.
U.S. EPA. Quality Assurance Guidance for Conducting Brownfields Site Assessments. EPA 540-R-98-038. September 1998.
U.S. EPA. Region 5: Instructions on the Perpetration of A Superfund Division Quality Assurance Project Plan. Revision 0 June 2000.

INITIAL PHASE II ENVIRO ENTAL SITE ASSESSMENT
SUMMARY OF MONITOR WELL INSTALLATION AND CONSTRUCTION DATA
AREA A

|  |  |  |  |  |  |  |  | Screened <br> Interyal <br> (ft bos) |  |  |  | Concrete Interval (ft, bgs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DEEP MONITOR WELLS |  |  |  |  |  |  |  |  |  |  |  |  |
| HMW-1D |  | 7-31-01 | 2337063.92 | 3177113.38 | 728.42 | 85.0 | 2.0" PVC | 73.0-78.0 | 71.0-80.0 | 80.0-85.0/69.0-71.0/1.0-5.0 | 5.0-69.0 | 0.0-1.0 |
| HMW-6D |  | 8-01-01 | 2338075.22 | 3177571.71 | 724.27 | 88.0 | 2.0' PVC | 80.0-85.0 | 78.0-88.0 | 76.0-78.0/1.0-5.0 | 5.0-76.0 | 0.0-1.0 |
| HMW-8D |  | 8-09-01 | 2336939,59 | 3177977.88 | 729.32 | 78.0 | 2.0' PVC | 68.0-73.0 | 66.0-78.0 | 64.0-66.0/1.0-13.0 | 13.0-64.0 | 0.0-1.0 |
| HMW-9D |  | 9-15-01 | 2336791.64 | 3178071.83 | 729.99 | 66.0 | $2.0{ }^{\text {n }}$ PVC | 61.0-66.0 | 59.0-66.0 | 58.0-59.0/1.0-12.0 | 12.0-58.0 | 0.0-1.0 |
| HMW-11D |  | 8-22-01 | 2336975.99 | 3178274.81 | 730.32 | 72.7 | 2.0n PVC | 64.0-69.0 | 62.0-72.7 | 61.0-62.0 | 2.0-61.0 | 0.0-2.0 |
| HMW-12D |  | 8-13-01 | 2337266.37 | 3178211.28 | 730.39 | 68.0 | 2.0" PVC | 61.0-66.0 | 59.0-68.0 | 57.0-59.0 | 1.0-57.0 | 0.0-1.0 |
| HMW-13D |  | 8-15-01 | 2337475.46 | 3178502.62 | 729.79 | 70.0 | 2.0' PVC | 61.0-66.0 | 59.0-70.0 | 57.0-59.0 | 2.0-57.0 | 0.0-2.0 |
| HMW-15D |  | 8-23-01 | 2337903.93 | 3178062.62 | 728.72 | 63.3 | 2.0n PVC | 57.0-63.0 | 56.0-63.3 | 54.0-56.0 | 1.0-54.0 | 0.0-1.0 |
| HMW-16D |  | 8-22-01 | 2337876.58 | 3178277.93 | 729.11 | 69.0 | 2.0" PVC | 61.0-66.0 | 60.0-69.0 | 58.0-60.0 | 1.0-58.0 | 0.0-1.0 |
| HMW-17D |  | 8-27-01 | 2337592.20 | 3178323.03 | 730.42 | 70.0 | 2.0' ${ }^{\text {P }}$ PVC | 61.0-66.0 | 59.0-70.0 | 57.0-59.0 | 2.0-57.0 | 0.0-2.0 |
| HMW-19D |  | 8-22-01 | 2337901.08 | 3178726.78 | 729.24 | 72.0 | 2.0" PVC | 63.0-68.0 | 61.0-72.0 | 59.0-61.0- | 1.0-59.0 | 0.0-1.0 |
| HMW-21D |  | 8-13-01 | 2337024.15 | 3178818.17 | 730.08 | 47.0 | 2.0" PVC | 31.0-46.0 | 34.0-47.0 | 47.0-60.0/32.0-34.0/1.0-10.0 | 10.0-32.0 | 0.0-1.0 |
| HMW-22D |  | 8-08-01 | 2336492.22 | 3178911.70 | 731.64 | 80.0 | 2.0" PVC | 75.0-80.0 | 73.0-80.0 | 73.0-75.0 | 1.0-73.0 | 0.0-1.0 |
| HMW-23D |  | 8-21-01 | 2337023.47 | 3178677.72 | 729.21 | 86.0 | 2.0" PVC | 81.0-86.0 | 79.0-88.3 | 78.0-79.0/1.0-15.0 | 15.0-78.0 | 0.0-1.0 |
| HMW-24D |  | 8-21-01 | 2337484.17 | 3179036.08 | 729.44 | 60.0 | 2.0 " PVC | 50.0-55.0 | 48.0-60.0 | 46.0-48.0/1.0-10.0 | 10.0-46.0 | 0.0-1.0 |
| HMW-28D |  | 8-29-01 | 2338436.46 | 3177958.96 | 723.65 | 95.0 | 2.0' PVC | 85.0-95.0 | 83.0-95.0 | 1.0-5.0 | 5.0-83.0 | 0.0-1.0 |
| HMW-29D |  | 9-11-01 | 2338444.95 | 3178222.97 | 723.63 | 80.0 | 2.0" PVC | 75.0-80.0 | 73.0-80.0 | 71.0-73.011.0-8.0 | 8.0-71.0 | 0.0-1.0 |
| HMW-30D |  | 9-05-01 | 2338461.13 | 3178471.56 | 724.95 | 68.0 | 2.0" PVC | 63.0-68.0 | 61.0-68.0 | 59.0-61.0/1.0-5.0 | 5.0-59.0 | 0.0-1.0 |
| HMW-31D |  | 8-31-01 | 2338459.90 | 3178697.29 | 725.34 | 60.0 | 2.0n PVC | 55.0-60.0 | 53.0-60.0 | 51.0-53.0/1.0-5.0 | 5.0-51.0 | 0.0-1.0 |
| HMW-32D |  | 9-06-01 | 2338468.95 | 3178967.48 | 725.07 | 93.0 | 2.0' ${ }^{\text {PVC }}$ | 88.0-93.0 | 86.0-93.0 | 84.0-86.0/1.0-5.0 | 5.0-84.0 | 0.0-1.0 |
| HMW-33D |  | 8-08-01 | 2337072.09 | 3178933.69 | 731.02 | 58.0 | 2.0" PVC | 45.0-50.0 | 43.0-51.0 | 51.0-58.0/41.0-43.0 | 1.0-41.0 | 0.0-41.0 |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA
SUMMARY OF DETECTED ANALYTES IN SOILS

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA TABLE 2 (Cont'd)
SUMMARY OF DETECTED ANALYTES IN SOILS

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Initial phase il environmental site assessment

| Soil Boring | Sample Identification | $\begin{aligned} & \text { Sample } \\ & \text { Date } \end{aligned}$ | Sample Depth | Analyte Type | Compound | Results | Units | RISC Default Closure Level - Commercial/Industrial Land Use |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GB-5 | SB1002:GB-5:S015025:412 | 8/8/01 | 1.5'-2.5' | Metals | Barium Chromium Lead Mercury | $\begin{gathered} 18.3 \\ 6.4 \\ 7.7 \\ 0.008 \\ \hline \end{gathered}$ | mg/kg dw $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ mg/kg dw | $\begin{aligned} & \hline 5,900 \\ & 120^{*+} \\ & 230 \\ & 32 \\ & \hline \end{aligned}$ |
|  |  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | - | - |
|  |  |  |  | Dry Weight | Dry Weight | 94.3 | \% | NS |
| GB-8 | SBIOO2:GB-8:S000015:412 | 88/801 | 0.0'-1.5' | Metals | Barium Chromium Lead Mercury | 88.9 6.5 28.3 0.024 | mg/kg dw <br> $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ <br> mg/kg dw | $\begin{gathered} \hline 5,900 \\ 120^{* *} \\ 230 \\ 32 \\ \hline \end{gathered}$ |
|  |  |  |  | vocs | All Analytes | <RL |  |  |
|  |  |  |  | SVOCs | All Analytes | <RL | - | - |
|  |  |  |  | TPH | TPH-FTIR Non-aq | <RL | NS | NS |
|  |  |  |  | Dry Weight | Dry Weight | 96 | \% | NS |
| GB-9 | SBID02:GB-9:S000020:412 | 8/9/01 | 0.0'-2.0' | Metals | Barium Chromium Lead Mercury | $\begin{aligned} & \hline 398 \\ & 90.2 \\ & 193 \\ & 1.38 \end{aligned}$ | $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ migkg dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | $\begin{aligned} & \hline 5,900 \\ & 1200^{\circ+} \\ & 230 \\ & .32 \\ & \hline \end{aligned}$ |
|  |  |  |  | VOCs | All Analytes | $<\mathrm{RL}$ | - | - |
|  |  |  |  | svocs | Benzo(a)antinacene | 574 | ug/kg dw | 15,000 |
|  |  |  |  |  | Benzo(a)pyrene | 427 | ug/kg dw | 1,500 |
|  |  |  |  |  | Benzo(b)fiuoranthene | 988 | ugikg dw | 15.000 |
|  |  |  |  |  | Benzo(k)fluoranthene | 451 | ug/kg dw | 39,000 |
|  |  |  |  |  | Chrysene | 753 | ug/kg dw | 25,000 |
|  |  |  |  |  | Fluoranthene | 1,040 | ug/kg dw | 880,000 |
|  |  |  |  |  | Phenanthrene | 749 2340 | ug/kg dw | 126,049,825** |
|  |  |  |  | PCBS | All Analytes | <RL | ug | -- |
|  |  |  |  | TPH | TPH - FTIR Non-aq | 2,320 | $\mathrm{mg} / \mathrm{kg}$ dw | NS |
|  |  |  |  | Dry Weight | Dry Weight | 95 | \% | NS |

InITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT
CITY OF SOUTH BEND, INDIANA
SUMMARY OF DETECTED ANALYTES IN SOILS

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INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT
CITY OF SOUTH BEND，INDIANA TABLE 2 （Cont＇d）

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INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND，INDIANA TABLE 2 （Cont＇d）
SUMMARY OF DETECTED ANALYTES IN SOILS

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InItial phase il environmental site assessment CITY OF SOUTH BEND, INDIANA

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| Soil Boring | Sample Identification | $\begin{aligned} & \text { Sample } \\ & \text { Date } \end{aligned}$ | Sample Depth | Analyte Type | Compound | Results | Units | $\begin{gathered} \hline \text { RISC Default Closure } \\ \text { Level - } \\ \text { Commercial/ndustria! } \\ \text { Land Use } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GB-22 | SB1002:GB22:S005020:428 | 8/701 | 0.5'-2.0' | Metals | Barium Chromium Lead Mercury | $\begin{gathered} 26.6 \\ 6.8 \\ 15.6 \\ 0.051 \\ \hline \end{gathered}$ | mg/kg dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg}$ dw | $\begin{gathered} 5,900 \\ 120^{*} \\ 230 \\ 32 \\ \hline \end{gathered}$ |
|  |  |  |  | SVOCs | Benzo(a)pyrene | 199 | ugikg dw | 1.500 |
|  |  |  |  | Dry Weight | Dry Weight | 88.3 | \% | NS |
| GB-23 | SB1002:GB23:S005020:428 | 87/101 | 0.5'2.0' | Metals | Barium Chromium Lead Mercury | $\begin{gathered} \hline \hline 36.7 \\ 4.7 \\ 27.6 \\ 0.059 \end{gathered}$ | mg/kg dw $\mathrm{mg} / \mathrm{kg}$ dw mglkg dw $\mathrm{mg} / \mathrm{kg}$ dw | $\begin{gathered} \hline 5,900 \\ 120^{* *} \\ 230 \\ 32 \\ \hline \end{gathered}$ |
|  |  |  |  | SVOCs | Benzo(a)anthracene <br> Berizo(a)pyrene <br> Benzo(b)fluoranthene Chrysene <br> Fluoranthene <br> Phenanthrene <br> Pyrene | $\begin{aligned} & 487 \\ & 442 \\ & 663 \\ & 520 \\ & 585 \\ & 845 \\ & 462 \\ & 820 \end{aligned}$ | ug/kg dw ug/kg dw ug/kg dw ug/kg dw ug/kg dw $u g / k g d w$ ug/kg dw | $\begin{gathered} \hline 15,000 \\ 1,500 \\ 15,000 \\ 25,000 \\ 880,00 \\ 126,049,825+\ldots \\ 570,000 \\ \hline \end{gathered}$ |
|  |  |  |  | Dry Weight | Dry Weight | 91.6 | \% | NS |
| GB-24 | SB1002:GB24:S005020:428 | 87701 | 0.5'-2.0' | Metals | Arsenic Barium Chromium Lead Mercury | $\begin{gathered} \hline \hline 35.9 \\ 114 \\ 7.3 \\ 28 \\ 0.08 \\ \hline \end{gathered}$ | $\overline{\mathrm{mg} / \mathrm{kg} \mathrm{dw}}$ $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg}$ dw | $\begin{gathered} \hline 20 \\ 5,900 \\ 1200^{2} \\ 230 \\ 32 \\ \hline \end{gathered}$ |
|  |  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | -- | - |
|  |  |  |  | Dry Weight | Dry Weight | 89.1 | \% | NS |
| GB-26 | SB1002:GB26:S020040:428 | $87 / 101$ | 2.0'-4.0' | Metals | Barium Chromium Lead Mercury | $\begin{gathered} \hline \hline 15.6 \\ 3.9 \\ 7.6 \\ 0.011 \\ \hline \end{gathered}$ | mg/kg dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | $\begin{aligned} & \hline 5,900 \\ & 120^{+4} \\ & 230 \\ & 32 \\ & \hline \end{aligned}$ |
|  |  |  |  | vocs | All Analytes | $<\mathrm{RL}$ | - | - |
|  | SB1002:SB26A:S020040:505\# | 8/23/01 | $2.0{ }^{\prime}-4.0^{\prime}$ | SvOCs | All Analytes | <RL | - |  |
|  | SB1002:GB26:S020040:428 | 817101 | 2.0'4.4.0' | TPH | TPH- FTIR Non-ag | <RL | NS | NS |
|  | SB1002:SB26A:S020040:505\# | 8/23/01 | $2.0{ }^{\circ} 4.40^{\prime}$ | Dry Weight | Dry Weight | 94.6 93.3 | \% | NS |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA TABLE 2 (Cont'd)

| Soil Boring | Sample Identification | Sample <br> Date | Sample Depth | Analyte Type | Compound | Results | Units | RISC Default Closure Level Commercial/Industria Land Use |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GB-27 | SB1002:GB27:S020040:428 | 877/01 | $2.0{ }^{\prime}-4.0^{\prime}$ | Metals | Barium Chromium Lead Mercury | 36 5.5 33.6 0.227 | $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg}$ dw | $\begin{gathered} 5.900 \\ 1200^{*} \\ 230 \\ 32 \end{gathered}$ |
|  |  |  |  | VOCs | All Analytes | <RL | - | - |
|  | SBI002:SB27A:S020040:505\# | 8/23/01 | 2.0'4.4.0 | SVOCs | Benzo(a)anthracene Benzo(a)pyrene | $\begin{aligned} & 753 \\ & 815 \end{aligned}$ | ug/kg dw ug/kg dw | $\begin{gathered} 15,000 \\ 1,500 \end{gathered}$ |
|  |  |  |  |  | Benzo(b)fuoranthene | 1,170 | ug/kg dw | 15,000 |
|  |  |  |  |  | Benzo(k)fluoranthene | 506 | ugkg dw | 39,000 |
|  |  |  |  |  | Chrysene | 960 | ug/kg dw | 25,000 |
|  |  |  |  |  | Fluoranthene | 2,130 | ug/kg dw | 880,000 |
|  |  |  |  |  | Phenanthrene Pyrene | $\begin{aligned} & 1,170 \\ & 1,790 \end{aligned}$ | ug/kg dw ug $/ \mathrm{kg}$ dw | $\begin{gathered} 126,049,825^{+\cdots \prime} \\ 570,000 \end{gathered}$ |
|  | SB1002:GB27:S020040:428 | 877/01 | 2.0'4.0' | TPH | TPH-FTIR Non-ag | $<\mathrm{RL}$ | NS | NS |
|  |  |  |  | Dry Weight | Dry Weight | 92.9 | \% | NS |
|  | SB1002:SB27A:S020040:505\# | 8/23/01 | $2.0{ }^{\circ}-4.0^{\prime}$ | Dry Weight | Dry Weight | 88.6 | \% | NS |
| GB-28 | SB1002:GB-28:S000020:412 | 877101 | 0.0'-2.0' | Metals | Barium | 77.5 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 5,900 1200 |
|  |  |  |  |  | Chromium | 5.6 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | ${ }^{120} 0^{*}$ |
|  |  |  |  |  | Lead | 39 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 230 |
|  |  |  |  |  | Mercury | 0.068 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 32 |
|  |  |  |  | SVOCs | Anthracene | 521 | uglkg dw | 51,000 15000 |
|  |  |  |  |  | Benzo(a)anthracene | 899 | ug/kg dw | 15,000 |
|  |  |  |  |  | Benzo(a)pyrene | 707 | ug/kg dw | 1,500 |
|  |  |  |  |  | Benzo(b)fluoranthene | 1,320 | ug/kg dw | 15,000 |
|  |  |  |  |  | Chrysene | 827 | ug/kg dw | 25,000 |
|  |  |  |  |  | Fluoranthene | 1,340 | ug/kg dw | 880,000 |
|  |  |  |  |  | Phenanthrene Pyrene | $\begin{aligned} & 1,800 \\ & 1,660 \end{aligned}$ | ug/kg dw ug $/ \mathrm{kg} \mathrm{dw}$ | $\begin{gathered} 126,049,825 \cdots * \\ 570,000 \end{gathered}$ |
|  |  |  |  | Dry Weight | Dry Weight | 95.2 | \% | NS |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA TABLE 2 (Cont'd)

NA
INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT

| Soil Boring | Sample Identification | $\begin{aligned} & \text { Sample } \\ & \text { Date } \end{aligned}$ | Sample Depth | Analyte Type | Compound | Results | Units | RISC Default Closure Level. <br> Commercial/Industrial Land Use |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GB-32 | SB1002:GB-32:S000015:412 | 818101 | 0.0'1.5' | Metals | Barium Chromium Lead Mercury | 59 6.5 23 0.014 | mg/kg dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | $\begin{gathered} 5,900 \\ 120^{*} \\ 230 \\ 32 \\ \hline \end{gathered}$ |
|  |  |  |  | SVOCs | Acenaphthene | 1,950 | ug/kg dw | 1,200,000 |
|  |  |  |  |  | Acenaphthylene | 780 4830 | ug/kg dw | 7,565,408*** |
|  |  |  |  |  | Antinacene | +1,960 | ug/kg dw | 15,000 |
|  |  |  |  |  | Benzo(a)pyrene | 1,570 | ug/kg dw | 1,500 |
|  |  |  |  |  | Benzo(b) hluoranthene | 4,110 | ug/kg dw | 15,000 |
|  |  |  |  |  | Benzo(k) Ifuoranthene | 866 | ug/kg dw | 39,000 |
|  |  |  |  |  | Chrysene | 2,340 | ug/kg dw | 25.000 |
|  |  |  |  |  | Dibenzofuran | 1,170 | ug/kg dw | 4,716,192*** |
|  |  |  |  |  | Fluoranthene | 8,610 | ug/kg dw | 880,000 |
|  |  |  |  |  | Fluorene | 2,250 | ug/kg dw | 1,100,000 |
|  |  |  |  |  | Naphthalene | 2,710 | ug/kg dw | 170.000 |
|  |  |  |  |  | Phenanthrene | 12,600 | ug/kg dw | 126,049,825"* |
|  |  |  |  |  | Pyrene | 1, ${ }^{5} 5$ | ugkg | NS |
| GB-33 | SBIO02:GB-33:S000010:412 | 877101 | 0.0'-1.0' | Metals | Arsenic | 9.7 | mg/kg dw | 20 |
|  |  |  |  |  | Barium | 238 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 5,900 |
|  |  |  |  |  | Chromium | 13 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | $120 *$ |
|  |  |  |  |  | Lead | 397 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 230 |
|  |  |  |  |  | Mercury | 0.504 | $\mathrm{mg} / \mathrm{kg}$ dw | 32 |
|  |  |  |  | SVOCs | Benzo(a)pyrene | 339 | ug/kg ow | 1,500 |
|  |  |  |  |  | Benzo(b)fluoranthene | 569 | ug/kg dw | 15,000 |
|  |  |  |  |  | Chrysene | 360 | ug/kg dw | 25,000 |
|  |  |  |  |  | Fluoranthene | 440 | ug/kg dw | 880,000 |
|  |  |  |  | Dry Weight | Dry Weight | 92.9 | \% | NS |

InITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA
TABLE 2 (Cont'd)
SUMMARY OF DETECTED ANALY

| Soil Boring | Sample Identification | $\begin{aligned} & \text { Sample } \\ & \text { Date } \end{aligned}$ | Sample Depth | Analyte Type | Compound | Results | Units | RISC Default Closure Level - <br> Commercial/Industrial Land Use |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GB-34 | SB1002:GB-34:S000015:412 | 877101 | 0.0'-1.5' | Metals | Arsenic | 34 | mgikg dw | 20 |
|  |  |  |  |  | Barium | 89 | mgikg dw | 5,900 |
|  |  |  |  |  | Chrornium | 9.4 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 120** |
|  |  |  |  |  | Lead | 125 | mg/kg dw | 230 |
|  |  |  |  |  | Mercury | 0.23 | mg/kg dw | 32 |
|  |  |  |  | svocs | Acenaphthene | 2,620 | ugkg dw | 1,200,000 |
|  |  |  |  |  | Acenaphthylene | 1,430 | ugikg dw | 7,565,408*** |
|  |  |  |  |  | Anthracene | 6,720 | ug/kg dw | 51,000 |
|  |  |  |  |  | Benzo(a)anthracene | 29,200 | ug/kg dw | 15.000 |
|  |  |  |  |  | Benzo(a)pyrene | 30,900 | ug/kg dw | 1.500 |
|  |  |  |  |  | Benzo(b)fluoranthene | 48,600 | ugikg dw | 15,000 |
|  |  |  |  |  | Benzo(k)fluoranthene | 16,600 | ug/kg dw | 39,000 |
|  |  |  |  |  | Chrysene | 36,900 | ug/kg dw | 25,000 |
|  |  |  |  |  | Dibenzo(a, h) anthracene | 2,530 | ug/kg dw | 1,500 |
|  |  |  |  |  | Dibenzofuran | 1,290 | $u g / \mathrm{kg} \mathrm{dw}$ | 4.716,192*** |
|  |  |  |  |  | Fluoranthene | 435 | ug/kg dw | 880,000 |
|  |  |  |  |  | Fluorene | 2,130 | ug/kg dw | 1,100,000 |
|  |  |  |  |  | Indeno(1,2,3-cd)pyrene | 8,260 | $u g / \mathrm{kg} \mathrm{dw}$ | 3,100 |
|  |  |  |  |  | Naphthalene | 879 | ug/kg dw | 170,000 |
|  |  |  |  |  | Phenanthrene | 55,600 | ug/kg dw | 126,049,825 ${ }^{\text {a }}$ |
|  |  |  |  |  | Pyrene | 74,900 887 | $\frac{\text { ug/kg dw }}{\%}$ | 570,00 |
|  |  |  |  | Dry Weight | IES |  |  |  |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA TABLE 2 (Cont'd)

| Soil Boring | Sample Identification | $\begin{aligned} & \text { Sample } \\ & \text { Date } \end{aligned}$ | Sample Depth | Analyte Type | Compound | Results | Units | RISC Default Closure Level Commercial/Industria Land Use |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GB-35 | SB1002:GB-35:S000015:412 | 877101 | 0.0'-1.5 ${ }^{\prime}$ | Metals | Arsenic Barium Chromium Lead Mercury | $\begin{gathered} \hline 17.1 \\ 170 \\ 13 \\ 315 \\ 0.635 \end{gathered}$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | $\begin{gathered} 20 \\ 5,900 \\ 120^{+*} \\ 230 \\ 32 \end{gathered}$ |
|  |  |  |  | svocs | Benzo(a)anthracene <br> Benzo(a)pyrene <br> Benzo(b)fluoranthene <br> Chrysene <br> Fluoranthene <br> Phenanthrene <br> Pyrene | 1502 569 405 848 574 874 521 1,010 | ug/kg dw <br> ug/kg dw <br> ug/kg dw <br> ug/kg dw <br> ug/kg dw <br> ug/kg dw <br> ug/kg dw | 15,000 <br> 1,500 <br> 15,000 <br> 25,000 <br> 880,000 <br> $126,049,825+\cdots$ <br> 570,000 |
|  |  |  |  | Dry Weight | Dry Weight | 87.6 | \% | NS |
|  | SBIOO2:GB-35D:S000015:412 | 87/101 | 0.0'-1.5' | Metals | Arsenic Barium Chromium Lead Mercury | $\begin{gathered} 13.3 \\ 136 \\ 17.1 \\ 163 \\ 0.558 \\ \hline \end{gathered}$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg}$ dw | $\begin{gathered} 20 \\ 5,900 \\ 120^{* *} \\ 230 \\ 32 \\ \hline \end{gathered}$ |
|  |  |  |  | svocs | Anthracene | 497 | ugkg dw | 51,000 |
|  |  |  |  |  | Penzo(a)anthracene Benzo(a)pyrene | $\begin{aligned} & 1,930 \\ & 1,920 \end{aligned}$ |  | 15,000 1,500 |
|  |  |  |  |  | Benzo(b)fluoranthene | 2,940 | ug/kg dw | 15,000 |
|  |  |  |  |  | Benzo(k)fluoranthene | 1,060 | ug/kg dw | 39,000 |
|  |  |  |  |  | Chrysene | 1,750 | uglkg dw | 25,000 |
|  |  |  |  |  | Fluoranthene | 3.170 | ug/kg dw | 880,000 |
|  |  |  |  |  | Indeno(1,2,3-cd)pyrene | 393 | ugikg dw | 3,100 |
|  |  |  |  |  | Phenanthrene | 2.050 88.2 | $\frac{u g / k g ~ d w ~}{\%}$ | $\frac{126,049,825 \cdots}{\text { NS }}$ |
|  |  |  |  | Dry Weight Dry Weight |  |  |  |  |

INITIAL. PHASE II ENVIRONMENTAL SITE ASSESSMENT
CITY OF SOUTH BEND, INDIANA
SUMMARY OF DETECTED ANALYTES IN SOILS

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND，INDIANA
TABLE 2 （Cont＇d）
SUMMARY OF DETECTED ANAL

|  | － |  |  |  | －8： | （1） | $22^{2}$ |  | $1: 108$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\stackrel{4}{5}$ |  |  |  <br>  | $\left\lvert\, \begin{array}{l\|l\|} 20 \\ \hline \end{array}\right.$ |  |  | 20 |  | 1.10 |
|  | min |  | 禺 $0_{0}^{\text {O }}$ | $\overrightarrow{\vec{v}} \mid \stackrel{\rightharpoonup}{\stackrel{\rightharpoonup}{\circ}}$ | Mon | $\stackrel{\text { 人 }}{\text { 人 }}$ | $\stackrel{\rightharpoonup}{v}$ | ¢0\％ | $x$ |
| 믐 品 © |  |  |  |  |  |  |  |  |  |
|  |  | $\left\lvert\, \begin{aligned} & 0 \\ & 0 \\ & 8 \\ & 9 \end{aligned}\right.$ | $\stackrel{8}{8}$ |  | $\frac{\text { 号 }}{\text { Di }}$ |  |  |  |  |
|  |  |  |  |  |  | $\begin{aligned} & \text { بì } \\ & \text { in } \end{aligned}$ |  | $\begin{aligned} & \text { in } \\ & \dot{\vdots} \\ & \dot{C} \end{aligned}$ |  |
|  |  |  | $\underset{\infty}{\bar{\infty}}$ |  |  | $\stackrel{\overline{\mathrm{T}}}{\stackrel{\rightharpoonup}{\mathrm{D}}}$ |  | $\stackrel{\bar{N}}{\bar{M}}$ |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  | \％ |  |  |  |  | $\stackrel{\text { ¢ }}{\text { ¢ }}$ |  |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA TABLE 2 (Cont'd)
SUMMARY OF DETECTED ANALYTES IN SOILS

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT
CITY OF SOUTH BEND, INDIANA
TABLE 2 (Cont'd)
SUMMARY OF DETECTED ANALY

| Soil Boring | Sample Identification | $\begin{aligned} & \text { Sample } \\ & \text { Date } \end{aligned}$ | Sample Depth | Analyte Type | Compound | Results | Units | RISC Defauit Ciosure Level Commercial/ndustrial Land Use |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HA-4 | SB1002:HA-4:S000010:412 | 7/31/01 | 0.0'-1.0' | Metals | Arsenic <br> Barium <br> Chromium <br> Lead <br> Mercury | 11 89.1 41 45.5 0.203 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg}$ dw | $\begin{gathered} 20 \\ 5,900 \\ 120^{+4} \\ 230 \\ 32 \\ \hline \end{gathered}$ |
|  |  |  |  | svocs | Acenaphthylene <br> Anthracene <br> Benzo(a)anthracene <br> Benzo(a)pyrene <br> Benzo(b)fluoranthene <br> Benzo(k)fiuoranthene <br> Chrysene <br> Fluoranthene <br> Phenanthrene <br> Pyrene | $\begin{gathered} 421 \\ 410 \\ 670 \\ 907 \\ 2450 \\ 633 \\ 783 \\ 1,020 \\ 0 \\ 1,820 \\ \hline \end{gathered}$ | ug/kg dw ug/kg dw $u g / \mathrm{kg} \mathrm{dw}$ ug/kg dw ug/kg dw ug/kg dw ug/kg dw ug/kg dw $\mathrm{ug} / \mathrm{Kg}$ ug/kg dw | $7,565,408+\ldots \ldots$ <br> 51,000 <br> 15,000 <br> 1,500 <br> 15,000 <br> 39,000 <br> 25,000 <br> 880,000 <br> $126,049,825^{+* *}$ <br> 570,000 |
|  |  |  |  | Dry Weight | Dry Weight | 83.7 | \% | NS |
| HMW-1D | SBIO02:HMW1D:S000020:505 | 7/31/01 | 0.0'-2.0' | Metals | Arsenic Barium Chromium Lead Mercury | $\begin{gathered} \hline 7.4 \\ 194 \\ 9 \\ 68 \\ 0.1 \\ \hline \end{gathered}$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg}$ dw | $\begin{gathered} \hline 20 \\ 5,900 \\ 120^{*+} \\ 230 \\ 32 \\ \hline \end{gathered}$ |
|  |  |  |  | VOCs | All Analytes | <RL | - | - |
|  |  |  |  | SVOCs | Benzo(a)pyrene Benzo(b)fluoranthene <br> Fluoranthene Phenanthrene Pyrene | $\begin{aligned} & 277 \\ & 563 \\ & 586 \\ & 357 \\ & 544 \\ & \hline \end{aligned}$ | ug/kg dw ug $/ \mathrm{kg}$ dw ug/kg dw $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ ug/kg dw | 1,500 <br> 15,000 <br> 880,000 <br> $126,049,825^{* *}$ <br> 570,000 |
|  |  |  |  | TPH | TPH-GRO [Non-Aqueous) | $<\mathrm{RL}$ | NS | NS |
|  |  |  |  | Dry Weight | Dry Weight | 93.2 | \% | NS |
| HMW-2S | SB1002:HMW2S:S020020:428 | 8/2/01 | 0.0'2.0' | Metals | Arsenic Barium Chromium Lead Mercury | $\begin{gathered} \hline 25 \\ 58.6 \\ 5.3 \\ 38.5 \\ 0.27 \\ \hline \end{gathered}$ | mgikg dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ mgikg dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | $\begin{gathered} \hline 20 \\ 5,900 \\ 120^{+4} \\ 230 \\ 32 \\ \hline \end{gathered}$ |
|  |  |  |  | VOCs | Toluene | 30.2 | ug/kg dw | 240,000 |
|  |  |  |  | Dry Weight Dry Weight |  | 73.6 | \% | NS |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA TABLE 2 (Cont'd)

| Soil Boring | Sample Identification | $\begin{aligned} & \text { Sample } \\ & \text { Date } \end{aligned}$ | Sample Depth | Analyte Type | Compound | Results | Units | $\begin{aligned} & \text { RISC Default Closure } \\ & \text { Level - } \\ & \text { Commercial/ndustrial } \\ & \text { Land Use } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMW-3S | SB1002:HMW3S:S060070:428 | 8/1/01 | 6.00-7.0' | Metals |  | 26.6 7.8 27.8 0.018 | mg/kg dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg}$ dw | $\begin{gathered} 5,900 \\ 1200^{*} \\ 230 \\ 32 \\ \hline \end{gathered}$ |
|  |  |  |  | VOCs | All Analytes | <RL | - | NS |
|  |  |  |  | Dry Weight | Dry Weight | 93 | \% | NS |
|  | SBI002:HMW3S:S060085:428 | 81/01 | $6 .{ }^{\prime}-8.5{ }^{\prime}$ | Metals | Barium <br> Chromium <br> Lead | $\begin{gathered} \hline 8 \\ 7.3 \\ 6.1 \end{gathered}$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg}$ dw | $\begin{aligned} & 5,900 \\ & 120^{+4} \\ & 230 \end{aligned}$ |
|  |  |  |  | VOCs | All Analytes | $<\mathrm{RL}$ | -- | - |
|  |  |  |  | Dry Weight | Dry Weight | 96.6 | \% | NS |
| HMW-4S | SB1002:HMW4S:S000020:428 | 81/01 | 0.0'-2.0' | Metals | Arsenic Barium Chromium Lead Mercury | $\begin{gathered} \hline 15.8 \\ 215 \\ 11 \\ 426 \\ 1.1 \end{gathered}$ | $\overline{m g / k g d w}$ mgikg dw $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | $\begin{gathered} \hline 20 \\ 5,900 \\ 120^{\circ+4} \\ 230 \\ 32 \\ \hline \end{gathered}$ |
|  |  |  |  | VOCs | All Analytes | $<\mathrm{RL}$ | - | - |
|  |  |  |  |  | Anthracene | 466 | ug/kg dw | 51,000 |
|  |  |  |  |  | Benzo(a)arthracene | 1,120 | ugikg dw | 15,000 |
|  |  |  |  |  | Benzo(a)pyrene | 913 | ug/kg dw | 1,500 |
|  |  |  |  |  | Benzo(b)fluoranthene | 1.610 | ug/kg dw | 15,000 |
|  |  |  |  | svocs | Benzo(k)fluoranthene | 531 | ug/kg dw | 39,000 |
|  |  |  |  |  | Chrysene | 1,030 | ug/kg dw | 25,000 |
|  |  |  |  |  | Fluoranthene | 1,850 | ug/kg dw | 880,000 |
|  |  |  |  |  | Phenanthrene | $\begin{aligned} & 2,230 \\ & 0 \end{aligned}$ | ug/kg dw ug/kg dw | $126,049,825^{* * *}$ 570,000 |
|  |  |  |  | TPH | TPH - GRO (Non Aqueous) | <RL | NS | NS |
|  |  |  |  | Dry Weight | Dry Weight | 86.1 | \% | NS |
| HMW-5S | SB1002:HMW5S:S000020:428 | 81/101 | 0.0'2. $2.0{ }^{\prime}$ | vocs | All Analytes | <RL | - | - |
|  |  |  |  | SVOCs | All Analytes | <RL | - | - |
|  |  |  |  | TPH | TPH-FTIR Non-aq | 160 | $\mathrm{mg} / \mathrm{kg}$ dw | NS |
|  |  |  |  | Dry Weight | Dry Weight | 93.3 | \% | NS |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT
CITY OF SOUTH BEND，INDIANA TABLE 2 （Cont＇d）
SUMMARY OF DETECTED ANALYTES IN SOILS

|  | 寞 무우N |  |  | 28 | 2 | 80， | 12082 | （i） | $1: 2020$ | －\％ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\stackrel{n}{5}$ |  |  |  |  |  |  | 1280 | 흠 $3 \frac{3}{3} \frac{3}{3} \frac{3}{0}$ <br>  <br>  | 1220 |  |  |
|  |  |  |  |  | \％ |  |  | N |  | O－ $0 \times 0$ | $\stackrel{\sim}{\stackrel{\sim}{v}}$ |
| 믈 高 気 0 |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & \frac{50}{5} \\ & \frac{10}{\frac{10}{2}} \end{aligned}$ | －80 |  |  |  | $3$ |  | $\frac{\frac{2}{2}}{2}$ |  | 頻 |  |
|  |  | $\begin{aligned} & \dot{̣} \\ & \dot{\vdots} \\ & \hline \dot{\circ} \end{aligned}$ |  |  |  | $\begin{aligned} & \stackrel{\grave{N}}{1} \\ & \stackrel{\rightharpoonup}{0} \\ & \stackrel{\omega}{\oplus} \end{aligned}$ |  | $\begin{aligned} & \dot{\sim} \\ & \stackrel{\rightharpoonup}{0} \\ & 0 \end{aligned}$ |  |  |  |
|  |  | － |  |  |  |  |  | $\underset{\text { ¢ }}{\substack{\text { ¢ }}}$ |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | ¢ |  |  |  |  |  | 员 |  | $\sum_{\text {¢ }}^{\substack{1}}$ |  |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA TABLE 2 (Cont'd)

| Soil Boring | Sample Identification | $\begin{aligned} & \text { Sample } \\ & \text { Date } \end{aligned}$ | Sample Depth | Analyte Type | Compound | Results | Units | RISC Default Closure Level - <br> Commercial/Industrial Land Use |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMW-8D | SBIO02:HMW8D:S010020:505 | 899/01 | 1.0'2.0' | Metals | Barium Chromium Lead Mercury | 14.3 <br> 3.7 <br> 11 <br> 0.055 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg}$ dw | $\begin{gathered} 5,900 \\ 120^{\circ 4} \\ 230 \\ 32 \\ \hline \end{gathered}$ |
|  |  |  |  | VOCs | All Analytes | <RL | - | - |
|  |  |  |  | Dry Weight | Dry Weight | 95.6 | \% | NS |
| HMW-9D | SBI002:HMW-9D:S000020:505 | 8/15/01 | 0.0'-2.0' | Metals | Arsenic <br> Barium <br> Chromium <br> Lead <br> Mercury | $\begin{gathered} \hline 4.4 .4 \\ 55.3 \\ 4.7 \\ 5.7 \\ 5.7 \\ 0.082 \\ \hline \end{gathered}$ | mg/kg dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ mg/kg dw $\mathrm{mg} / \mathrm{kg} d \mathrm{w}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | $\begin{gathered} \hline 20 \\ 5,900 \\ 120^{\circ} \\ 230 \\ 32 \\ \hline \end{gathered}$ |
|  |  |  |  | vocs | Tetrachloroethene | 50.1 | ug/kg dw | 640 |
|  |  |  |  | Dry Weight | Dry Weight | 93.2 | \% | NS |
|  | SB1002:HMW-9DD:S000020:505 | 8/15/01 | 0.0'2.0.0 | Metals | Arsenic | 4.8 | mg/kg dw | 20 |
|  |  |  |  |  | Barium | 47.3 | $\mathrm{mg} / \mathrm{kg}$ dw | 5,900 |
|  |  |  |  |  | Chromium | 5 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | ${ }^{1200}$ |
|  |  |  |  |  | $\begin{aligned} & \text { Lead } \\ & \text { Mercury } \end{aligned}$ | $\begin{aligned} & 47.3 \\ & 0.082 \end{aligned}$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | $\begin{aligned} & 230 \\ & 32 \end{aligned}$ |
|  |  |  |  | VOCs | Tetrachloroethene | 83.9 | ug/kg dw | 640 |
|  |  |  |  | Dry Weight | Dry Weight | 94 | \% | NS |
|  | SB1002:HMW9D:300320:505 | 8/15/01 | $30.0{ }^{\circ} \cdot 32.0{ }^{\prime}$ | TOC | TOC | 0.17 | \% | NS |
| HWM-91 | SB1002:HMW91:S005020:428 | 8/20/01 | 0.5'-2.0' | VOCs | Carbon tetrachloride <br> Chloroform <br> Tetrachloroethene | $\begin{aligned} & \hline 158 \\ & 45.5 \\ & 4,740 \end{aligned}$ | ug/kg dw ug/kg dw $u g / k g d w$ | $\begin{aligned} & \hline 290 \\ & 1,200 \\ & 640 \\ & \hline 640 \end{aligned}$ |
|  |  |  |  | SVOCs | Benzo(a)anthracene | 746 | ug/kg dw | 15,000 |
|  |  |  |  |  | Benzo(a)pyrene | 613 | ug/kg dw | 1,500 |
|  |  |  |  |  | Benzo(b)fluoranthene | 989 | ug/kg dw | 15,000 |
|  |  |  |  |  | Chrysene | 743 | ug/kg dw | 25,000 |
|  |  |  |  |  | Fluoranthene | 1,590 | ug/kg dw | 880,000 |
|  |  |  |  |  | Phenanthrene | 2,020 | ug/kg dw | 126,049,825** |
|  |  |  |  |  | Pyrene | 1,310 | ugkg dw | 570,000 |
|  |  |  |  | $\frac{\text { TPH }}{\text { Dry Weight }}$ | ${ }_{\text {TPH - GRO (Non Aqueous) }}^{\text {Dry Weight }}$ | <RL | NS | NS |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA
TABLE 2 (Cont'd)
SUMMARY OF DETECTED ANALY

| Soil Boring | Sample Identification | $\begin{aligned} & \text { Sample } \\ & \text { Date } \end{aligned}$ | Sample Depth | Analyte Type | Compound | Results | Units | RISC Default Closure Level Commercial/lndustria Land Use |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMW-10S | SBIOO2:HMW10S:S040050:428 | . 877101 | 4.0'-5.0' | VOCs | Tetrachloroethene | 16 | ug/kg dw | 640 |
|  |  |  |  | svocs | Benzo(a)anthracene | 524 | ug/kg dw | 15.000 |
|  |  |  |  |  | Benzo(a)pyrene | 246 | uglkg dw | 1.500 |
|  |  |  |  |  | Benzo(b)fluoranthene | 602 | ug/kg dw | 15,000 |
|  |  |  |  |  | Chrysene | 720 | ug/kg dw | 25,000 |
|  |  |  |  |  | Fluoranthene | 615 | ugikg dw | 880,000 |
|  |  |  |  |  | Naphthalene | 489 | ug/kg dw | 170,000 |
|  |  |  |  |  | Pyrene | 600 | uglkg dw | 570,000 |
|  |  |  |  | TPH | TPH-DRO Nor-Aqueous | 931 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | NS |
|  |  |  |  | Dry Weight | Dry Weight | 87 | \% | NS |
|  | SB1002:HMW10S:S100110:428 | $87 / 101$ | 10.0'-11.0 | VOCs | All Analytes | <RL | - | - |
|  |  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | $\cdots$ | - |
|  |  |  |  | TPH | TPH - DRO Non-Agueous | 42.4 | mg/kg dw | NS |
|  |  |  |  | Dry Weight | Dry Weight | 84.6 | \% | NS |
| HMW-11D | SB1002:HMW-11D:S020040:505 | 8/14/01 | 2.0'-4.0' | Metals | Barium | 99.5 | mg/kg dw | 5,900 |
|  |  |  |  |  | Chromium | 11.4 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | $120{ }^{1 *}$ |
|  |  |  |  |  | Lead | $\begin{gathered} 177 \\ 0.159 \end{gathered}$ | mg/kg dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | $\begin{gathered} 230 \\ 32 \end{gathered}$ |
|  |  |  |  | Vocs | All Analytes | <RL |  | - |
|  |  |  |  | Dry Weight | Dry Weight | 93.1 | \% | NS |
| HMW-12D | SBI002:HMW-12D:S000020:505 | 8/13/01 | 0.0'-2.0' | Metals | Arsenic | 4.9 | mgikg dw | 20 |
|  |  |  |  |  | Barium | 58 | $\mathrm{mg} / \mathrm{kg}$ dw | 5,900 |
|  |  |  |  |  | Chromium | 8.4 | mg/kg dw | 120** |
|  |  |  |  |  | Lead | 58 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 230 |
|  |  |  |  |  | Mercury | 0.11 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 32 |
|  |  |  |  | VOCs | All Analytes | <RL | - | - |
|  |  |  |  | Dry Weight | Dry Weight | 91.6 | \% | NS |
|  | SB1002:HMW12D:120140:505 | 8/13/01 | 12.0'-14.0 ${ }^{\circ}$ | TOC | TOC | 0.047 | \% | NS |
| HMW-12S | SB1002:HMW12S:S005020:428 | 8/14/01 | 0.5'-2.0' | Metals | Barium | 176 | $\mathrm{mg} / \mathrm{kg}$ dw | 5.900 |
|  |  |  |  |  | Chromium | 6.4 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | ${ }^{1200^{* *}}$ |
|  |  |  |  |  | Lead | 241 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 230 |
|  |  |  |  |  | Mercury | 0.089 | $\mathrm{mg} / \mathrm{kg}$ dw | 32 |
|  |  |  |  | VOCs | Tetrachloroethene | 19.6 | ug/kg dw | 640 |
|  |  |  |  | TPH | TPH-GRO(NON Aqueous) | $<\mathrm{RL}$ | NS | NS |
|  |  |  |  | Dry Weight | Dry Weight | 88.8 | \% | NS |
| HMW-13S | SBI002:HMW13S:S060070:428 | 81201 | 6.0'-7.0' | Vocs | Toluene | 39 | ug/kg ow | 240,000 |
|  |  |  |  | SVOCs | All Analytes | <RL | - | - |
|  |  |  |  | TPH | TPH-DRO Non-Aqueous | <RL | NS | NS |
|  |  |  |  |  | TPH-FTIR Non-aq | <RL | NS | NS |
|  |  |  |  | Dry Weight | Dry Weight | 96.9 | \% | NS |
|  | SB1002:HMW13S:S140150:428 | 8/2/01 | 14.0'-15.0' | VOCs | Acetone | 140 | ug/kg dw | 3,100 |
|  |  |  |  | Vocs | Toluene | 8.9 | $\underline{\mathrm{g} / \mathrm{kg} \mathrm{dw}}$ | 240,000 |
|  |  |  |  | SVOCs | All Analytes | <RL | - | $\cdots$ |
|  |  |  |  | TPH | TPH-DRO Non-Aqueous | <RL | NS | NS |
|  |  |  |  | Dry Weight | Dry Weight | 81.6 | \% | NS |
|  |  |  | TABLE CONTINUES |  |  |  |  |  |

CITY OF SOUTH BEND, INDIANA
INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT
SUMMARY OF DETECTED ANALYTES IN SOILS

|  |  |  |  |  | ,20 | 82 |  |  |  |  | 1 | 18 |  | $1{ }^{1}$ | 1 | 292 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\stackrel{n}{5}$ |  |  |  |  <br>  | $1{ }^{\text {c }}$ | $\bigcirc 1$ |  | ( ${ }^{\text {a }}$ |  |  | , | , | 88 | \% | 1, |  |
| $\begin{aligned} & \stackrel{n}{\overrightarrow{3}} \\ & \stackrel{y}{\ddot{G}} \end{aligned}$ |  |  |  |  |  | $\dot{m} \mid \vec{v}$ |  |  |  |  |  | $\overrightarrow{\vec{k}}\|\overrightarrow{\mathrm{v}}\| \overrightarrow{\mathrm{v}} \mid$ |  |  | $\stackrel{\rightharpoonup}{\text { b }}$ | - |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | $\stackrel{8}{8}$ |  |  |  | 荅 |  |  |  | $0$ |  | - |  | 1-1 |
|  | $\begin{aligned} & \dot{\sim} \\ & \text { نָion } \end{aligned}$ |  |  | $\stackrel{i n}{\stackrel{i n}{+}}$ |  |  |  | $\begin{aligned} & \dot{\circ} \\ & \stackrel{\rightharpoonup}{\mathrm{O}} \end{aligned}$ |  |  |  |  |  |  | $\begin{aligned} & \text { ön } \\ & \text { ָ̀ } \\ & \text { ì } \end{aligned}$ |  |
|  | $\frac{\overline{5}}{\frac{5}{7}}$ |  |  | $\stackrel{5}{5}$ <br> $\stackrel{\circ}{0}$ |  |  |  | $\begin{aligned} & \overline{\mathbf{b}} \\ & \stackrel{\rightharpoonup}{\omega} \end{aligned}$ |  |  |  |  |  |  | $\begin{aligned} & \overline{\bar{O}} \\ & \stackrel{\rightharpoonup}{\bar{n}} \end{aligned}$ |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 号 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA
TABLE 2 (Cont'd)
SUMMARY OF DETECTED ANALY

NITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT
CITY OF SOUTH BEND, INDIANA
TABLE 2 (Cont'd)
SUMMARY OF DETECTED ANALY
SUMMARY OF DETECTED ANALYTES IN SOILS

| Soil Boring | Sample Identification | $\begin{aligned} & \text { Sample } \\ & \text { Date } \end{aligned}$ | Sample Depth | Analyte Type | Compound | Results | Units | RISC Default Closure Level Commercial/Industrial Land Use |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMW-17D | SB1002:MW17D:S005020:428 | 8127101 | 0.5'-2.0' | Metals | Barium Chromium Lead Mercury | $\begin{aligned} & 22.1 \\ & 4.7 \\ & 13.4 \\ & 0.038 \\ & \hline \end{aligned}$ | $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg}$ dw | $\begin{aligned} & 5,900 \\ & 120^{\circ+} \\ & 230 \\ & 32 \\ & \hline \end{aligned}$ |
|  |  |  |  | vocs | 1,1,1-Trichloroethane | 10 | ug/kg dw | 300 |
|  |  |  |  | Dry Weight | Dry Weight | 95.2 | \% | NS |
| HMW-18S | SB1002:HMW18S:S000010:412 | 8/14/01 | 0.0'-1.0' | VOCs | Tetrachloroethene | 31.8 | ug/kg dw | 640 |
|  |  |  |  | SvOCs | Anthracene Benzo(a)anthracene | $\begin{aligned} & 1,670 \\ & 5,510 \end{aligned}$ | ug/kg dw ug/kg dw | $\begin{aligned} & 51,000 \\ & 15000 \end{aligned}$ |
|  |  |  |  |  | Benzo(a)pyrene | 5,260 | ug/kg dw | 1,500 |
|  |  |  |  |  | Benzo(b)lluoranthene Benzo(k) fiuoranthene | $\begin{aligned} & 7,920 \\ & 3,110 \end{aligned}$ | ug/kg dw ug/kg dw | $\begin{aligned} & 15,000 \\ & 39,000 \end{aligned}$ |
|  |  |  |  |  | Chrysene | 5,280 | uglkg dw | 25,000 |
|  |  |  |  |  | Fluoranthene | 10,300 | ug/kg dw | 880,000 |
|  |  |  |  |  | Fluorene | 477 | $u g / \mathrm{kg} \mathrm{dw}$ | 1,100,000 |
|  |  |  |  |  | Indeno( $1,2,3$-cd) pyrene | 820 | ug/kg dw | 3.100 |
|  |  |  |  |  | Phenanthrene | 8,200 | $u g / \mathrm{kg} \mathrm{dw}$ | 126,049,825 ${ }^{*}$ |
|  |  |  |  |  | Pyrene |  |  |  |
|  |  |  |  | TPH | TPH - DRO Non-Aqueous <br> TPH - FTIR Non-aq | $\begin{aligned} & 528 \\ & 395 \\ & \hline \end{aligned}$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | $\begin{aligned} & \text { NS } \\ & \text { NS } \end{aligned}$ |
|  |  |  |  | Dry Weight | Dry Weight | 89.6 | \% | NS |
|  | SB1002:HMW18S:S230250:412 | 8/14/01 | 23.0' ${ }^{\prime}$-25.0' | VOCs | Tetrachloroethene | 9.7 | $u g / \mathrm{kg}$ dw | 640 |
|  |  |  |  | SVOCs | All Analytes | <RL | - | $\cdots$ |
|  |  |  |  | TPH | TPH-DRO Non-Agueous | 11.8 | $\mathrm{mg} / \mathrm{kg}$ dw | NS |
|  |  |  |  | Dry Weight | Dry Weight | 95.4 | \% | NS |
| HMW-19S | SB1002:HMW19S:S000020:428 | 8/8/01 | 0.0'-2.0' | Metals | Barium Chromium Lead Mercury | $\begin{gathered} \hline 69.7 \\ 5.7 \\ 89.4 \\ 1.14 \end{gathered}$ | mg/kg dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | $\begin{gathered} 5,900 \\ 120^{* *} \\ 230 \\ -32 \\ \hline \end{gathered}$ |
|  |  |  |  | VOCs | All Analytes | $<\mathrm{RL}$ | - | - |
|  |  |  |  | SVOCs | Benzo(a)anthracene | 821 | ug/kg dw | 15,000 1,500 |
|  |  |  |  |  | Benzo(a)pyrene | 779 | ug/kg dw | 1,500 |
|  |  |  |  |  | Benzo(b)fluoranthene | 1,300 | ug/kg dw | 15,000 |
|  |  |  |  |  | Benzo(k)fluoranthene | 414 | ug/kg dw | 39,000 |
|  |  |  |  |  | Chrysene | 909 | ugikg dw | 25,000 |
|  |  |  |  |  | Fluoranthene | 1,480 | ug/kg dw | 880,000 |
|  |  |  |  |  | Phenanthrene | 1,330 | ug/kg dw | 126,049,825** |
|  |  |  |  |  | Pyrene | 1,790 | $\underline{L g} / \mathrm{kg} \mathrm{dw}$ | 570,000 |
|  |  |  |  | TPH | TPH-FTIR Non-aq | <RL | NS | NS |
|  |  |  |  | Dry Weight Dry Weight |  | 89.4 | \% | NS |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA
TABLE 2 (Cont'd)

| Soil Boring | Sample Identification | Sample Date | Sample Depth | Analyte Type | Compound | Results | Units | RISC Default Closure Level Commercial/Industrial Land Use |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMW-19D | SB1002:HMW19D:S080095:428 | 8/22/01 | 8.0'-9.5' | Metals | Barium Chromium | $\begin{gathered} \hline 8.83 \\ 2.8 \\ \hline \end{gathered}$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg}$ dw | $\begin{aligned} & 5,900 \\ & 120^{\circ+4} \\ & \hline \end{aligned}$ |
|  |  |  |  | VOCs | All Analytes | <RL | $\cdots$ | - |
|  |  |  |  | Dry Weight | Dry Weight | 90.5 | \% | NS |
|  | SB1002:HMW19D:S120130:428 | 8/2201 | 12.0'-13.0' | Metals | Arsenic | 5.7 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 20 |
|  |  |  |  |  | Barium | 16.3 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 5,900 |
|  |  |  |  |  | Chromium | 5.1 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | $120^{*}$ |
|  |  |  |  |  | Lead | 8 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 230 |
|  |  |  |  |  | Mercury | 0.012 | mg/kg dw | 32 |
|  |  |  |  | VOCs | All Analytes | <RL | - | - |
|  |  |  |  | Dry Weight | Dry Weight | 91.5 | \% | NS |
| HMW-20S | SB1002:HMW20S:S000020:428 | 8/6/01 | 0.0'2.0' | VOCs | Aill Analytes | <RL | - | - |
|  |  |  |  | SVOCs | All Analytes | <RL | - | - |
|  |  |  |  | TPH | TPH-GRO(Non-Aqueous) | <RL | NS | NS |
|  |  |  |  | Dry Weight | Dry Weight | 88.2 | \% | NS |
| HMW-21D | SBIO02:HMW21D:S005020:428 | 8/13/01 | 0.5'-2.0' | VOCs | All Analytes | <RL | - | - |
|  |  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | - | -- |
|  |  |  |  | TPH | TPH-FTIR Non-aq | 64 | $\mathrm{mg} / \mathrm{kg}$ dw | NS |
|  |  |  |  | Dry Weight | Dry Weight | 94.6 | \% | NS |
| HMW-22D | SB1002:HMW22D:S000020:505 | 8/6/01 | 0.0'-2.0' | Metals | Arsenic | 21.4 | mgikg dw | 20 |
|  |  |  |  |  | Barium | 115 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 5,900 |
|  |  |  |  |  | Chromium | 10 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 120** |
|  |  |  |  |  | Lead | 74 | mg/kg dw | 230 |
|  |  |  |  |  | Mercury | 0.243 | mg/kg dw | 32 |
|  |  |  |  | Dry Weight | Dry Weight | 91.6 | \% | NS |
|  | SB1002:HMW22D:160180:505 | 8/6101 | 16.0'18.0' | vocs | All Analytes | <RL | - | - |
|  |  |  |  | TOC | TOC | 0.036 | \% | NS |
| HMW-23S | SBI002:HMW23S:5060070:428 | 8/8/01 | 6.0'-7.0' | Vocs | All Analytes | <RL | - | - |
|  |  |  |  | SVOCs | All Analytes | <RL | - | - |
|  |  |  |  | TPH | TPH-GRO (Non-Aqueous) | $<\mathrm{RL}$ | NS | NS |
|  |  |  |  | Dry Weight | Dry Weight | 82.4 | \% | NS |
|  | SB1002:HMW23S:S100115:428 | 818/01 | 10.0'-11.5' | VOCs | All Analytes | <RL | - | - |
|  |  |  |  | SVOCS | All Analytes | <RL | $\cdots$ | - |
|  |  |  |  | TPH | TPH-GRO(Non-Agueous) | <RL | NS | NS |
|  |  |  |  | Dry Weight | Dry Weight | 93.3 | \% | NS |
| HMW-23D | SB1002:HMW23D:S000020:428 | 8/17/01 | 0.0'-2.0' | Metals | Barium | 44.5 | $\mathrm{mg} / \mathrm{kg}$ dw | 5,900 |
|  |  |  |  |  | Chromium | 7.4 | mgikg dw | ${ }^{1200^{*}}$ |
|  |  |  |  |  | Lead | 23.3 | mg/kg dw | 230 |
|  |  |  |  |  | Mercury | 0.019 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 32 |
|  |  |  |  | VOCs | Ail Analytes | <RL | - | - |
|  |  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | - | - |
|  |  |  |  | TPH | TPH-DRO Non-Agueous | 95.8 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | NS |
|  |  |  |  | Dry Weight | Dry Weight | 85.7 | \% | NS |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT
CITY OF SOUTH BEND, INDIANA
SUMMARY OF DETECTED ANALYTES IN SOILS

| Soil Boring | Sample Identification | $\begin{aligned} & \text { Sample } \\ & \text { Date } \end{aligned}$ | Sample Depth | Analyte Type | Compound | Results | Units | RISC Default Closure <br> Level - <br> Commercial//ndustrial <br> Land Use |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMW-24D | SB1002:HMW24D:S005020:428 | 8/21/01 | 0.5'-2.0' | Metals | Arsenic <br> Barium <br> Chrornium <br> Lead <br> Mercury | $\begin{gathered} 9.2 \\ 833 \\ 26 \\ 5.970 \\ 0.558 \\ \hline \end{gathered}$ | $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | $\begin{gathered} 20 \\ 5,900 \\ 1200^{\circ} \\ 230 \\ 32 \\ \hline \end{gathered}$ |
|  |  |  |  | VOCs | All Analytes | <RL | - | - |
|  |  |  |  | Dry Weight | Dry Weight | 85.2 | \% | NS |
|  | SBIO02:HMW24DD:S005020:428 | 8/21/01 | 0.5'-2.0' | Metals | Barium Chromium Lead Mercury | $\begin{gathered} 1,260 \\ 30 \\ 13,600 \\ 0.821 \end{gathered}$ | $\mathrm{mg} / \mathrm{kg}$ dw mgikg dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg}$ dw | $\begin{gathered} 5,900 \\ 120^{+} \\ 230 \\ 32 \\ \hline \end{gathered}$ |
|  |  |  |  | VOCs | All Analytes | <RL | - | - |
|  |  |  |  | Dry Weight | Dry Weight | 85 | \% | NS |
| HMW-25S | SB1002:HMW25S:S010025:412 | 8/10/01 | ${ }^{1.0}{ }^{\prime}-2.5{ }^{\prime}$ | Metals | Barium Chromium Lead Mercury | 134 <br> 8.2 <br> 47.4 <br> 0.208 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg}$ dw mglkg dv | $\begin{aligned} & \hline 5,900 \\ & 120^{\circ *} \\ & 230 \\ & 32 \\ & \hline \end{aligned}$ |
|  |  |  |  | VOCs | All Analytes | <RL | $=$ | - |
|  |  |  |  | SVOCs | All Analytes | <RL | - | - |
|  |  |  |  | PCBs | All Analytes | $<\mathrm{RL}$ | - | - |
|  |  |  |  | TPH | TPH-FTIR Non-aq | <RL | NS | NS |
|  |  |  |  | Dry Weight | Dry Weight | 85.7 | \% | NS |
|  | SB1002:HMW25S:020040:505 | 8/10/01 | 2.0'-4.0' | VOCs | All Analytes | <RL | - | - |
|  |  |  |  | SVOCs | All Analytes | <RL | - | - |
|  |  |  |  | PCBS | All Analytes | <RL | - | - |
|  |  |  |  | TPH | TPH - FTIR Non-aq | <RL | NS | NS |
|  |  |  |  | TOC | TOC | 0.18 | \% | NS |
|  | SB1002:HMW25S:S210230:412 | 8110/01 | 21.0'23.0' | Metals | Barium | 5.9 | $\mathrm{mg} / \mathrm{kg}$ dw | 5,900 |
|  |  |  | 21.0-23.0 | Dry Weight | Dry Weight | 91 | \% | NS |
| HMW-26S | SB1002:HMW26S:S015025:412 | 8/9101 | 1.5'-2.5' | Metals | Barium Chromium Lead Mercury | $\begin{gathered} \hline 37 \\ 9.2 \\ 21.9 \\ 0.021 \\ \hline \end{gathered}$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} d \mathrm{w}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg}$ dw | $\begin{aligned} & 5,900 \\ & 120^{\circ} \\ & 230 \\ & 32 \\ & \hline \end{aligned}$ |
|  |  |  |  | VOCs | All Analytes | <RL | - | - |
|  |  |  |  | SVOCs | All Analyles | <RL | - | - |
|  |  |  |  | TPH | TPH-GRO(Non-Aqueous) | <RL | NS | NS |
|  |  |  |  | Dry Weight Dry Weight |  | 91.6 | \% | NS |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT

| Soil Boring | Sample Identification | $\begin{aligned} & \text { Sample } \\ & \text { Date } \end{aligned}$ | Sample Depth | Analyte Type | Compound | Results | Units | RISC Default Closure Level Commercial//ndustrial Land Use |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMW-27S | SB1002:HMW27S:S000015:412 | 8/13/01 | 0.0'-1.5' | Metals | Arsenic Barium Chromium Lead Mercury |  <br> 11 <br> 77.3 <br> 15.5 <br> 132 <br> 0.441 | mg/kg dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | $\begin{gathered} \hline 20 \\ 5,900 \\ 120^{1+4} \\ 230 \\ 32 \\ \hline \end{gathered}$ |
|  |  |  |  | VOCs | Terachloroethene | 14.7 | ug/kg diw | 640 |
|  |  |  |  | svocs | Anthracene | $630$ | ug/kg dw $u g / \mathrm{kg}$ dw | 51,000 15,000 |
|  |  |  |  |  | Benzo(a)pyrene | 5,970 | ugkg dw | 1,500 |
|  |  |  |  |  | Benzo(b)fluoranthene | 9,290 | ugkg dw | 15,000 |
|  |  |  |  |  | Benzo(k)fluoranthene | 3,780 | ugkg dw | 39,000 |
|  |  |  |  |  | Chrysene | 6,550 | uglkg dw | 25,000 |
|  |  |  |  |  | Dibenzo(a, h ) anthracene | 368 | uglkg dw | 1,500 |
|  |  |  |  |  | Fluoranthene | 11,000 | ug/kg dw | 880,000 |
|  |  |  |  |  | Indeno(1,2,3-cd)pyrene | 1,170 | ugkg dw | 3,100 |
|  |  |  |  |  | Phenanthrene Pyrene | $\begin{gathered} 6,000 \\ 10,500 \end{gathered}$ | $u g / k g d w$ $u g / \mathrm{kg} \mathrm{dw}$ | $\begin{gathered} 126,049,825+\cdots \\ 570,000 \end{gathered}$ |
|  |  |  |  | TPH | TPH - FTIR Non-aq | 110 | mg/kg dw | NS |
|  |  |  |  | Dry Weight | Dry Weight | 89.1 | \% | NS |
| HMW-29D | SB1002:HMW29D:040060:505 | 9/11/01 | $4.0{ }^{1}-6.0^{\prime}$ | TOC | TOC | 0.043 | \% | NS |
| HMW-32D | SB1002:HMW320:200220:505 | $916 / 01$ | 20.0'-22.0 | TOC | TOC | 0.053 | \% | NS |
| HMW-33D | SB1002:HMW33D:S000020:428 | 8/9/01 | 0.0'-2.0' | Metals | Barium Chromium Lead <br> Mercury | $\begin{gathered} \hline 177 \\ 9.2 \\ 2,720 \\ 30.9 \\ \hline \end{gathered}$ | $\begin{aligned} & \mathrm{mg} / \mathrm{kg} \mathrm{dw} \\ & \mathrm{mg} / \mathrm{kg} \mathrm{dw} \\ & \mathrm{mg} / \mathrm{kg} \mathrm{dw} \\ & \mathrm{mg} / \mathrm{kg} \mathrm{dw} \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 5,900 \\ 120^{* *} \\ 230 \\ 32 \\ \hline \end{gathered}$ |
|  |  |  |  | VOCs | Naphthalene | 63.8 | ug/kg dw | 170,000 |
|  |  |  |  | Dry Weight | Dry Weight | 90.6 | \% | NS |
|  | SB1002:HMW330:500520:505 | 8/9/01 | 50.0'-52.0' | TOC | TOC | 0.088 | \% | NS |
| HMW-34D | SB1002:HMW34S:S000010:412 | 8/14/01 | 0.0'-1.0' | vōCs | All Analytes | <RL | - | - |
|  |  |  |  | SVOCs | Benzo(a)anthracene | 353 | ug/kg dw | 15,000 |
|  |  |  |  |  | Benzo(a)pyrene | 340 | ug/kg dw | 1,500 |
|  |  |  |  |  | Benzo(b)fluoranthene | 494 | ug/kg div | 15,000 |
|  |  |  |  |  | Chrysene | 408 | ug/kg dw | 25,000 |
|  |  |  |  |  | Phenanthrene <br> Pyrene | $\begin{aligned} & 458 \\ & 704 \end{aligned}$ | ug/kg dw $u g / k g \mathrm{dw}$ | $\begin{gathered} 126,049,825^{+*} \\ 570,000 \end{gathered}$ |
|  |  |  |  | TPH | TPHi-DRO Non-Aqueous | 30.4 | mg/kg dw | NS |
|  |  |  |  | Dry Weight | Dry Weight | 94.1 | \% | NS |

InITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT
CITY OF SOUTH BEND，INDIANA
SUMMARY OF DETECTED ANALYTES IN SOILS

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| $\begin{aligned} & \text { 듬 } \\ & \text { 吕 } \\ & 5 \\ & \hline 0 . \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | $9 \begin{gathered} 9 \\ 0 \\ 9 \\ 9 \\ 0 \\ 0 \\ 0 \end{gathered}$ |  | $\stackrel{3}{8}$ |  |  |  |  |  | $\square$ |  |  | $\stackrel{3}{9}$ | 近 |
|  | O O O． O． |  |  | $\begin{aligned} & \dot{\sim} \\ & \stackrel{\rightharpoonup}{\circ} \\ & \hline 0 \end{aligned}$ |  |  |  |  |  |  |  |  | $\begin{aligned} & \dot{\sim} \\ & \text { Ò } \\ & \text { O} \end{aligned}$ |  |  |  |  |
|  | $\begin{aligned} & \stackrel{-}{6} \\ & \stackrel{\rightharpoonup}{\circ} \end{aligned}$ |  |  | $\stackrel{\overline{5}}{\mathbf{\circ}}$ $\stackrel{\rightharpoonup}{\mathbf{D}}$ |  |  | $\frac{\overline{0}}{\infty}$ |  |  |  | $\begin{aligned} & \frac{\overline{\mathrm{M}}}{\substack{\infty}} \end{aligned}$ |  | $\begin{aligned} & \overline{\mathrm{D}} \\ & \stackrel{\text { 禸/ }}{ } \end{aligned}$ |  |  | ¢ |  |
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INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA

## SUMMARY OF DETECTED ANALYTES IN SOILS

| Soil Boring | Sample Identification | $\begin{aligned} & \text { Sample } \\ & \text { Date } \end{aligned}$ | Sample Depth | Analyte Type | Compound | Resuits | Units | RISC Default Closure Level Commercial/Industrial Land Use |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SB-5 | SBIO02:SB-5:S000015:412 | $818 / 01$ | 0.0'-1.5' | Metals | Arsenic <br> Barium <br> Chromium <br> Lead <br> Mercury | $\begin{gathered} \hline 57.1 \\ 124 \\ 16.2 \\ 122 \\ 0.092 \end{gathered}$ | mg/kg dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | $\begin{gathered} \hline 20 \\ 5,900 \\ 120^{1+4} \\ 230 \\ 32 \\ \hline \end{gathered}$ |
|  |  |  |  | Vocs | All Analytes | <RL | - | - |
|  |  |  |  | Svocs | All Analytes | <RL | - | - |
|  |  |  |  | TPH | TPH - GRO (Non-Aqueous) FTIR Non-aq | <RL | $\begin{aligned} & \hline \text { NS } \\ & \text { NS } \end{aligned}$ | $\begin{aligned} & \text { NS } \\ & \text { NS } \end{aligned}$ |
|  |  |  |  | Dry Weight | Dry Weight | 98.6 | \% | NS |
| SB-6 | SBI002:SB6:S100110:428 | 8/6/01 | 10.0'-11.0' | Metals | Arsenic Barium Chromium Lead Mercury | $\begin{gathered} \hline \hline 3.5 \\ 24 \\ 5.2 \\ 32.3 \\ 0.096 \\ \hline \end{gathered}$ | $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | $\begin{gathered} \hline 20 \\ 5,900 \\ 1200^{*+} \\ 230 \\ 32 \\ \hline \end{gathered}$ |
|  |  |  |  | VOCs | All Analytes | <RL | - | - |
|  |  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | - | - |
|  |  |  |  | TPH | TPH - DRO Non-Aqueous | 25.8 | mg/kg dw | NS |
|  |  |  |  | Dry Weight | Dry Weight | 93.9 | \% | NS |
|  | SB1002:SB6:S140150:428 | 8/5/01 | 14.0'0 $0^{\prime}$ 15.0' | Metals | Barium Cnromium Lead Mercury | $\begin{gathered} 15 \\ 4.7 \\ 14 \\ 0.043 \end{gathered}$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ $\mathrm{mg} / \mathrm{kg}$ dw $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | $\begin{aligned} & \hline 5,900 \\ & 120^{+*} \\ & 230 \\ & 32 \\ & \hline \end{aligned}$ |
|  |  |  |  | VOCs | All Analytes | $<\mathrm{RL}$ | $\cdots$ | $\cdots$ |
|  |  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | - | - |
|  |  |  |  | TPH | TPH-DRO Non-Agueous | 15.7 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | NS |
|  |  |  |  | Dry Weight | Dry Weight | 90.8 | \% | NS |

*     - Total concentrations of organics do not exceed $2,000 \mathrm{mg} / \mathrm{kg}(2,000,000 \mathrm{ug} / \mathrm{kg})$ for any subsurface sample, and $6,000 \mathrm{mg} / \mathrm{kg}$ for any surface samples. concentrations of metals do not exceed $10,000 \mathrm{mg} / \mathrm{kg}$ for any sample.
*** - Assumes hexavalent chromium.
\# - Samples SB1002:SB26A:S020040:505 and SB1002:SB27A:S020040:505 are re-samples from GB-26 and GB-27, respectively.
<RL - Results are less than the analytical method reporting limit.
NS - No Cleanup Goal/Closure Level Available.
- Analyte concentration exceeds default RISC commercialindustrial closure level.
INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA
SUMMARY OF DETECTED ANALYTES IN GROUNDWATER

| Monitoring Well Designation | Sample Identification | Sample Date | Analyte Type | Compound | Results (ug/L) | RISC Default Closure Level industrial Land Use (ug/L) | RISC Default Closure Level - Residential Land Use (ug/L) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMW-1S | SB1002:HMW1S:G091801:523 | 9/18/01 | Metals* | Arsenic Barium Cadmium Chromium Lead | $\begin{aligned} & 38.6 \\ & 205 \\ & 1.2 \\ & 8.7 \\ & 75.4 \end{aligned}$ | $\begin{gathered} 50 \\ 7,200 \\ 51 \\ 310^{* *} \\ 42 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 50 \\ 2,000 \\ 5 \\ 100^{* *} \\ 15 \\ \hline \end{gathered}$ |
|  |  |  | VOCs | Trichloroethene | 2.3 | 260 | 5 |
|  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | -- | -- |
|  |  |  | TPH | $\begin{aligned} & \text { TPH - Method } 418.1 \text { (Aq.) } \\ & \text { TPH - GRO (Aq.) } \end{aligned}$ | $\begin{aligned} & <R L \\ & <R L \end{aligned}$ | $\begin{aligned} & \hline \text { NS } \\ & \text { NS } \end{aligned}$ | $\begin{aligned} & \hline \text { NS } \\ & \text { NS } \end{aligned}$ |
| HMW-1I | SBI002:HMW11:G091801:523 | 9/18/01 | Metals* | Arsenic Barium Chromium Lead | $\begin{gathered} 23 \\ 94.6 \\ 8.7 \\ 39.4 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 50 \\ 7,200 \\ 310^{* *} \\ 42 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \hline 50 \\ 2,000 \\ 100^{* *} \\ 15 \\ \hline \end{gathered}$ |
|  |  |  | VOCs | cis-1,2-Dichloroethene Trichloroethene | $\begin{array}{r} 4.3 \\ 16.8 \end{array}$ | $\begin{gathered} 1,000 \\ 260 \end{gathered}$ | $\begin{gathered} 70 \\ 5 \end{gathered}$ |
|  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$. | -- | -- |
|  |  |  | TPH | $\begin{aligned} & \text { TPH - Method } 418.1 \text { (Aq.) } \\ & \text { TPH - GRO (Aq.) } \end{aligned}$ | $\begin{aligned} & <R L \\ & <R L \end{aligned}$ | $\begin{aligned} & \hline \text { NS } \\ & \text { NS } \end{aligned}$ | $\begin{aligned} & \hline \text { NS } \\ & \text { NS } \end{aligned}$ |
| HMW-1D | SBI002:HMW1D:G091801:523 | 9/18/01 | Metais* | Barium Lead | $\begin{gathered} 36.8 \\ 3.4 \end{gathered}$ | $\begin{gathered} 7,200 \\ 42 \end{gathered}$ | $\begin{gathered} \hline 2,000 \\ 15 \end{gathered}$ |
|  |  |  | VOCs | cis-1,2-Dichloroethene | 1.8 | 1,000 | 70 |
|  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | -- | -- |
|  |  |  | TPH | $\begin{aligned} & \text { TPH - Method } 418.1 \text { (Aq.) } \\ & \text { TPH - GRO (Aq.) } \end{aligned}$ | $\begin{aligned} & <R L \\ & <R L \end{aligned}$ | $\begin{aligned} & \text { NS } \\ & \text { NS } \end{aligned}$ | $\begin{aligned} & \hline \text { NS } \\ & \text { NS } \end{aligned}$ |
| MW-1S | SBI002:MW1S:G091701:523 | 9/17/01 | Metals* | Barium Lead | $\begin{aligned} & \hline \overline{53.8} \\ & 14.6 \end{aligned}$ | $\begin{gathered} 7,200 \\ 42 \end{gathered}$ | $\begin{gathered} \hline 2,000 \\ 15 \end{gathered}$ |
|  |  |  | VOCs | cis-1,2-Dichloroethene Tetrachloroethene Trichloroethene | $\begin{aligned} & 2.7 \\ & \hline 203 \\ & 4.4 \end{aligned}$ | $\begin{gathered} \frac{72}{1,000} \\ 55 \\ 260 \end{gathered}$ | $\begin{gathered} 70 \\ 5 \\ 5 \end{gathered}$ |
| MW-1D | SBI002:MW1D:G091701:523 | 9/17/01 | Metals* | Barium Lead | $62$ | $\begin{gathered} 7,200 \\ 42 \end{gathered}$ | $\begin{gathered} \hline 2,000 \\ 15 \end{gathered}$ |
|  |  |  | vocs | All Analytes | $<\mathrm{RL}$ | -- | -- |

INITIAL PHASE II ENYIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA TABLE 3 (Cont'd)
SUMMARY OF DETECTED ANALYTES IN GROUNDWATER

| Monitoring Well Designation | Sample Identification | Sample Date | Analyte Type | Compound | Results (ug/L) | RISC Default Closure Level Industrial Land Use (ug/L) | RISC Default Closure Level - Residential Land Use (ug/L) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMW-2S | SB1002:HMW2S:G091801:523 | 9/18/01 | Metais* | Arsenic | 146 | 50 | 50 |
|  |  |  |  | Barium | 448 | 7,200 | 2,000 |
|  |  |  |  | Cadmium | 4.1 | 51 | 5 |
|  |  |  |  | Chromium | 163 | $310^{* *}$ | $100^{* *}$ |
|  |  |  |  | Lead | 531 | 42 | $15^{* * *}$ |
|  |  |  |  | Silver | 0.7 | 510 | 180 |
|  |  |  | VOCs | cis-1,2-Dichloroethene Trichloroethene | $\begin{gathered} 1.3 \\ 8 \end{gathered}$ | $1,000$ | $\begin{gathered} 70 \\ 5 \\ \hline \end{gathered}$ |
|  |  |  | TPH | TPH - Method 418.1 (Aq.) | $<\mathrm{RL}$ | NS | NS |
|  |  |  |  | TPH - GRO (Aq.) | $<\mathrm{RL}$ | NS | NS |
| HMW-3S | SBI002:HMW3S:G092001:523 | 9/20/01 | Metals* | Arsenic | 18.9 | 50 | 50 |
|  |  |  |  | Barium | 81.4 | 7,200 | 2,000 |
|  |  |  |  | Chromium | 12.7 | 310 ** | 100** |
|  |  |  |  | Lead | 31.3 | 42 | 15 |
|  |  |  | VOCs | cis-1,2-Dichloroethene | 1.6 | 1,000 | 70 |
|  |  |  |  | Tetrachloroethene | 1.2 | 55 | 5 |
|  |  |  |  | Trichloroethene | 13.8 | 260 | 5 |
|  |  |  | TPH | TPH-GRO (Aq.) | $<\mathrm{RL}$. | NS | NS |
| HMW-4S | SBI002:HMW4S:G092001:523 | 9/20/01 | Metals* | Barium | 29 | 7,200 | 2,000 |
|  |  |  |  | Lead | 3.4 | 42 | 15*** |
|  |  |  | VOCs | Trichloroethene | 4 | 260 | 5 |
|  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | -- | - |
|  |  |  | TPH | TPH - GRO (Aq.) | $<\mathrm{RL}$ | NS | NS |
| HMW-5S | SBI002:HMW5S:G092001:523 | 9/20/01 | VOCs | cis-1,2-Dichloroethene | 1.6 | 1,000 | 70 |
|  |  |  |  | Tetrachloroethene | 1.3 | 55 | 5 |
|  |  |  |  | Trichloroethene | 14.2 | 260 | 5 |
|  |  |  | TPH | TPH - Method 418.1 (Aq.) | <RL | NS | NS |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA
SUMMARY OF DETECTED ANALYTES IN GROUNDWATER

| Monitoring Well Designation | Sample Identification | Sample Date | Analyte Type | Compound | Results (ug/L) | RISC Default Closure Level Industrial Land Use (ug/L) | RISC Default Closure Level-Residential Land Use (ug/L) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMW-6S | SBI002:HMW6S:G092001:523 | 9/20/01 | Metals* | Arsenic | 54.2 | 50 | 50 |
|  |  |  |  | Barium | 231 | 7,200 | 2,000 |
|  |  |  |  | Chromium | 47.4 | $310^{* *}$ | 100** |
|  |  |  |  | Lead | 95 | 42 | 15 |
|  |  |  | VOCs | Trichloroethene | 4.1 | 260 | 5 |
|  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | - | -- |
|  |  |  | TPH | TPH - GRO (Aq.) | <RL | NS | NS |
|  | SBI002:HMW6S:G092001D:523 | 9/20/01 | Metals* | Arsenic | 44.2 | 50 | 50 |
|  |  |  |  | Barium | 192 | 7,200 | 2,000 |
|  |  |  |  | Chromium | 39.9 | $310^{* *}$ | 100** |
|  |  |  |  | Lead | 71.8 | 42 | 15 |
|  |  |  | VOCs | Trichloroethene | 4.5 | 260 | 5 |
|  |  |  | SVOCs | All Analytes | <RL | - | -- |
|  |  |  | TPH | TPH-GRO (Aq.) | $<\mathrm{RL}$ | NS | NS |
| HMW-6D | SBI002:HMW6D:G092001:523 | 9/20/01 | Metals* | Barium | 39 | 7,200 | 2,000 |
|  |  |  | Metals | Lead | 1.9 | 42 | 15 |
|  |  |  | VOCs | Trichloroethene | 6.7 | 260 | 5 |
|  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | -- | -- |
|  |  |  | TPH | TPH-GRO (Aq.) | $<\mathrm{RL}$ | NS | NS |
| HMW-7S | SB1002:HMW7S:G091701:523 | 9/17/01 | Metals* | Barium Lead | $\begin{aligned} & 39 \\ & 5.1 \end{aligned}$ | $\begin{gathered} 7,200 \\ 42 \end{gathered}$ | $\begin{gathered} 2,000 \\ 15 \end{gathered}$ |
|  |  |  |  | Chloroform | 1.3 | 470 | 100 |
|  |  |  | Vocs | Tetrachloroethene | 4.1 | 55 | 5 |
| HMW-8S | SBI002:HMW8S:G091701:523 | 9/17/01 | Metals* | Arsenic | 15.3 | 50 | 50 |
|  |  |  |  | Barium | 102 | 7,200 | 2,000 |
|  |  |  |  | Chromium | 10.1 | $310{ }^{\text {** }}$ | 100** |
|  |  |  |  | Lead | 45.2 | 42 | 15 |
|  |  |  | VOCs | Tetrachioroethene | 40.7 | 55 | 5 |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA
SUMMARY OF DETECTED ANALYTES IN GROUNDWATER
AREA A

| Monitoring Well Designation | Sample Identification | Sample Date | Analyte Type | Compound | Results (ug/L) | RISC Default Closure Level Industrial Land Use (ug/L) | RISC Default Closure Level - Residential L_and Use (ug/L) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMW-81 | SBI002:HMW81:G091701:523 | 9/17/01 | Metals* | Arsenic Barium Lead | $\begin{aligned} & \hline 10.5 \\ & 98.2 \\ & 10.2 \end{aligned}$ | $\begin{gathered} 50 \\ 7,200 \\ 42 \\ \hline \end{gathered}$ | $\begin{gathered} 50 \\ 2,000 \\ 15 \\ \hline \end{gathered}$ |
|  |  |  | VOCs | cis-1,2-Dichloroethene 1,1,1-Trichloroethane | $\begin{gathered} 1 \\ 3.2 \end{gathered}$ | $\begin{aligned} & 1,000 \\ & 3,600 \\ & \hline \end{aligned}$ | $\begin{gathered} 70 \\ 200 \end{gathered}$ |
| HMW-8D | SBI002:HMW8D:G091701:523 | 9/17/01 | Metals* | Barium Lead | $\begin{gathered} \hline 81 . \overline{8} \\ 4.8 \end{gathered}$ | $\begin{gathered} 7,200 \\ \hline 42 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2,000 \\ \hline 15 \end{gathered}$ |
|  |  |  | VOCs | 1,1,1-Trichloroethane | 3.3 | 3,600 | 200 |
|  | SBI002:HMW8D:G091701D:523 | 9/17/01 | Metals* | Barium <br> Lead | $\begin{gathered} 82.1 \\ 3.4 \\ \hline \end{gathered}$ | $\begin{gathered} 7,200 \\ \underline{42} \\ \hline \end{gathered}$ | $\begin{array}{r} 2,000 \\ 15 \\ \hline \end{array}$ |
| MW-8S | SBI002:MW8S:G091701:523 | 9/17/01 | Metals* | Barium Lead | $\begin{gathered} \hline 29.7 \\ 8.5 \end{gathered}$ | $\begin{gathered} 7,200 \\ 42 \\ \hline \end{gathered}$ | $\begin{gathered} 2,000 \\ 15 \end{gathered}$ |
|  |  |  | VOCs | All Analytes | $<\mathrm{RL}$ | -- | -- |
| MW-8D | SB1002:MW8D:G091701:523 | 9/17/01 | Metals* | Barium Lead | $\begin{gathered} \hline \hline 47.4 \\ 5.7 \end{gathered}$ | $\begin{gathered} 7, \overline{200} \\ \hline 42 \\ \hline \end{gathered}$ | $\begin{gathered} 2,000 \\ 15 \end{gathered}$ |
|  |  |  | VOCs | All Analytes | $<\mathrm{RL}$ | - | -- |
| HMW-9S | SB1002:HMW9S:G091901:523 | 9/19/01 | VOCs | Carbon tetrachloride Tetrachloroethene | $\begin{aligned} & 1.3 \\ & 749 \end{aligned}$ | $\begin{aligned} & \hline 22 \\ & 55 \end{aligned}$ | $\overline{5}$ |
|  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | -- | -- |
|  |  |  | TPH | TPH - GRO (Aq.) | $<\mathrm{RL}$ | NS | NS |
| HMW-9I | SBI002:HMW91:G091901:523 | 9/19/01 | VOCs | Tetrachloroethene | 349 | 55 | 5 |
|  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | -- | - |
|  |  |  | TPH | TPH - GRO (Aq.) | <RL | NS | NS |
| HMW-9D | SB1002:HMW9D:G091901:523 | 9/19/01 | Metals* | Barium <br> Cadmium Lead | $\begin{gathered} 82.3 \\ 1.6 \\ 14.2 \end{gathered}$ | $\begin{gathered} \hline 7,200 \\ 51 \\ 42 \end{gathered}$ | $\begin{gathered} \hline 2,000 \\ 5 \\ 15 \end{gathered}$ |
|  |  |  | VOCs | Tetrachloroethene | 2.5 | 55 | 5 |
| HMW-10S | SBI002:HMW10S:G091801:505 | 9/18/01 | vocs | cis-1,2-Dichloroethene sec-Butylbenzene Tetrachloroethene Trichloroethene | $\begin{gathered} \hline 4.2 \\ 4 \\ 31.2 \\ 47.8 \end{gathered}$ | $\begin{aligned} & \hline 1,000 \\ & \text { NS } \\ & 55 \\ & 260 \end{aligned}$ | $\begin{gathered} \hline 70 \\ \text { NS } \\ 5 \\ 5 \end{gathered}$ |
|  |  |  | TPH | TPH - DRO (Aq.) | 2,200 | NS | NS |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT

| INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA <br> TABLE 3 (Cont'd) <br> SUMMARY OF DETECTED ANALYTES IN GROUNDWATER AREA A |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Monitoring Well Designation | Sample Identification | Sample Date | Analyte Type | Compound | Results (ug/L) | RISC Default Closure Level Industrial Land Use (ug/L) | RISC Default Closure Level - Residential Land Use (ug/L) |
| HMW-11S | SBI002:MW11S:G091801:505 | 9/18/01 | VOCs | cis-1,2-Dichloroethene 1,1,1-Trichloroethane Trichloroethene | $\begin{aligned} & 1.1 \\ & 1.8 \\ & 1.1 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1,000 \\ & 3,600 \\ & 260 \\ & \hline \end{aligned}$ | $\begin{gathered} 70 \\ 200 \\ 5 \\ \hline \end{gathered}$ |
|  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | -- | - |
|  |  |  | TPH | $\begin{aligned} & \text { TPH - Method } 418.1 \text { (AQ) } \\ & \text { TPH - DRO (Aq.) } \end{aligned}$ | $\begin{aligned} & <R L \\ & <R L \end{aligned}$ | $\begin{aligned} & \hline \text { NS } \\ & \text { NS } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { NS } \\ & \text { NS } \\ & \hline \end{aligned}$ |
| HMW-11I | SBI002:HMW111:G091801:505 | 9/18/01 | Metals* | Barium Lead | $\begin{gathered} \hline 32.5 \\ 2.5 \end{gathered}$ | $\begin{gathered} 7,200 \\ 42 \end{gathered}$ | $\begin{gathered} \hline 2,000 \\ \hline \\ \hline \end{gathered}$ |
|  |  |  | VOCs | sec-Butylbenzene cis-1,2-Dichloroethene trans-1,2-Dichloroethene n-Propylbenzene Trichloroethene | $\begin{gathered} 1.3 \\ 35.5 \\ 5.1 \\ 1.2 \\ 11.3 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { NS } \\ 1,000 \\ 200 \\ \text { NS } \\ 260 \\ \hline \end{gathered}$ | $\begin{gathered} \text { NS } \\ 70 \\ 100 \\ \text { NS } \\ 5 \\ \hline \end{gathered}$ |
|  | SB1002:HMW11l:G091801D:505 | 9/18/01 | Metals* | Barium <br> Lead | $\begin{gathered} 33.5 \\ 2.2 \end{gathered}$ | $\begin{gathered} 7,200 \\ 42 \\ \hline \end{gathered}$ | $\begin{gathered} 2,000 \\ 15 \\ \hline \end{gathered}$ |
|  |  |  | VOCs | sec-Butylbenzene cis-1,2-Dichloroethene trans-1,2-Dichloroethene n-Propylbenzene Trichloroethene | $\begin{gathered} 1.4 \\ 34.2 \\ 5.3 \\ 1.3 \\ 12.1 \end{gathered}$ | $\begin{gathered} \hline \text { NS } \\ 1,000 \\ 200 \\ \text { NS } \\ 260 \\ \hline \end{gathered}$ | NS 70 100 NS 5 |
| HMW-11D | SBI002:HMW11D:G091801:505 | 9/18/01 | Metals* | Barium Lead | $\begin{gathered} \hline 55.5 \\ 3.6 \end{gathered}$ | $\begin{gathered} 7,200 \\ \hline 42 \end{gathered}$ | $\begin{gathered} 2,000 \\ 15 \end{gathered}$ |
|  |  |  | VOCs | Tetrachloroethene | 34.2 | 55 | 5 |
|  |  |  | TPH | TPH - Method 418.1 (Aq.) | $<\mathrm{RL}$ | NS | NS |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA TABLE 3 (Cont'd)

| Monitoring Well Designation | Sample Identification | Sample Date | Analyte Type | Compound | Results (ug/L) | RISC Default Closure Level Industrial Land Use (ug/L) | RISC Default Closure Level - Residential Land Use (ug/L) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MW-11D | SBI002:MW11D:G091801:505 | 9/18/01 | VOCs | cis-1,2-Dichloroethene Tetrachloroethene 1,1,1-Trichloroethane Trichloroethene | $\begin{aligned} & 1.2 \\ & 1.7 \\ & 1.4 \\ & 1.1 \end{aligned}$ | $\begin{gathered} 1,000 \\ 55 \\ 3,600 \\ 260 \\ \hline \end{gathered}$ | $\begin{gathered} 70 \\ 5 \\ 200 \\ 5 \\ \hline \end{gathered}$ |
|  |  |  | SVOCs | All Analytes | <RL | -- | -- |
|  |  |  | TPH | TPH - DRO (Ag.) | $<\mathrm{RL}$ | NS | NS |
| HMW-12S | SBI002:HMW12S:G091901:523 | 9/19/01 | Metals* | Arsenic Barium Lead | $\begin{aligned} & \hline 46.7 \\ & 154 \\ & 19.5 \\ & \hline \end{aligned}$ | $\begin{gathered} 50 \\ 7,200 \\ 42 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 50 \\ 2,000 \\ 15^{* * *} \end{gathered}$ |
|  |  |  | VOCs | Chloroform cis-1,2-Dichioroethene trans-1,2-Dichloroethene Tetrachloroethene Trichloroethene | $\begin{gathered} \hline 2.2 \\ 2.4 \\ 5 \\ 52.1 \\ 29.6 \end{gathered}$ | $\begin{gathered} \hline 470 \\ 1,000 \\ 200 \\ 55 \\ 260 \end{gathered}$ | $\begin{gathered} 100 \\ 70 \\ 100 \\ 5 \\ 5 \\ \hline \end{gathered}$ |
|  |  |  | TPH | TPH-GRO (Aq.) | <RL | NS | NS |
| HMW-12D | SBI002:HMW12D:G091801:505 | 9/18/01 | Metals* | Barium Lead | $\begin{aligned} & \hline 62.6 \\ & 2.8 \\ & \hline \end{aligned}$ | $\begin{gathered} 7,200 \\ 42 \\ \hline \end{gathered}$ | $\begin{gathered} 2,000 \\ 15 \end{gathered}$ |
|  |  |  | VOCs | Tetrachloroethene 1,1,1-Trichloroethane | $\begin{aligned} & 1.4 \\ & 1.6 \\ & \hline \end{aligned}$ | $\begin{gathered} 55 \\ 3,600 \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ 200 \\ \hline \end{gathered}$ |
| HMW-13S | SBI002:HMW13S:G091801:523 | 9/18/01 | VOCs | cis-1,2-Dichloroethene Trichloroethene | $\begin{aligned} & \hline 2.8 \\ & 19 \end{aligned}$ | $\begin{aligned} & 1,000 \\ & 260 \end{aligned}$ | $\begin{gathered} \hline 70 \\ 5 \end{gathered}$ |
|  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | -- | - |
|  |  |  | TPH | $\begin{aligned} & \text { TPH - Method } 418.1 \text { (Aq.) } \\ & \text { TPH - DRO (Aq.) } \end{aligned}$ | $\begin{aligned} & <\mathrm{RL} \\ & <\mathrm{RL} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { NS } \\ & \text { NS } \end{aligned}$ | $\begin{aligned} & \hline \text { NS } \\ & \text { NS } \end{aligned}$ |
| HMW-13D | SBI002:HMW13D:G091901:523 | 9/19/01 | Metals* | Barium Lead | $\begin{aligned} & 138 \\ & 7.7 \end{aligned}$ | $\begin{gathered} \hline 7,200 \\ 42 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2,000 \\ 15 \\ \hline \end{gathered}$ |
|  |  |  | VOCs | cis-1,2-Dichloroethene trans-1,2-Dichloroethene Tetrachloroethene Trichloroethene | $\begin{aligned} & 8.9 \\ & 8.1 \\ & 290 \\ & 386 \\ & \hline \end{aligned}$ | $\begin{gathered} 1,000 \\ 200 \\ 55 \\ 260 \\ \hline \end{gathered}$ | $\begin{gathered} 70 \\ 100 \\ 5 \\ 5 \\ \hline \end{gathered}$ |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA

| Monitoring Well Designation | Sample Identification | Sample Date | Analyte Type | Compound | Results (ug/L) | RISC Default Closure Level Industrial Land Use (ug/L) | RISC Default Closure Level -Residential Land Use (ug/L) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MW-13S | SBI002:MW13S:G091901:523 | 9/19/01 | Metals* | Barium | $\begin{gathered} \hline 57.8 \\ 1.5 \end{gathered}$ | $7,200$ | $2,000$ |
|  |  |  | VOCs | Tetrachloroethene | 638 | 55 | 5 |
| MW-13D | SBI002:MW13D:G091901:523 | 9/19/01 | Metals* | Barium | $75.2$ | 7,200 42 | 2,000 15 |
|  |  |  | VOCs | Tetrachloroethene | $\frac{4}{143}$ | 55 | 5 |
| HMW-14S | SBI002:HMW14S:G091901:523 | 9/19/01 | VOCs | Trichloroethene | 2.5 | 260 | 5 |
|  |  |  | SVOCs | All Analytes | $\stackrel{4}{4} \mathrm{R}$ | - | -- |
|  |  |  | PCBs | All Analytes | <RL | -- | -- |
|  | SBl002:HMW14S:G091901D:523 | 9/19/01 | VOCs | Trichloroethene Vinyl Chloride | $\begin{gathered} 2.6 \\ 4 \end{gathered}$ | $\begin{gathered} 260 \\ 2 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 5 \\ & 2 \\ & \hline \end{aligned}$ |
|  |  |  | PCBs | All Analytes | $<\mathrm{RL}$ | - | - |
|  |  |  | TPH | TPH - Method 418.1 (Aq.) | <RL | NS | NS |
| MW-14 | SBI002:MW14:G092001:523 | 9/20/01 | Metals* | Barium Lead | $\begin{gathered} \hline \hline 44.3 \\ 1.8 \end{gathered}$ | $\begin{gathered} \overline{7,200} \\ 42 \end{gathered}$ | $\begin{gathered} \hline 2,000 \\ 15 \end{gathered}$ |
|  |  |  | VOCs | 1,1,1-Trichloroethane | 3.7 | 3,600 | 200 |
| HMW-15S | SBl002:HMW15S:G091901:523 | 9/19/01 | VOCs | Trichloroethene | 7.4 | 260 | 5 |
|  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | $\cdots$ | -- |
|  |  |  | TPH | TPH - Method 418.1 (Aq.) | <RL | NS | NS |
| HMW-15D | SBl002:HMW15D:G091901:523 | 9/19/01 | VOCs | cis-1,2-Dichloroethene Trichloroethene | $\begin{aligned} & \hline 2.7 \\ & 6.5 \end{aligned}$ | $\begin{gathered} \hline 1,000 \\ 260 \end{gathered}$ | $\begin{gathered} \hline 70 \\ 5 \end{gathered}$ |
|  |  |  | SVOCs | All Analytes | <RL | -- | -- |
|  |  |  | TPH | TPH - Method 418.1 (Aq.) | <RL | NS | NS |
| MW-15D | SBI002:MW15D:G091801:505 | 9/18/01 | Metals* | Barium Lead | $\begin{gathered} 64.8 \\ 1.7 \end{gathered}$ | $\begin{gathered} 7,200 \\ 42 \end{gathered}$ | $\begin{gathered} 2,000 \\ 15 \end{gathered}$ |
|  |  |  | vocs | sec-Butylbenzene | 4.1 | NS | NS |
|  |  |  |  | cis-1,2-Dichloroethene | 7.6 | 1,000 | 70 |
|  |  |  |  | trans-1,2-Dichloroethene | 1.5 | 200 | 100 |
|  |  |  |  | $n$-Hexane | 48.8 | NS | NS |
|  |  |  |  | n-Propylbenzene | 2.4 | NS | NS |
|  |  |  |  | Tetrachloroethene | 270 | 55 | 5 |
|  |  |  |  | Trichloroethene | 14.8 | 260 | 5 |
|  |  |  |  | 1,3,5-Trimethylibenzene | 1.4 | NS | NS |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA
SUMMARY OF DETECTED ANALYTES IN GROUNDWATER

| Monitoring Well Designation | Sample Identification | Sample <br> Date | Analyte Type | Compound | Results (ug/L) | RISC Default Closure Level Industrial Land Use (ug/L) | RISC Default Closure Level - Residential Land Use (ug/L) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMW-16D | SBI002:HMW16D:G091801:505 | 9/18/01 | VOCs | 1,1-Dichloroethane cis-1,2-Dichloroethene 1,1,1-Trichloroethane Trichloroethene | $\begin{aligned} & 1.2 \\ & 2.8 \\ & 1.2 \\ & 2.3 \end{aligned}$ | $\begin{gathered} 10,000 \\ 1,000 \\ 3,600 \\ 260 \\ \hline \end{gathered}$ | $\begin{gathered} 990 \\ 70 \\ 200 \\ 5 \\ \hline \end{gathered}$ |
|  |  |  | SVOCs | All Analytes | <RL | -- | -- |
|  |  |  | TPH | $\begin{aligned} & \text { TPH - Method } 418.1 \text { (Aq.) } \\ & \text { TPH - DRO (Ag.) } \end{aligned}$ | $\begin{aligned} & <R L \\ & <R L \end{aligned}$ | $\begin{aligned} & \hline \text { NS } \\ & \text { NS } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { NS } \\ & \text { NS } \\ & \hline \end{aligned}$ |
| HMW-17D | SBI002:HMW17D:G091701:523 | 9/17/01 | Metals* | Barium Lead | $\begin{gathered} 66.3 \\ 3 \end{gathered}$ | $\begin{gathered} 7,200 \\ 42 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2,000 \\ 15 \\ \hline \end{gathered}$ |
|  |  |  | VOCs | cis-1,2-Dichloroethene 1,1,1-Trichioroethane | $\begin{aligned} & 1.2 \\ & 1.9 \end{aligned}$ | $\begin{aligned} & 1,000 \\ & 3,600 \\ & \hline \end{aligned}$ | $\begin{gathered} 70 \\ 200 \end{gathered}$ |
| HMW-18S | SB1002:HMW18S:G091901:523 | 9/19/01 | vocs | cis-1,2-Dichloroethene trans-1,2-Dichloroethene Tetrachloroethene Trichloroethene | $\begin{gathered} 3 \\ 1.9 \\ 36.4 \\ \mathbf{1 3 . 1} \\ \hline \end{gathered}$ | $\begin{gathered} 1,000 \\ 200 \\ 55 \\ 260 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 70 \\ 100 \\ 5 \\ 5 \\ \hline \end{gathered}$ |
|  |  |  | SVOCs | All Analytes | <RL | -- | -- |
|  |  |  | TPH | $\begin{aligned} & \text { TPH - Method } 418.1 \text { (Aq.) } \\ & \text { TPH - DRO (Aq.) } \end{aligned}$ | $\begin{aligned} & <R L \\ & <R L \end{aligned}$ | $\begin{aligned} & \text { NS } \\ & \text { NS } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { NS } \\ & \text { NS } \end{aligned}$ |
| HMW-19S | SBI002:19S:G091801:505 | 9/18/01 | Metals* | Arsenic <br> Barium <br> Cadmium <br> Chromium <br> Lead <br> Mercury | $\begin{gathered} \hline 2,140 \\ 2,140 \\ 2 \\ 27.6 \\ 255 \\ 0.4 \\ \hline \end{gathered}$ | 50 <br> 7,200 <br> 51 <br> $310^{* *}$ <br> 42 <br> 31 | $\begin{gathered} \hline \hline 50 \\ 2,000 \\ 5 \\ 100^{* *} \\ 15 \\ 2 \\ \hline \end{gathered}$ |
|  |  |  | VOCs | Tetrachloroethene 1,1,1-Trichloroethane | $\begin{aligned} & 185 \\ & 1.8 \end{aligned}$ | $\begin{gathered} \hline 55 \\ 3,600 \end{gathered}$ | $\begin{gathered} 5 \\ 200 \\ \hline \end{gathered}$ |
|  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | - | -- |
|  |  |  | TPH | TPH - Method 418.1 (Aq.) | <RL | NS | NS |
|  | SBI002:19S:G091801D:505 | 9/18/01 | Metals* | Arsenic | 2,860 | 50 | 50 |
|  |  |  |  | Barium | 3,100 | 7,200 | 2,000 |
|  |  |  |  | Cadmium | 3.3 | 51 | 5 |
|  |  |  |  | Chromium | 40 | $310^{* *}$ | $100^{* *}$ |
|  |  |  |  | Lead | 359 | 42 | 15 |
|  |  |  |  | Mercury | $0.6$ | $31$ | $2$ |
|  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | 510 | $\cdots$ |
|  |  |  | TPH | TPH - Method 418.1 (Aq.) | $<\mathrm{RL}$ | NS | NS |

TABLE 3 (Cont'd)
SUMMARY OF DETECTED ANALYTES
INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA
SUMMARY OF DETECTED ANALYTES IN GROUNDWATER

| Monitoring Well Designation | Sample Identification | Sample <br> Date | Analyte Type | Compound | Results (ug/L) | RISC Default Closure Level Industrial Land Use (ug/L) | RISC Default Closure Level - Residential Land Use (ug/L) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMW-19D | SBI002:HMW19D:G091801:505 | 9/18/01 | Metals* | Barium Lead | $\begin{gathered} 56.1 \\ 1.4 \end{gathered}$ | $\begin{gathered} 7,200 \\ 42 \end{gathered}$ | $\begin{gathered} 2,000 \\ 15 \end{gathered}$ |
|  |  |  | VOCs | Tetrachloroethene | 46.9 | 55 | 5 |
| HMW-20S | SBI002:HMW20S:G092001:503 | 9/20/01 | VOCs | All Analytes | <RL | -- | -- |
|  |  |  | TPH | TPH-GRO (Aq.) | $<\mathrm{RL}$ | NS | NS |
| HMW-21D | SBI002:HMW21D:G091901:523 | 9/17/01 | Metals* | Barium Lead | $\begin{gathered} 76.3 \\ 3 \\ \hline \end{gathered}$ | $\begin{gathered} 7,200 \\ 42 \end{gathered}$ | $\begin{gathered} 2,000 \\ 15 \\ \hline \end{gathered}$ |
|  |  |  | VOCs | 1,1,1-Trichloroethane | 4.4 | 3,600 | 200 |
|  |  |  | TPH | TPH - Method 418.1 (Aq.) | $<\mathrm{RL}$ | NS | NS |
| HMW-22D | SB1002:HMW22D:G091701:523 | 9/17/01 | Metals* | Barium Lead | $\begin{gathered} 76.3 \\ 3 \end{gathered}$ | $\begin{gathered} \hline 7,200 \\ 42 \end{gathered}$ | $\begin{gathered} \hline 2,000 \\ 15 \end{gathered}$ |
|  |  |  | VOCs | All Analytes | $<\mathrm{RL}$ | -- | -- |
| HMW-22I | SBI002:HMW221:G091701:523 | 9/17/01 | Metals* | Arsenic Barium Lead | $\begin{gathered} \hline 7.7 \\ 61.8 \\ 5.8 \end{gathered}$ | $\begin{gathered} 50 \\ 7,200 \\ 42 \end{gathered}$ | $\begin{gathered} 50 \\ 2,000 \\ 15 \end{gathered}$ |
|  |  |  | VOCs | 1,1,1-Trichloroethane | 1.2 | 3,600 | 200 |
| HMW-23S | SBI002:HMW23S:G091801:505 | 9/18/01 | VOCs | Ethylbenzene Isopropylbenzene (Cumene) <br> p-Isopropyltoluene Naphthalene | $\begin{aligned} & \hline 4.8 \\ & 78.3 \\ & 430 \\ & 371 \\ & \hline \end{aligned}$ | $\begin{gathered} 10,000 \\ \text { NS } \\ \text { NS } \\ 2,000 \end{gathered}$ | $\begin{aligned} & 700 \\ & \text { NS } \\ & \text { NS } \\ & 8 \end{aligned}$ |
|  |  |  |  | Fuproderadineme | 昂的 | 1,020*** | $76.8{ }^{\text {*** }}$ |
|  |  |  |  | 1,2,4-Trimethylbenzene | 7,740 | 5,110*** | $16.4{ }^{* * *}$ |
|  |  |  |  |  |  | 5,110*** | 16.4 *** |
|  |  |  |  | Xylenes | 146 | 180,000 | 10,000 |
|  |  |  | SVOCs | All Analytes | <RL. | -- | -- |
|  |  |  | TPH | TPH-GRO (Aq.) | <RL | NS | NS |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA
SUMMARY OF DETECTED ANALYTES IN GROUNDWATER
AREA A

| Monitoring Weil Designation | Sample Identification | Sample <br> Date | Analyte Type | Compound | Results (ug/L) | RISC Default Closure Level Industrial Land Use (ug/L) | RISC Default Closure Level - Residential Land Use (ug/L) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMW-23D | SBi002:HMW23D:G091801:505 | 9/18/01 | Metals* | Arsenic Barium Chromium Lead | $\begin{aligned} & 13.8 \\ & 192 \\ & 22.3 \\ & 60.1 \end{aligned}$ | $\begin{gathered} 50 \\ 7,200 \\ 310^{* *} \\ 42 \end{gathered}$ | $\begin{gathered} 50 \\ 2,000 \\ 100^{*+} \\ 15 \end{gathered}$ |
|  |  |  | VOCs | 1,1,1-Trichloroethane | 3.7 | 3,600 | 200 |
|  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | -- | -- |
|  |  |  | TPH | $\begin{aligned} & \text { TPH - DRO (Aq.) } \\ & \text { TPH - GRO (Aq.) } \end{aligned}$ | $\begin{aligned} & <R L \\ & <R L \end{aligned}$ | $\begin{aligned} & \hline \text { NS } \\ & \text { NS } \end{aligned}$ | $\begin{aligned} & \hline \text { NS } \\ & \text { NS } \end{aligned}$ |
| MW-23D | SBI002:MW23D:G091801:505 | 9/18/01 | VŌCs | 1,1,1-Trichloroethane | 3.7 | 3,600 | 200 |
|  |  |  | SVOCs | All Analytes | <RL | -- | - |
|  |  |  | TPH | TPH - GRO (Aqueous) | $<\mathrm{RL}$ | NS | NS |
| MW-23S | SBI002:MW23S:G091801:505 | 9/18/01 | VOCs | Naphthalene 1,1,1-Trichloroethane | $\begin{aligned} & \hline 417 \\ & 2.3 \end{aligned}$ | $\begin{aligned} & \hline 2,000 \\ & 3,600 \end{aligned}$ | $\begin{gathered} \hline 8 \\ 200 \\ \hline \end{gathered}$ |
|  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | -- | -- |
|  |  |  | TPH | TPH-GRO (Aq.) | 36,200 | NS | NS |
| HMW-24S | SBI002:HMW24D:G092001:523 | 9/20/01 | Metals ${ }^{*}$ | Barium Lead | $\begin{gathered} \hline 55.6 \\ 1.7 \end{gathered}$ | $\begin{gathered} \hline 7,200 \\ 42 \end{gathered}$ | $\begin{gathered} \hline 2,000 \\ 15 \end{gathered}$ |
|  |  |  | VOCs | 1,1,1-Trichloroethane | 3.7 | 3,600 | 200 |
| MW-24D | SBI002:MW24D:G091801:505 | 9/18/01 | Metals* | Arsenic <br> Barium <br> Lead | $\begin{aligned} & \hline 10 \\ & 72.3 \\ & 110 \end{aligned}$ | $\begin{gathered} 50 \\ 7,200 \\ 42 \end{gathered}$ | $\begin{gathered} \hline \hline 50 \\ 2,000 \\ 25 \\ \hline \end{gathered}$ |
|  |  |  | VOCs | Tetrachloroethene 1,1,1-Trichloroethane | $\begin{aligned} & 8.8 \\ & 3.2 \end{aligned}$ | $\begin{array}{r} 55 \\ 3,600 \\ \hline \end{array}$ | $\begin{gathered} 5 \\ 200 \\ \hline \end{gathered}$ |
|  |  |  | SVOCs | All Analytes | $<R \mathrm{~L}$ | -- | -- |
|  |  |  | TPH | $\begin{aligned} & \text { TPH - DRO (Aq.) } \\ & \text { TPH - GRO (Aq.) } \end{aligned}$ | $\begin{aligned} & <\mathrm{RLL} \\ & <\mathrm{RL} \end{aligned}$ | $\begin{aligned} & \hline \text { NS } \\ & \text { NS } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { NS } \\ & \text { NS } \\ & \hline \end{aligned}$ |
| HMW-25S | SBI002:HMW25S:G091901:523 | 9/19/01 | Metals* | Arsenic <br> Barium <br> Chromium <br> Lead <br> Mercury | $\begin{gathered} \hline 647 \\ 7,030 \\ 224 \\ 1,410 \\ 2.3 \end{gathered}$ | $\begin{gathered} \hline 50 \\ 7,200 \\ 310^{* *} \\ 42 \\ 31 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 50 \\ 2,000 \\ 100^{* *} \\ 15 \\ 2 \\ \hline \end{gathered}$ |
|  |  |  | VOCs | 1,1,1-Trichloroethane | 2.4 | 3,600 | 200 |
|  |  |  | SVOCs | All Analytes | <RL | - | -- |
|  |  |  | TPH | TPH-GRO (Aq.) | $<\mathrm{RL}$ | NS | NS |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA

| Monitoring Well Designation | Sample Identification | Sample Date | Analyte Type | Compound | Results (ug/L) | RISC Default Closure Level Industrial Land Use (ug/L) | RISC Default Closure Level - Residential Land Use (ug/L) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MW-25S | SBI002:MW25S:G091701:523 | 9/17/01 | Metais* | Arsenic <br> Barium <br> Chromium <br> Lead | $\begin{array}{r} \hline 5.6 \\ 189 \\ 89.9 \\ 20.9 \\ \hline \end{array}$ | $\begin{gathered} 50 \\ 7,200 \\ 310^{* *} \\ 42 \end{gathered}$ | $\begin{gathered} 50 \\ 2,000 \\ 100^{* *} \\ 15 \end{gathered}$ |
|  |  |  | VOCs | Tetrachloroethene 1,1,1-Trichloroethane | $\begin{array}{r} 4.7 \\ 1.3 \end{array}$ | $\begin{array}{r} \hline 55 \\ 3,600 \\ \hline \end{array}$ | $\begin{gathered} 5 \\ 200 \\ \hline \end{gathered}$ |
| MW-25D | SBI002:MW25D:G091701:523 | 9/17/01 | Metals* | Barium <br> Chromium <br> Lead | $\begin{gathered} \hline 64.7 \\ 30.4 \\ 3.8 \end{gathered}$ | $\begin{gathered} 7,200 \\ 310^{* *} \\ 42 \end{gathered}$ | $\begin{gathered} \hline 2,000 \\ 100^{* *} \\ 15 \end{gathered}$ |
|  |  |  | VOCs | Tetrachloroethene 1,1,1-Trichloroethane | $\begin{aligned} & 2.2 \\ & 2.7 \end{aligned}$ | $\begin{gathered} 55 \\ 3,600 \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ 200 \end{gathered}$ |
| HMW-26S | SBI002:HMW26S:G091901:523 | 9/19/01 | Metals* | Arsenic <br> Barium <br> Cadmium <br> Chromium <br> Lead | $\begin{gathered} 112 \\ 240 \\ 1 \\ 33.2 \\ 127 \end{gathered}$ | $\begin{gathered} \hline 50 \\ 7,200 \\ 51 \\ 310^{* *} \\ 42 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 50 \\ 2,000 \\ 5 \\ 100^{* *} \\ 15 \\ \hline \end{gathered}$ |
|  |  |  | VOCs | sec-Butylbenzene p -Isopropyltoluene | $\begin{gathered} 2 \\ 1.2 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \text { NS } \\ & \text { NS } \end{aligned}$ | $\begin{aligned} & \hline \text { NS } \\ & \text { NS } \\ & \hline \end{aligned}$ |
|  |  |  | TPH | TPH-GRO (Aq.) | <RL | NS | NS |
| HMW-27S | SBI002:HMW27S:G091901:523 | 9/19/01 | Metals* | Arsenic <br> Barium <br> Cadmium <br> Chromium <br> Lead <br> Mercury | $\begin{gathered} \hline 144 \\ 783 \\ 3.3 \\ 40 \\ \hline 240 \\ 0.3 \end{gathered}$ | 50 <br> 7,200 <br> 51 <br> $310^{* *}$ <br> 42 <br> 31 | $\begin{gathered} \hline 50 \\ 2,000 \\ 5 \\ 100^{+*} \\ 15 \\ 2 \\ \hline \end{gathered}$ |
|  |  |  | VOCs | Tetrachloroethene 1,1,1-Trichloroethane Trichloroethene | $\begin{aligned} & 136 \\ & 2.2 \\ & 3.2 \end{aligned}$ | $\begin{gathered} \hline 55 \\ 3,600 \\ 260 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 5 \\ 200 \\ 5 \\ \hline \end{gathered}$ |
|  |  |  | SVOCs | All Analytes | <RL | -- | -- |
|  |  |  | TPH | TPH - GRO (Aq.) TPH - Method 418.1 (Aq.) | $\begin{aligned} & <R L \\ & <R L \end{aligned}$ | $\begin{aligned} & \hline \text { NS } \\ & \text { NS } \end{aligned}$ | $\begin{aligned} & \hline \text { NS } \\ & \text { NS } \end{aligned}$ |
| HMW-28S | SBI002:HMW28S:G091401:505 | 9/14/01 | Metais ${ }^{*}$ | Barium | 72.5 | 7,200 | 2,000 |
|  |  |  | VOCs | cis-1,2-Dichoroethene Tetrachioroethene Trichloroethene | $\begin{gathered} 2.6 \\ 1 \\ 15.1 \end{gathered}$ | $\begin{gathered} 1,000 \\ 55 \\ 260 \\ \hline \end{gathered}$ | $\begin{gathered} 70 \\ 5 \\ 5 \end{gathered}$ |
|  |  |  | TPH | TPH - Method 418.1 (Ag.) | <RL | NS | NS |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA
SUMMARY OF DETECTED ANALYTES IN GROUNDWATER

| Monitoring Well Designation | Sample Identification | Sample <br> Date | Analyte Type | Compound | Results (ug/L) | RISC Default Closure Level Industrial Land Use (ug/L) | RISC Default Closure Level - Residential Land Use (ag/L) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMW-28D | SB1002:HMW28D:G091401:505 | 9/14/01 | Metals* | Barium Lead | $\begin{gathered} 37.5 \\ 8.3 \\ \hline \end{gathered}$ | $\begin{gathered} 7,200 \\ 42 \\ \hline \end{gathered}$ | $\begin{gathered} 2,000 \\ 15 \end{gathered}$ |
|  |  |  | VOCs | cis-1,2-Dichloroethene Tetrachloroethene 1,1,1-Trichloroethane Trichloroethene | $\begin{gathered} 2 \\ 1.4 \\ 1.8 \\ 51.4 \\ \hline \end{gathered}$ | $\begin{gathered} 1,000 \\ 55 \\ 3,600 \\ 260 \end{gathered}$ | $\begin{gathered} 70 \\ 5 \\ 200 \\ 5 \\ \hline \end{gathered}$ |
|  |  |  | TPH | TPH - Method 418.1 (Aq.) | $<\mathrm{RL}$ | NS | NS |
| MW-28S | SBI002:MW28S:G091801:505 | 9/18/01 | Metals* | Arsenic Barium Lead | $\begin{aligned} & \hline 11.1 \\ & 163 \\ & 17 \end{aligned}$ | $\begin{gathered} \hline 50 \\ 7,200 \\ 42 \end{gathered}$ | $\begin{gathered} \hline 50 \\ 2,000 \\ 15 \end{gathered}$ |
|  |  |  | VOCs | Tetrachloroethene | 2.9 | 55 | 5 |
| MW-28D | SBI002:MW28D:G091801:505 | 9/18/01 | Metals* | Arsenic <br> Barium <br> Lead | $\begin{gathered} 11.2 \\ 62.8 \\ 17 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 50 \\ 7,200 \\ 42 \end{gathered}$ | $\begin{gathered} 50 \\ 2,000 \\ 15 \\ \hline \end{gathered}$ |
|  |  |  | vocs | Tetrachloroethene | 12.8 | 55 | 5 |
| HMW-291 | SB1002:HMW291:G091401:505 | 9/14/01 | Metais* | Arsenic Barium Lead | $\begin{aligned} & \hline 11.5 \\ & 58.5 \\ & 20.8 \end{aligned}$ | $\begin{gathered} \hline 50 \\ 7,200 \\ 42 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 50 \\ 2,000 \\ 15 \end{gathered}$ |
|  |  |  | VOCs | sec-Butylbenzene cis-1,2-Dichloroethene Isopropylbenzene (Cumene) n-Propylbenzene Trichloroethene | $\begin{gathered} 1.8 \\ 2.3 \\ 1.8 \\ 2.1 \\ 13.9 \end{gathered}$ | $\begin{gathered} \text { NS } \\ 1,000 \\ \text { NS } \\ \text { NS } \\ 260 \end{gathered}$ | $\begin{gathered} \text { NS } \\ 70 \\ \text { NS } \\ \text { NS } \\ 5 \end{gathered}$ |
|  |  |  | SVOCs | Fiuorene | 18 | 2,000 | 310 |
|  |  |  | TPH | TPH - Method 418.1 (Aq.) | 3,600 | NS | NS |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA
SUMMARY OF DETECTED ANALYTES IN GROUNDWATER

| Monitoring Well Designation | Sample Identification | Sample <br> Date | Analyte Type | Compound | Results (ug/L) | RISC Default Closure Level Industrial Land Use (ug/L) | RISC Default Closure Level - Residential Land Use (ug/L) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMW-29D | SBI002:HMW29D:G091401:505 | 9/14/01 | Metals* | Barium <br> Lead | $\begin{gathered} \hline 48.3 \\ 2.2 \end{gathered}$ | $\begin{gathered} 7,200 \\ 42 \end{gathered}$ | $\begin{gathered} 2,000 \\ 15 \end{gathered}$ |
|  |  |  | VOCs | cis-1,2-Dichloroethene Isopropylbenzene (Cumene) n-Propylbenzene Trichloroethene | $\begin{array}{r} \hline 3.7 \\ 2.8 \\ 3.4 \\ 10.5 \\ \hline \end{array}$ | $\begin{gathered} 1,000 \\ \text { NS } \\ \text { NS } \\ 260 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 70 \\ \text { NS } \\ \text { NS } \\ 5 \\ \hline \end{gathered}$ |
|  |  |  | TPH | TPH - Method 418.1 (Aq.) | 7,500 | NS | NS |
| HMW-301 | SBI002:HMW301:G091401:505 | 9/14/01 | Metais* | Barium Lead | $\begin{gathered} 59.9 \\ 9 \end{gathered}$ | $\begin{gathered} \hline 7,200 \\ 42 \end{gathered}$ | $\begin{gathered} 2,000 \\ 15 \end{gathered}$ |
|  |  |  | VOCs | sec-Butylbenzene | 3.4 | NS | NS |
|  |  |  |  | 1,1-Dichloroethane | 1.3 | 10,000 | 990 |
|  |  |  |  | cis-1,2-Dichloroethene | 1.4 | 1,000 | 70 |
|  |  |  |  | $n$-Hexane | 44.8 | NS | NS |
|  |  |  |  | Isopropylbenzene (Cumene) | 1 | NS | NS |
|  |  |  |  | p-Isopropyltoluene | 3.2 | NS | NS |
|  |  |  |  | n-Propylbenzene | 3.8 | NS | NS |
|  |  |  |  | Trichloroethene | 1.2 | 260 | 5 |
|  |  |  |  | 1,2,4-Trimethylbenzene | 2.6 | NS | NS |
|  |  |  |  | 1,3,5-Trimethylbenzene | 2.6 | NS | NS |
|  |  |  |  | Xylenes | 1.5 | 180,000 | 10,000 |
|  |  |  | TPH | TPH - Method 418.1 (Aq.) | 400 | NS | NS |
| MW-30D | SB1002.MW30D:G092001:523 | 9/20/01 | VOCs | All Analytes | <RL | -- | -- |
| HMW-30D | SBI002:HMW30D:G091401:505 | 9/14/01 | Metals* | Barium Lead | $\begin{gathered} \hline 47.3 \\ 2.5 \end{gathered}$ | $\begin{gathered} 7,200 \\ \hline 42 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \hline, 000 \\ & 15^{* * *} \end{aligned}$ |
|  |  |  | vocs | sec-Butylbenzene | 1.4 | NS | NS |
|  |  |  |  | 1,1-Dichloroethane | 1.4 | 10,000 | 990 |
|  |  |  |  | cis-1,2-Dichloroethene | 4.2 | 1,000 | 70 |
|  |  |  |  | n -Hexane | 12.5 | NS | NS |
|  |  |  |  | p-lsopropyltoluene | 1 | NS | NS |
|  |  |  |  | 1,1,1-Trichloroethane | 1.1 | 3,600 | 200 |
|  |  |  |  | Trichloroethene | 10.8 | 260 | 5 |
|  |  |  | TPH TPH - Method 418.1 (Aq.) |  | 300 | NS | NS |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA

| Monitoring Well Designation | Sample Identification | Sample <br> Date | Analyte Type | Compound | Results (ug/L) | RISC Default Closure Level Industrial Land Use (ug/L) | RISC Default Closure Level-Residential Land Use (ug/L) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMW-31S | SBI002:HMW31S:G091701:523 | 9/17/01 | Metals* | Arsenic | 121 | 50 | 50 |
|  |  |  |  | Barium | 1020 | 7,200 | 2,000 |
|  |  |  |  | Cadmium | 6.8 | 51 | 5 |
|  |  |  |  | Chromium | 55.3 | $310^{* *}$ | 100** |
|  |  |  |  | Lead | 387 | 42 | 15 |
|  |  |  |  | Mercury | 0.5 | 31 | 2 |
|  |  |  | VOCs | Tetrachloroethene | 11.8 | 55 | 5 |
|  |  |  |  | 1,1,1-Trichloroethane | 1.4 | 3,600 | 200 |
|  |  |  |  | Trichloroethene | 2 | 260 | 5 |
|  |  |  | SVOCs | All Analytes | <RL | - | -- |
|  |  |  | TPH | TPH - Method 418.1 (Aq.) | <RL | NS | NS |
| HMW-311 | SBI002:HMW31I:G091701:523 | 9/17/01 | Metals* | Barium | $70.6$ | 7,200 | $2,000$ |
|  |  |  | VOCs |  |  |  |  |
|  |  |  |  | n-Butylbenzene | 10.3 | NS | NS |
|  |  |  |  | sec-Butylbenzene | 9.8 | NS | NS |
|  |  |  |  | n-Hexane | 68 | NS | NS |
|  |  |  |  | Isopropylbenzene (Cumene) | 3.2 | NS | NS |
|  |  |  |  | p-Isopropyltoluene | 5.1 | NS | NS |
|  |  |  |  | n-Propylbenzene | 4.1 | NS | NS |
|  |  |  |  | Vinyl Chloride | 1.5 | 2 | 2 |
|  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | -- | - |
|  |  |  | TPH | TPH - Method 418.1 (Aq.) | 1,400 | NS | NS |
|  | SBl002:HMW31I:G091701D:523 | 9/17/01 | Metals* | Barium | 73.2 | 7,200 | 2,000 |
|  |  |  |  | Lead | 8.8 | 42 | 15 |
|  |  |  | VOCs | n-Butylbenzene | 10.3 | NS | NS |
|  |  |  |  | sec-Butylbenzene | 9.9 | NS | NS |
|  |  |  |  | n -Hexane | 83.6 | NS | NS |
|  |  |  |  | Isopropylbenzene (Cumene) | 3 | NS | NS |
|  |  |  |  | p-lsopropyltoluene | 5.2 | NS | NS |
|  |  |  |  | n-Propylbenzene | 4 | NS | NS |
|  |  |  |  | Vinyi Chloride | 1.3 | 2 | 2 |
|  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | -- | -- |

INITIAL. PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA TABLE 3 (Cont'd)


| Monitoring Well Designation | Sample Identification | Sample <br> Date | Analyte Type | Compound | Results (ug/L) | RISC Default Closure Level Industrial Land Use (ug/L) | RISC Default Closure Level - Residential Land Use (ug/L) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMW-31D | SBI002:HMW31D:G091701:523 | 9/17/01 | Metals* | Barium Lead | $\begin{gathered} \hline 85.2 \\ 5.2 \end{gathered}$ | $\begin{gathered} 7,200 \\ 42 \end{gathered}$ | $\begin{gathered} 2,000 \\ 15 \\ \hline \end{gathered}$ |
|  |  |  | VOCs | $\begin{aligned} & \text { 1,1-Dichloroethane } \\ & \text { cis-1,2-Dichloroethene } \\ & \text { n-Hexane } \\ & \text { Isopropylbenzene (Cumene) } \\ & \text { Tetrachloroethene } \\ & \hline \end{aligned}$ | $\begin{gathered} 1.3 \\ 1.6 \\ 78.2 \\ 3.6 \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} 10,000 \\ 1,000 \\ \text { NS } \\ \text { NS } \\ 55 \\ \hline \end{gathered}$ | 990 70 NS NS 5 |
|  |  |  | SVOCs | All Analytes | $<\mathrm{RL}$ | - | - |
|  |  |  | TPH | TPH - Method 418.1 (Aq.) | 13,000 | NS | NS |
| HMW-321 | SBI002:HMW32I:G091401:505 | 9/14/01 | Metals ${ }^{*}$ | Arsenic Barium Lead | $\begin{aligned} & \hline 9.4 \\ & 108 \\ & 29.2 \end{aligned}$ | $\begin{gathered} 50 \\ 7,200 \\ 42 \end{gathered}$ | $\begin{gathered} 50 \\ 2,000 \\ 15 \end{gathered}$ |
|  |  |  | VOCs | sec-Butylbenzene | 9.3 | NS | NS |
|  |  |  |  | cis-1,2-Dichloroethene | 7 | 1,000 | 70 |
|  |  |  |  | trans-1,2-Dichloroethene | 9.1 | 200 | 100 |
|  |  |  |  | n -Hexane | 114 | NS | NA |
|  |  |  |  | p-Isopropyltoluene | 2.3 | NS | NS |
|  |  |  |  | n-Propylbenzene | 1.9 | NS | NS |
|  |  |  |  | Tetrachloroethene | 363 | 55 | 5 |
|  |  |  |  | Trichloroethene | 98.8 | 260 | 5 |
|  |  |  | TPH | TPH - Method 418.1 (AQ) | 700 | NA | NA |
| HMW-32D | SBI002:HMW32D:G091401:505 | 9/14/01 | Metals* | Barium Lead | $\begin{aligned} & \hline 98.2 \\ & 10.1 \end{aligned}$ | $\begin{gathered} 7,200 \\ 42 \end{gathered}$ | $\begin{aligned} & 2,000 \\ & 15^{* * *} \end{aligned}$ |
|  |  |  | VOCs | Acetone | 21.4 | 10,000 | 770 |
|  |  |  |  | sec-Butylbenzene | 10.8 | NS | NS |
|  |  |  |  | cis-1,2-Dichloroethene | 33.3 | 1,000 | 70 |
|  |  |  |  | trans-1,2-Dichloroethene | 3.5 | 200 | 100 |
|  |  |  |  | n -Hexane | 23.3 | NS | NA |
|  |  |  |  | p-Isopropyltoluene | 2.5 | NS | NS |
|  |  |  |  | n-Propylbenzene | 1.5 | NS | NS |
|  |  |  |  | Tetrachloroethene | 35.9 | 55 | 5 |
|  |  |  |  | Trichloroethene | 18.2 | 260 | 5 |
|  |  |  | TPH | TPH - Method 418.1 (Aq.) | 800 | NS | NS |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA
SUMMARY OF DETECTED ANALYTES IN GROUNDWATER

| Monitoring Well Designation | Sample Identification | Sample Date | Analyte Type | Compound | Results (ug/L) | RISC Default Closure Level Industrial Land Use (ug/L) | RISC Default Closure Level - Residential Land Use (ug/L) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMW-33S | SBI002:HMW33S:G091901:523 | 9/19/01 | Metals* | Arsenic <br> Barium <br> Lead | $\begin{aligned} & 5.3 \\ & 100 \\ & 132 \end{aligned}$ | $\begin{gathered} 50 \\ 7,200 \\ 42 \end{gathered}$ | $\begin{gathered} 50 \\ 2,000 \\ 15 \\ \hline \end{gathered}$ |
|  |  |  | VOCs | All Analytes | <RL | -- | -- |
| HMW-33D | SBI002:HMW33D:G091901:523 | 9/19/01 | Metals* | Arsenic Barium Chromium Lead | $\begin{array}{r} \hline 11.1 \\ 116 \\ 8.8 \\ 12.9 \\ \hline \end{array}$ | $\begin{gathered} \hline 50 \\ 7,200 \\ 310^{* *} \\ 42 \end{gathered}$ | $\begin{gathered} 50 \\ 2,000 \\ 100^{*+} \\ 15 \end{gathered}$ |
|  |  |  | Vocs | 1,1,1-Trichloroethane | 4 | 3,600 | 200 |
| HMW-34S | SBI002:HMW34S:G091901:523 | 9/19/01 | VOCs | cis-1,2-Dichloroethene Trichloroethene | $\begin{aligned} & \hline 1.1 \\ & 4.5 \end{aligned}$ | $\begin{gathered} 1,000 \\ 260 \end{gathered}$ | $\begin{gathered} \hline 70 \\ 5 \end{gathered}$ |
|  |  |  | SVOCs | All Analytes | <RL | -- | - |
|  |  |  | TPH | $\begin{aligned} & \text { TPH - Method } 418.1 \text { (Aq.) } \\ & \text { TPH - DRO (Aq.) } \end{aligned}$ | $\begin{aligned} & <R L \\ & <R L \end{aligned}$ | $\begin{aligned} & \hline \text { NS } \\ & \text { NS } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { NS } \\ & \text { NS } \\ & \hline \end{aligned}$ |
| HMW-35S | SBI002:HMW35S:G091701:523 | 9/17/01 | Metals* | Barium Lead | $\begin{gathered} \hline \hline 47.1 \\ 2.8 \end{gathered}$ | $\begin{gathered} 7,200 \\ 42 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 2,000 \\ & 15^{* * *} \\ & \hline \end{aligned}$ |
|  |  |  | VOCs | cis-1,2-Dichloroethene Trichloroethene | $\begin{aligned} & \hline 1.5 \\ & 7.4 \end{aligned}$ | $\begin{gathered} 1,000 \\ 260 \end{gathered}$ | $\begin{gathered} 70 \\ 5 \end{gathered}$ |
| SB-1 | SBI002:SB1:G092001:523 | 9/20/01 | VOCs | Trichloroethene | 7.3 | 260 | 5 |
|  |  |  | TPH | TPH - Method 418.1 (Aq.) | $<\mathrm{RL}$ | NS | NS |
| HP-1\# | ZHG001:HP1s:G051401:412 ${ }^{\text {a }}$ | 5/14/01 | VOCs | cis-1,2-Dichloroethene trans-1,2-Dichloroethene Tetrachloroethene Trichloroethene | 4 <br> 4.2 <br> -465 <br> 87.7 | $\begin{gathered} \hline \hline, 000 \\ 200 \\ 55 \\ 260 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 70 \\ 100 \\ 5 \\ 5 \\ \hline \end{gathered}$ |
|  | ZHG001:HP1d:G051401:412 ${ }^{\text {b }}$ | 5/14/01 | VOCs | cis-1,2-Dichloroethene trans-1,2-Dichloroethene Tetrachloroethene Trichloroethene | $\begin{aligned} & \hline 3.5 \\ & 4.6 \\ & 53.8 \\ & 87.8 \end{aligned}$ | $\begin{gathered} 1,000 \\ 200 \\ 55 \\ 260 \end{gathered}$ | $\begin{gathered} 70 \\ 100 \\ 5 \\ 5 \end{gathered}$ |
|  | ZHG001:HP1dD:G051401:412 ${ }^{\text {b }}$ | 5/14/01 | VOCs | cis-1,2-Dichloroethene trans-1,2-Dichloroethene n -Hexane Tetrachloroethene Trichloroethene | 3.3 4.2 13.4 -64.3 92.2 | $\begin{gathered} 1,000 \\ 200 \\ \text { NS } \\ 55 \\ 260 \end{gathered}$ | $\begin{gathered} 70 \\ 100 \\ \text { NA } \\ 5 \\ 5 \end{gathered}$ |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA

| Monitoring Well Designation | Sample Identification | Sample <br> Date | Analyte Type | Compound | Results (ug/L) | RISC Default Closure Level Industrial Land Use (ug/L) | RISC Default Closure Level - Residential Land Use (ug/L) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HP-2\# | ZHG001:HP2s:G051401:412 ${ }^{\text {c. }}$ | 5/14/01 | VOCs | n-Butylbenzene | 2 | NS | NS |
|  |  |  |  | sec-Butylbenzene | 1.4 | NS | NS |
|  |  |  |  | cis-1,2-Dichloroethene | 10.4 | 1,000 | 70 |
|  |  |  |  | trans-1,2-Dichloroethene | 4.1 | 200 | 100 |
|  |  |  |  | n-Hexane | 21.2 | NS | NA |
|  |  |  |  | n-Propylbenzene | 1.4 | NS | NS |
|  |  |  |  | Tetrachloroethene | 13.7 | 55 | 5 |
|  |  |  |  | Trichloroethene | 2.4 | 260 | 5 |
|  | ZHG001:HP2d:G051401:412 ${ }^{\text {d. }}$ | 5/14/01 | VOCs | n-Butylbenzene | 10.4 | NS | NS |
|  |  |  |  | sec-Butylbenzene | 10 | NS | NS |
|  |  |  |  | cis-1,2-Dichloroethene | 15.7 | 1,000 | 70 |
|  |  |  |  | trans-1,2-Dichloroethene | 2.6 | 200 | 100 |
|  |  |  |  | n -Hexane | 189 | NS | NA |
|  |  |  |  | Isopropylibenzene (Cumene) | 4.2 | NS | NS |
|  |  |  |  | n-Propylbenzene | 15.2 | NS | NS |
|  |  |  |  | p-Isopropyltoluene | 7 | NS | NS |
|  |  |  |  | 1,2,4-Trimethylbenzene | 1.3 | NS | NS |
|  |  |  |  | 1,3,5-Trimethylbenzene | 2 | NS | NS |


|  | Bingigy | Sample Nümbér | Depth (ft:) |  | Gravel $\%$ coarse |  | Wharse sunditum, Mine |  |  | silto Clay |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 01-405 | HMW-8D | SS-10 | 18.0-20.0 | BROWN POORLY GRADED SAND, TRACE FINES | 0.0 | 0.0 | 1.0 | 27.9 | 68.1 | 3.0 | NC | NC | SP |
| 01-400 | HMW-9D | SS-16 | 30.0-32.0 | GREY POORLY GRADED SAND, TRACE GRAVEL, FINES | 0.0 | 6.6 | 5.6 | 50.5 | 36.3 | 1.0 | NC | NC | SP |
| 01-407 | HMW-11D | SS-5 | 14.0-16.0 | BROWN POORLY GRADED SAND, TRACE GRAVEL, FINES | 0.0 | 1.6 | 2.0 | 26.3 | 68.6 | 1.5 | NC | NC | SP |
| 01-409 | HMW-12D | SS-7 | 12.0-14.0 | BROWN POORLY GRADED SAND WITH GRAVEL, TRACE FINES | 0.0 | 19.1 | 16.3 | 31.2 | 30.3 | 3.1 | NC | NC | SP |
| 01-402 | HMW-13D | SS-17 | 32.0-33.0 | BROWN POORLY GRADED SAND WITH GRAVEL, TRACE FINES | 9.9 | 18.6 | 11.1 | 28.5 | 30.3 | 1.6 | NC | NC | SP |
| 01-403 | HMW-19S | SS-2 | 2.0-4.0 | BROWN WELL-GRADED SAND, LITTLE GRAVEL, TRACE SILT, CLAY | 6.2 | 5.9 | 5.3 | 24.6 | 46.5 | 7.7. 3.8 | NC | NC | SW-SM |
| 01-396 | HMW-21D | SS-3 | 4.0-6.0 | BROWN POORLY GRADED SAND. TRACE FINES, GRAVEL | 0.0 | 0.1 | 0.6 | 10.8 | 86.6 | 1.9 | NC | NC | SP |
| 01-408 | HMW-22D | SS-9 | 16.0-18.0 | BROWN POORLY GRADED SAND WITH GRAVEL, TRACE FINES | 0.0 | 16.2 | 7.4 | 43.3 | 31.1 | 2.0 | NC | NC | SP |
| 01-406 | HMW-23S | SS-8 | 14.0-15.0 | BROWN POORLY GRADED SAND, TRACE FINES, GRAVEL | 0.0 | 0.8 | 2.3 | 36.8 | 56.8 | 3.3 | NC | NC | SP |
| 01-398 | HMW-25S | SS-2 | 2.0-4.0 | BROWN SILTY, CLAYEY SAND, LITTLE GRAVEL | 0.0 | 13.8 | 10.1 | 22.6 | 36.7 | $7.4 \quad 9.4$ | 22.0 | 15.0 | SC-SM |
| 01-397 | HMW-29D | SS-3 | 4.0-6.0 | BROWN POORLY GRADED SAND, TRACE FINES, GRAVEL | 0.0 | 3.9 | 7.9 | 51.0 | 32.6 | 4.6 | NC | NC | SP |
| 01-399 | HMW-29D | SS-8 | 14.0-16.0 | BROWN POORLY GRADED SAND WITH GRAVEL, TRACE FINES | 0.0 | 23.9 | 18.6 | 42.7 | 11.6 | 3.2 | NC | NC | SP |
| 01-404 | HMW-32D | SS-11 | 20.0-22.0 | BROWN POORLY GRADED SAND, TRACE GRAVEL, FINES | 0.0 | 8.3 | 8.0 | 59.1 | 22.5 | 2.1 | NC | NC | SP |
| 01-401 | HMW-33D | SS-29 | 50.0-52.0 | BROWN SILTY SAND, TRACE GRAVEL., CLAY | 0.0 | 5.4 | 6.6 | 30.3 | 43.9 | $11.4 \quad 2.4$ | NC | NC | SM |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT UTH BEND INDIANA
TABLE 4

## SUMMARY OF GEOTECHNICAL DATA <br> \section*{AREA A}

NOTE: NC - Analysis not completed due to lack of fines.
INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT
CITY OF SOUTH BEND, INDIANA
SUMMARY OF SOIL SAMPLES EXCEEDING RISC COMMERCIALINDUSTRIAL DEFAULT CLOSURE LEVELS OR OTHER QUALITATIVE RISK GOALS

| Soll Boring | Location | Suspected Source | Sample Depth | Compound | Results | Default Closure Level | Units | Exceeded RISC Exposure Media or Pathway Closure Level |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GB-3 | Former Railroad Spur, Northwest portion of the Underground Pipe \& Valve Property | Spills from Prior Parts Degreasing Operations | 0.5'-2.0' | Lead | 306 | 230 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Migration to Groundwater |
| GB-10 | Former Railroad Spur, Outside and South of the South-central Portion of the South Bend Lathe Building | Railroad Ties | 0.0'-2.0' | Benzo(a)pyrene | 10,900 | 1,500 | ug/kg dw | Direct Contact Exposure |
|  |  |  |  | Benzo(b)flouranthene | 16,000 | 15,000 | ug/kgdw | Direct Contact Exposure |
|  |  |  |  | Indeno(1,2,3-cd)pyrene | 3,160 | 3,100 | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | Migration to Groundwater |
|  |  |  |  | Cadium | 89.2 | 77 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Migration to Groundwater |
| GB-11 | Oil Staining Area, Outside and South of the South-central Portion of the South Bend Lathe Property | Probable Cutting Oils | 0.0'-1.5' | Lead | 628 | 230 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Migration to Groundwater |
|  |  |  |  | Benzo(a)pyrene | 1,610 | 1,500 | ug/kg dw | Direct Contact Exposure |
| GB-12 | Oil Staining Area, Outside and South of the South-central Portion of the South Bend Lathe Property | Probable Cutting Oils | 0.0'-2.0' | Chorium | 177 | 120 | mg/kg dw | Migration to Groundwater |
|  |  |  |  | Benzo(a)pyrene | 2,650 | 1,500 | ug/kg dw | Direct Contact Exposure |
| GB-15 | Former Railroad Spur, Outside and East of the Northern Portion of Underground Pipe \& Valve | Railroad Ties | 0.0'-1.0' | Arsenic | 27.6 | 20 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Direct Contact Exposure |
|  |  |  |  | Lead | 391 | 230 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Migration to Groundwater |
| GB-16 | Former Railroad, Outside and East of the Central Portion of Underground Pipe \&Valve | Railroad Ties | 0.0'-0.5' | Berrzo(a)pyrene | 3,030 | 1,500 | ug/kg dw | Direct Contact Exposure |
| GB-17 | Former Railroad Spur, Outside and east of the Southern Portion of Underground Pipe \& Valve | Railroad Ties | 0.0'-1.5' | Arsenic | 26 | 20 | mg/kg dw | Direct Contact Exposure |
|  |  |  |  | Lead | 337 | 230 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Migration to Groundwater |
| GB-19 | Former Railroad Spur, Outside and southeast of the Southern Portion of Underground Pipe \& Valve | Railroad Ties | 0.0'-1.0' | Arsenic | 34 | 20 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Direct Contact Exposure and Migration to Groundwater |
|  |  |  |  | Lead | 429 | 230 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Migration to Groundwater |
| GB-24 | Former Railroad Spur, Outside and West of Allied Products Corp. Building 86 | Railroad Ties | 0.5'-2.0' | Arsenic | 35.9 | 20 | ugkg dw | Direct Contact Exposure and Migration to Groundwater |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT
CITY OF SOUTH BEND, INDIANA
SUMMARY OF SOIL SAMPLES EXCEEDING RISC COMMERCIALINDUSTRIAL DEFAULT CLOSURE LEVELS ALITATIVE RISK GOALS
AREA A

| Soll Boring | Location | Suspected Source | Sample Depth | Compound | Results | Defaullt Closure Level | Units | Exceeded RISC Exposure Media or Pathway Closure Level |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GB-29 | Former Railroad Spur, Outside and Southwest of Allied Products Corp. Building 80 | Railroad Ties | 0.5'-1.5' | Arsenic | 41.5 | 20 | mg/kg dw | Direct Contact Exposure and Migration to Groundwater |
|  |  |  |  | Benzo(a)pyrene | 2,620 | 1,500 | ug/kg dw | Direct Contact |
| GB-31 | Former Railroad Spur, Outside and West of Allied Products Corp. Building 79 | Railroad Ties | 0.0'-1.0' | Lead | 429 | 230 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Migration to Groundwater |
|  |  |  |  | Benzo(a)pyrene | 8,900 | 1,500 | ug/kg dw | Direct Contact Exposure |
| GB-32 | Former Railroad Spur, Outside and South of the Aliied Product Corp. Building 86 | Railroad Ties | 0.0'-1.5' | Benzo(a)pyrene | 1,570 | 1,500 | $u g / \mathrm{kg} \mathrm{dw}$ | Direct Contact Exposure |
| GB-33 | Former Railroad Spur, Outside and east of the Southern Portion of Allied Product Corp. Building 83 | Railroad Ties | 0.0'-1.0' | Lead | 397 | 230 | mg/kg dw | Migration to Groundwater |
| GB-34 | Former Railroad Spur, Outside and East of Allied Products Corp. Building 83 | Railroad Ties | 0.0'-1.5' | Benzo(a)anthracene | 29,200 | 15,000 | ug/kg dw | Direct Contact Exposure |
|  |  |  |  | Benzo(a)pyrene | 30,900 | 1,500 | ug/kg dw | Direct Contact Exposure and Migration to Groundwater |
|  |  |  |  | Benzo(b)flouranthane | 48,600 | 15,000 | ug/kg dw | Direct Contact Exposure |
|  |  |  |  | Chrysene | 36,900 | 25,000 | ug/kg dw | Migration to Groundwater |
|  |  |  |  | Dibenzo(a,h)anthracene | 2,530 | 1,500 | ug/kg dw | Direct Contact Exposure |
|  |  |  |  | Indeno(1,2,3-cd)pyrene | 8,260 | 3,100 | ug/kg dw | Migration to Groundwater |
|  |  |  |  | Arsenic | 34 | 20 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Direct Contact Exposure and Migration to Groundwater |
| GB-35 | Former Rairoad Spur, Outside and North of Allied Product Corp. Building 86 | Railroad Ties | 0.0'-1.5' | Lead | 315 | 230 | mg/kg dw | Migration to Groundwater |
|  |  |  |  | Benzo(a)pyrene | 1,920 | 1,500 | ug/kg dw | Direct Contact Exposure |
| GS-2 | Probable Spent Foundry Sand and Misc. Debris, Inside theSoutheast Portion of Underground Pipe \& Vaive | Spent Foundry Sand | Grab | Lead | 240 | 230 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Migration to Groundwater |
|  |  |  |  | Benzo(a)pyrene | 2,820 | 1,500 | ug/kg dw | Direct Contact Exposure |
| GS-3 | Probable Spent Foundry Sand and Misc. Debris, Inside theSoutheast Portion of Underground Pipe \& Valve | Spent Foundry Sand | Grab | Arsenic | 33.3 | 20 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Direct Contact Exposure and Migration to Groundwater |
|  |  |  |  | Lead | 259 | 230 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Migration to Groundwater |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT
CITY OF SOUTH BEND, INDIANA
TABLE 5 (cont'd)
SUMMARY OF SOIL SAMPLES EXCEEDING RISC COMMERCIALINDUSTRIAL DEFAULT CLOSURE LEVELS OR OTHER QUALITATIVE RISK GOALS

| Soll Boring | Location | Suspected Source | Sample Depth | Compound | Results | Default Closure Level | Units | Exceeded RISC Exposure Medial or Pathway Closure Level |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HA-1 | Former Retention Basin, Outside and Souhwest of Underground Pipe \& Valve Building | Proabable Fugitive Dust | 0.0'-0.5' | Lead | 599 | 230 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Migration to Groudwater |
| HA-2 | Former Retention Basin, Outside and Souhwest of Underground Pipe \& Valve | Probable Fugitive Dust | 0.0'-1.0' | Lead | 449 | 230 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Migration to Groudwater |
| HA-3 | Former Railroad Spur, Outside and South of Underground Pipe \& Valve | Railroad Ties | 0.0'-1.0' | Arsenic | 114 | 20 | $\mathrm{mg} / \mathrm{kg}$ dw | Direct Contact Exposure and Migration to Groundwater |
|  |  |  |  | Lead | 278 | 230 | mg/kg dw | Direct Contact Exposure |
|  |  |  |  | Benzo(a)pyrene | 3,100 | 1,500 | ug/kg dw | Direct Contact Exposure |
| HMW-2S | Former Railroad Spur, Outside and North of Underground Pipe \& Valve | Rairoad Ties | 0.5'-2.0' | Arsenic | 25 | 20 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Direct Contact Exposure |
| HMW-4S | Potential Drywell, Outside and East of the Central Portion of the Huckins Building | Probable Fugitive Dust | 0.0'-2.0' | Lead | 426 | 230 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Migration to Groundwater |
| HMW-7S | Hydraulic Control, Outside and West of the Central Portion of Building 86 | Probable Fugitive Dust | 0.0'-2.0' | Lead | 388 | 230 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Migration to Groudwaler |
| HMW-91 | Southern Portion of Allied Products Corp. Building 142 | Spills from Prior Parts Degreasing Operations | 0.5'-2.0' | Tetrachloroethene | 4,740 | 640 | ug/kg dw | Migration to Groundwater' |
| HNW-12S | Former Press Pits, Inside in the Central Portion of Allied Product Corp. Building 80 | Probable Fugitive Dust | 0.5'-2.0' | Lead | 241 | 230 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Migration to Groundwater |
| HMW-13D | Former Press Pits, Inside in the Northern Portion of Allied Product Corp. Building 80 | Probable Fugitive Dust | 0.5-2.0' | Lead | 230,000 | 230,000 | ug/kg dw | Migration to Groundwater |
| HMW-15S | Oil Staining Area, Outside and South of the South-central Portion of the South Bend Lathe Property | Probable Cutting Oils | 4.0'-5.0' | Benzo(a)pyrene | 7,610 | 1,500 | ug/kg dw | Direct Contact Exposure |

INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT
CITY OF SOUTH BEND, INDIANA
TABLE 5 (cont'd)
SUMMARY OF SOIL SAMPLES EXCEEDING RISC COMMERCIAL/INDUSTRIAL DEFAULT CLOSURE LEVELS
OR OTHER QUALITATIVE RISK GOALS

| Soll Boring | Location | Suspected Source | Sample Depth | Compound | Results | Default Closure Leve! | Units | Exceeded RISC Exposure Media of Pathway Closure Level |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMW-18S | Former Degreasing Operation, Outside and South of the Eastern Portion of the South Bend Lathe Porperty | Spills from Prior Parts Degreasing Operations | 0.0'-1.0' | Benzo(a)pyrene | 5,260 | 1,500 | ug/kg dw | Direct Contact Exposure |
| HMW-22D | Former Railroad Spur, Outside and South of Allied Product Corp. Building 83 | Railroad Ties | 0.0'-2.0' | Arsenic | 21.4 | 20 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Direct Contact Exposure |
| HMW-24D | East and Outside of the Northern Portion of Allied Products Corp. Building 83 | Potential Paint Disposal Otherwise Unknown | 0.5'-2.0' | Lead | 13,600 | 230 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Construction Worker and Direct Contact Exposure and Migration to Groundwater |
| HMW-27S | Former Railroad Spur, Outside and East of the South Bend Lathe Building | Railroad Ties | 0.0'-1.5' | Benzo(a)pyrene | 5,970 | 1,500 | ug/kg dw | Direct Contact Exposure |
| HMW-33D | South-central Portion of Allied Products Corp. Building 83 | Potential Paint Disposal Otherwise Unknown | 0.0'-2.0' | Lead | 2,720 | 230 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Construction Worker and Direct Contact Exposure and Migration to Groundwater |
| SB-1 | Former UST Location, Outside and North of the Huckins Tool \& Die Building | Probable Used Oils | 10.0'-11.5' | PCBs | 5.31 | 5.3 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Direct Contact Exposure |
| SB-5 | Former Retention Basin, Outside and Southwest of Underground Pipe \& Valve | Railroad Ties | 0.0'-1.5' | Arsenic | 57.1 | 20 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | Direct Contact Exposure and Migration to Groundwater |

Note:

- Based on Hull's experience modeling volatilization to indoor air in soils similar to those seen at the Site, the concentration of tetrachioroethene detected in a surface soil sample at
HMW-9I may result in also unacceptable risk.
INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT CITY OF SOUTH BEND, INDIANA


## TABLE 6

SUMMARY OF GROUNDWATER NEAR OR BEYOND THE POINT OF COMPLIANCE EXCEEDING RISC COMMERCIALIINDUSTRIAL DEFAULT CLOSURE LEVELS

| Soil Boring | Location | Suspected Source | Sample Date | Compound | Results (ug/L) | Cleanup Goal (ug/L) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMW-23S | Near Northeast Corner of Allied Products Corp Building 82, $\sim 140 \mathrm{ft}$. West of Point of Compliance | Releases from fuel storage or transfer (1,2,4-Trimethylbenzene is a constituent of petroleum fuels - particularly gasoline) | 9/18/01 | 1,2,4-Trimethylbenzene | 7,740 | 5,110 ${ }^{1}$ |
| HMW-25S | East of Allied Products Corp Building 78, ~250 ft. West of Point of Compliance | Potential change in redox conditions within or near the "oil zone" may allow mobilization of arsenic in groundwater. Other potential sources include paints, railroad ties or past wood treating operations during lumber yard operations. | 9/19/01 | Arsenic | 647 | 50 |
|  |  | Potential releases from leaded fuel storage or transfer. Potential releases from used oil storage or spills. Potential use in paints. | 9/19/01 | Lead | 1,410 | 42 |
| HMW-26S | Immediately West of Guard Shack on South Bend Lathe Property, ~160 ft. West of Point of Compliance | Potential change in redox conditions within or near the "oil zone" may allow mobilization of arsenic in groundwater. Other potential sources include paints, railroad ties or past wood treating operations during lumber yard operations. | 9/19/01 | Arsenic | 112 | 50 |
|  |  | Potential releases from leaded fuel storage or transfer. Potential releases from used oil storage or spills. Potential use in paints. | 9/19/01 | Lead | 127 | 42 |
| HMW-27S | Between South Bend Lathe Building and Former Engineering Building, $\sim 260 \mathrm{ft}$. West and ~280 ft. South of Point of Compliance | Potential change in redox conditions within or near the "oil zone" may allow mobilization of arsenic in groundwater. Other potential sources include paints, railroad ties or past wood treating operations during lumber yard operations. | 9/19/01 | Arsenic | 144 | 50 |
|  |  | Potential releases from leaded fuel storage or transfer. Potential releases from used oil storage or spills. Potential use in paints. | 9/19/01 | Lead | 240 | 42 |
|  |  | Downgradient of former degreasing operations in southeast portion of South Bend Lathe building. Downgradient of probably source areas on Allied Products Corp. property (beneath buildings 86 and 142). Potential contribution from off-Site sources. | 9/19/01 | Tetrachloroethene | 136 | 55 |

[^6]INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT
CITY OF SOUTH BEND, INDIANA
TABLE 6 (Cont'd)
SUMMARY OF GROUNDWATER NEAR OR BEYOND THE POINT OF COMPLIANCE EXCEEDING RISC COMMERCIALINDUSTRIAL DEFAULT CLOSURE LEVELS

| Soil Boring | Location | Suspected Source | Sample Date | Compound | Results (ug/L) | Cleanup Goal (ug/L) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMW-31S | North of Sample Street on County Jail Property, $\sim 90 \mathrm{ft}$. Outside (north) of Point of Compliance | Potential change in redox conditions within or near the "oil zone" may allow mobilization of arsenic in groundwater. Other potential sources include paints, railroad ties or past wood treating operations during lumber yard operations. | 9/17/01 | Arsenic | 121 | 50 |
|  |  | Potential releases from leaded fuel storage or transfer. Potential releases from used oil storage or spills. Potential use in paints. | 9/17/01 | Lead | 387 | 42 |
| HMW-321 | North of Sample Street on County Jail Property, $\sim 80 \mathrm{ft}$. Outside (north) of Point of Compliance | Downgradient of former degreasing operations in southeast portion of South Bend Lathe building. Downgradient of probably source areas on Allied Products Corp. property (beneath buildings 86 and 142). Potential contribution from off-Site sources. | 9/14/01 | Tetrachloroethene | 363 | 55 |
| HMW-33S | In South-central Portion of Allied Products Corp. Building 83, 210 ft . West of Point of Compliance | Potential releases from leaded fuel storage or transfer. Potential releases from used oil storage or spills. Potential use in paints. | 9/19/01 | Lead | 132 | 42 |
| HP-1 ${ }^{3}$ | Near Northeast Corner of Engineering Building, ~ Five ft. South of Point of Compliance | Downgradient of former degreasing operations in southeast portion of South Bend Lathe building. Downgradient of probably source areas on Allied Products Corp. property (beneath buildings 86 and 142). Potential contribution from off-Site sources. | 5/14/01 | Tetrachloroethene | 165 | 55 |
|  |  | Downgradient of former degreasing operations in southeast portion of South Bend Lathe building. Downgradient of probably source areas on Allied Products Corp. property (beneath buildings 86 and 142). Potential contribution from off-Site sources. | 5/14/01 | Tetrachloroethene | 64.3 | 55 |

2.     - Direct-push (hydropunch) sampling location, completed before initiation of the Initial Phase II ESA. Sample containing 165 ug/L tetrachloroethene was collected from depth interval of $26^{\prime}-30^{\prime}$. Sample containing $64 \mathrm{ug} / \mathrm{L}$ tetrachloroethen was collected from depth interval of $36^{\prime}-40^{\prime}$.


TAKEN FROM U.S.G.S. 7.5 MIN. QUAD MAP
SOUTH BEND EAST, INDIANA - 1958
SOUTH BEND WEST, INDIANA - 1969

$1000 \quad 0 \quad 1000 \quad 2000 \quad 3000 \quad 4000 \quad 5000$ FEET $\quad 0 \quad$ QUADRANGLE
1 $\qquad$

LOCATION
 OCATION












LEGEND

|首 SCREENED INTERVAL

Pb (30 ug/l) LEAD (CONCENTRATION)
As ( $30 \mathrm{ug} / \mathrm{I}$ ) ARSENIC (CONCENTRATION)
PCE ( $30 \mathrm{ug} / \mathrm{l}$ ) tetrachloroethene (Concentration)
TCE (30 ug/l) TRICHLOROETHENE (CONCENTRATION)

WILL: FINE TO COARSE SAND WITH MINOR AMOUNTS OF GRAVEL, SLTT, CLAY, BRICKS,
CONCRETE AND/OR ASPHALT FRAGMENTS
$\square$ SAND: FINE TO COARSE SAND WTH MINOR
AMOUNTS OF GRAVEL, SILT AND/OR CLAY
$\square$ SILT: SILT WITH MINOR AMOUNTS OF CLAY, and/OR GRAVEL

21
SANDY SILT: SILT WTH FINE TO COARSE SAND
AND MINOR AMOUNTS OF CLAY AND/OR GRAVEL
$\square$
$\square$ CLAYEY SILT: SILT WITH CLAY AND MINOR AM
OF FINE TO MEDUM SAND AND/OR GRAVEL

SILTY CLAY: CLAY WITH SILT AND MINOR AMOUNTS

(1)SANDY clay: clay with sand and minor amounts
$\square$ SANDY CLAY: CLAY WITH S
OF CLAY AND/OR GRAVEL

SAND: SAND With black staining




## APPENDIX A

Soil Boring Logs and Well Construction Diagrams











| - |  | S. ir |  | Date Started $: 07 / 31 / 01$ <br> Date Completed $: 07 / 31 / 01$ <br> Logged by $:$ Matt Youn <br> Reviewed by $:$ <br> Drilling Contractor $:$ Topflite <br> Drilling Method $: 4.25$ HSA <br> Sampling Method $:$ Split Spoo <br> Total Depth (ft.) $: 85.0^{\prime}$ <br> S. Water Level Date $:$ <br> S. Water Level (ft.) $:$ |  |  |  | LOG | F BORING HMW-1D <br> (Page 5 of 5 ) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| South Bend Area A UP\&V Reservoir South Bend, $\mathbb{I N}$ |  |  |  |  |  |  |  | G. Elev PID/FID PID/FID | USGS) $:$ Not Surveyed <br> : Photo vac 100ppm ISO  <br> : 100 ppm Isobutylene  |
| SBI002 |  |  |  |  |  |  |  | Drum L |  |
| Depth <br> in Surf. <br> Feet  |  |  | 응 응 은 음 |  |  |  | Soil Samples Sampled Int. $\square$ Lab Sample | Water Levels Static $\qquad$ During Drilling <br> PTION | Well: HMW-1D Elev.: |
|  | $\begin{gathered} \text { SS-36 } \\ 69.0-71.0 \\ \\ \text { SS-37 } \\ 71.0-73.0 \\ \\ \\ \text { SS-38 } \\ 73.0-75.0 \\ \\ \text { SS-39 } \\ 75.0-77.0 \\ \\ \text { SS-40 } \\ 77.0-79.0 \\ \text { SS } \\ \text { SS-41 } \\ 79.0-81.0 \\ 81.0-83.0 \\ \text { SS-43 } \\ 83.0-85.0 \end{gathered}$ | 24/24 <br> 24/24 <br> 24/24 <br> 24/24 <br> 24/24 <br> 24/24 <br> 24/18 <br> 24/24 | 8.2 3.1 6.4 8.9 5.8 3.9 3.6 3 | 11-30-19 $11-48-26$ | 8 |  | Same as above, tra <br> Same as above <br> Same as above, <br> Same as above, no <br> Same as above <br> Grey silty fine SAN <br> Same as above <br> Same as above <br> Brown and grey lay <br> Same as above, no <br> Same as above, bro layering <br> End of boring at 85 | gravel <br> gravel <br> ay, less gravel <br> wet, trace gravel <br> ng <br> yering less silt <br> n and grey |  |
|  |  |  |  |  |  |  |  |  |  |






| SBi002South Bend Area A <br> UP\&V Reservoir <br> South Bend, $N$SBA |  |  |  | Date Started <br> Date Completed <br> Logged by <br> Reviewed by <br> Drilling Contractor <br> Drilling Method <br> Sampling Method <br> Total Depth (ft.) <br> S. Water Level Date <br> S. Water Level (ft.) |  |  | : 08/02/01$: 08 / 02 / 01$: Matt Young$:$: Topflite$: 4.25$ HSA$:$ Split Spoon$: 88.0^{\prime}$$:$$:$ |  | LOG OF BORING HMW-6D <br> (Page 3 of 5) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | G. Ele PID/FI PID/FID |  |
|  |  |  |  |  |  |  |  |  |
| Depth Surf. <br> in  <br> Feet  |  |  | 듬 응 믄 믐 |  |  | \% |  | Soil Samples Sampled Int. Lab Sample <br> DESCR | Water Levels Static During Drilling | Well: HMW-6D Elev.: |
|  | ${ }_{36 \text { S. }-38.0}$ $\begin{aligned} & \text { SS. } 20.0 \\ & 38.0-40.0 \end{aligned}$ <br> SS-21 40.0-42.0 <br> SS-22 <br> 42.0-44.0 <br> SS-23. <br> 44.0-46.0 <br> SS-24 <br> SS-24 <br> 48.0-50.0 | $23 / 14$ $24 / 16$ $24 / 16$ $24 / 8$ $23 / 12$ $24 / 4$ $23 / 10$ $23 / 12$ | 1.4 | $36-61-50$ <br> $15-54-40$ <br> $29-78-50$ <br> $15-54-39$ <br> $28-88-50$ <br> $15-88-4$ <br> $38-50$ <br> $9-63-50$ <br> $15-67-50$ <br>  <br>  <br>  |  |  |  | Same as above, inc size gravel, becom <br> Same as above <br> Same as above, ve <br> Same as above, les (Note: Had to move large rock and it ca offset 2 to $3^{\prime \prime}$, Didn' <br> Same as above, le <br> Same as above <br> Same as above <br> Trace of gravel in s <br> Same as above, m SAND, trace silt, tra | rease silt, larger gery dense <br> y dense <br> s gravel rig, possibly hit used augers to move boring) <br> s silt <br> oon, no recovery <br> dium to fine ce gravel |  |


















|  |  |  |  | Date Started <br> Date Completed <br> Logged by <br> Reviewed by <br> Drilling Contractor <br> Driling Method <br> Sampling Method <br> Total Depth (ft.) <br> S. Water Level Date <br> S. Water Level (ft.) |  |  | : 08/22/01 <br> : 08/22/01 <br> : Matt Young <br> : James P. Hogan <br> : Topflite <br> : 4.25 ID HSA <br> : 48" Split Spoon : 74.0' |  | LOG OF BORING HMW-11D <br> (Page 4 of 5) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | G. Elev PID/FID PID/FID |  |  |
|  |  |  |  | Drum L |  |  |
| Depth <br> in <br> Feet Surf. <br> Elev. |  |  | 틍 을 믐 믐 |  |  |  |  |  |  | Soil Samples $\square$ Sampled Int. Lab Sample <br> DESCRI | Water Levels Static During Drilling | Well: HMW-11D Elev.: |
|  | SS-21 46.0-48.0 <br> SS-22 48.0-50.0 <br> SS-23 <br> 50.0-52.0 <br> SS-24 <br> 52.0-54.0 <br> SS-25 54.0-56.0 <br> SS-26 56.0-58.0 <br> SS-27 <br> 58.0-60.0 | 24/12 <br> 24/12 <br> 24/12 <br> 21/14 <br> 24/16 <br> 24/12 <br> 24/8 | 15.8 <br> 11.4 <br> 15.4 <br> 16.3 <br> 15.9 <br> 15.3 <br> 7.8 |  |  |  |  |  |  | Same as above, slig <br> Same as above, incr increase gravel, sligh from puliing spoons water <br> Same as above <br> Same as above <br> Same as above <br> Same as above, less less gravel <br> Brown fine to medium gravel trace clay <br> Large cobble in spoo | crease silt, ht odor may be through bad <br> s coarse sand, <br> um SAND, trace on |  |










|  | $\begin{array}{r} * \\ \times \\ \hline \end{array}$ | in |  | Date Started $: 08 / 13 / 01$ <br> Date Completed $: 08 / 13 / 01$ <br> Logged by $:$ Matt Young <br> Reviewed by $:$ <br> Driling Contractor $:$ Topfilie <br> Driling Method $: 4.25$ ID HSA <br> Sampling Method $:$ Split Spoon <br> Total Depth (f.) $: 68.0^{\prime}$ <br> S. Water Level Date $:$ <br> S. Water Level (ft.) $:$ |  |  |  | LOG | OF BORING HMW-12D <br> (Page 1 of 4) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| South Bend Area A Franklin \& Sample South Bend, iN |  |  |  |  |  |  |  | G. Elev PID/FID PID/FID | Model $:$ Not Surveyed <br> Mas / 2020  <br> Calibration $: 100$ ppm Isobutylene |
|  |  |  |  |  |  |  |  | Drum |  |
| Surf. Elev. |  |  | $\begin{aligned} & \text { 틈 } \\ & \text { I } \\ & \text { 은 } \\ & \text { 음 } \end{aligned}$ |  |  |  | Soil Samples Sampled Int $\square$ Lab Sample | Water Levels Static $\qquad$ During Drilling | Well: HMW-12D Elev.: |
| ren | $\begin{gathered} \text { HA-1l } \\ 0.0-2.0 \\ \\ \\ \text { HA-2l } \\ 2.0-4.0 \\ \\ \\ \text { SS-3 } \\ 4.0-6.0 \\ \\ \\ \text { SS-4 } \\ 6.0-8.0 \\ \\ \\ \text { SS-5. } \\ 8.0-10.0 \\ \\ \\ \text { SS-6 } \\ 10.0-12.0 \\ \\ \\ \text { SS-7 } \\ 12.0-14.0 \\ \hline \end{gathered}$ | $24 / 12$ <br> 24/22 <br> 24/14 <br> 24/8 <br> 24/16 <br> 24/14 <br> 24/22 | 0.0 <br> 2.5 <br> 7.8 <br> 4.7 <br> 10.1 <br> 7.0 <br> 9.0 <br> 7.3 | 4-3-2 <br> 3-3-1 <br> 3-6-3 <br> 9-9-5 <br> 8-21-14 <br> 8-21-15 <br> 8-24-15 |  |  | Concrete and reba <br> Brown medium to trace silt, trace gra of balck staining, <br> Same as above, <br> Same as above <br> Light brown mediu trace gravel, trace <br> Brown medium to trace silt, trace grave <br> Same as above, <br> Light brown fine to trace silt, moist <br> Same as above | arse SAND <br> l; small amount ist <br> staining <br> to coarse SAND, it, moist <br> arse SAND, l, moist <br> silt <br> medium SAND, |  |



|  |  |  |  | Date Started <br> Date Completed <br> Logged by <br> Reviewed by <br> Drilling Contractor <br> Drilling Method <br> Sampling Method <br> Total Depth (ft.) <br> S. Water Level Date <br> S. Water Level (ft.) |  |  | : 08/13/01 <br> : 08/13/01 <br> : Matt Young <br> : Topflite <br> : 4.25 ID HSA <br> : Split Spoon : 68.0' |  | LOG OF BORING HMW-12D <br> (Page 3 of 4) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | G. Elev PID/FID PID/FID |  |  |
|  |  |  |  | Drum |  |  |
| Depth Surf <br> in Elev <br> Feet  |  |  | 틈 응 믄 믐 |  |  |  |  |  |  | Soil Samples Sampled Int Lab Sample <br> DESCR | Water Levels Static $\qquad$ During Drilling | Well: HMW-12D Elev.: |
|  | $\begin{gathered} \text { SS-18 } \\ 34.0-36.0 \\ \\ \text { SS-19. } \\ 36.0-38.0 \\ \\ \\ \text { SS-20 } \\ 38.0-40.0 \\ \\ \\ \text { SS-21 } \\ 40.0-42.0 \\ \text { SS-23 } \\ 42.0-44.0 \\ \\ \text { SS-23 } \\ 44.0-46.0 \\ \\ \text { SS-24. } \\ 46.0-48.0 \\ \\ \hline \end{gathered}$ | 24/16 <br> 24/12 <br> 24/18 <br> 24/12 <br> 24/18 <br> 24/16 <br> 24/18 <br> 24/16 <br> 24/18 | 0.9 1.6 0.0 0.0 0.4 0.0 0.0 0.0 00 0 |  |  |  | $29-22-17$ <br> $42-28-18$ <br> $23-29-17$ <br> $47-34-27$ <br> $14-50-29$ <br> $7-23-14$ <br> $15-45-44$ <br> $11-55-27$ <br>  <br>  <br>  | 8 |  | Same as above <br> Same as above, ${ }^{2}$ <br> Same as above <br> Same as above, m <br> Same as above <br> Same as above, 4 <br> Same as above <br> Same as above <br> Same as above, tra | large cobbles <br> re silt <br> at top, no gravel <br> ce gravel |  |

























11-30-2001 F:ICLIENTSISBIISBIOO2ISOIL BORING LOGSIHMW-25S.BOR

















\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{4}{|l|}{\multirow[t]{3}{*}{}} \& \multicolumn{3}{|r|}{\multirow[t]{3}{*}{\begin{tabular}{l}
Date Started \\
Date Completed \\
Logged by \\
Reviewed by \\
Drilling Contractor \\
Drilling Method \\
Sampling Method \\
Total Depth (ft.) \\
S. Water Level Date \\
S. Water Level (ft.)
\end{tabular}}} \& \multirow[t]{3}{*}{\begin{tabular}{l}
: 09/11/01 \\
: 09/11/01 \\
: Matt Young \\
: TopFlight \\
: 4.25 ID HSA \\
: Split Spoon \\
: 82.0' \\
e \\
:
\end{tabular}} \& \& \multirow[t]{3}{*}{\begin{tabular}{l}
LOG OF BORING HMW-29D \\
(Page 4 of 6)
\end{tabular}} \\
\hline \& \& \& \& \& \& \& \& G. Elev PID/FID PID/FID \& \\
\hline \& \& \& \& \& \& \& \& Drum \& \\
\hline \begin{tabular}{c|c} 
Depth \& Surf. \\
in \& Elev. \\
Feet \&
\end{tabular} \&  \&  \&  \&  \&  \&  \& \begin{tabular}{l}
Soil Samples
Sampled Int.
Lab Sample \\
DESCR
\end{tabular} \& \begin{tabular}{l}
Water Levels
Static
\(\qquad\) During Drilling \\
PTION
\end{tabular} \& Well: HMW-29D Elev.: \\
\hline -42 \& \[
\begin{gathered}
\text { SS-16 } \\
45.0-47.0
\end{gathered}
\]
\[
\begin{gathered}
\text { SS-17 } \\
50.0-52.0
\end{gathered}
\] \& \begin{tabular}{l}
34/16 \\
24/12
\end{tabular} \& 0.0

20.8 \& \[
$$
\begin{array}{|c|} 
\\
\\
\\
\\
\\
\\
8-33-51-35 \\
\\
8
\end{array}
$$

\] \&  \&  \& | Same as above, no |
| :--- |
| Same as above, fe |
| Same as above, tra |
| No recovery | \& | staining / brown |
| :--- |
| gravel |
| ce gravel, grey | \&  <br>

\hline
\end{tabular}




|  |  |  |  | Date Started <br> Date Completed <br> Logged by <br> Reviewed by <br> Drilling Contractor <br> Drilling Method <br> Sampling Method <br> Total Depth (ft.) <br> S. Water Level Date <br> S. Water Level (ft.) |  |  | : 09/12/01 <br> : 09/12/01 <br> : Matt Young <br> : <br> : TopFlight <br> : 4.25 ID HSA <br> : No Sampling |  | LOG OF BORING HMW-291 <br> (Page 1 of 1) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | G. Elev PID/FID PID/FID |  |  |
|  |  |  |  | Drum L |  |  |
| Depth <br> in <br> Feet Surf. <br> Elev. |  |  | 들 은 음 믐 |  |  |  |  |  | Graphic Log ${ }^{\circ}$ | Soil Samples Sampled Int. $\square$ Lab Sample <br> DESCR | Water Levels $\square$ Static $\qquad$ During Drilling <br> IPTION | Well: HMW-29I <br> Elev.: |
| 0 1 1 2 |  |  |  |  |  |  |  |  |  | See HMW-29D for | ology |  |



| $\square$ |  | S. |  | Date Started : 09/05/01 <br> Date Completed $: 09 / 05 / 01$ <br> Logged by : Matt Young <br> Reviewed by $:$ <br> Drilling Conitractor $:$ TopFlight <br> Drilling Method $: 4.25$ ID HSA <br> Sampling Method $:$ Split Spoon <br> Total Depth (ft.) $: 70^{\prime}$ <br> S. Water Level Date $:$ <br> S. Water Level (ft.) $:$ |  |  |  | LOG | OF BORING HMW-30D <br> (Page 1 of 5 ) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| South Bend Area A Franklin \& Sample South Bend, IN |  |  |  |  |  |  |  | G. Ele <br> PID/F <br> PID/F | ft. USGS) $:$ Not Surveyed <br> Model $: 2020 / 100 \mathrm{ppm}$ Iso. <br> Calibration $: 100 \mathrm{ppm}$ Isobutylene |
| SBI002 |  |  |  |  |  |  |  | Drum | D |
| Depth <br> in Surf. <br> Feet  |  |  | 응 응 은 음 |  |  |  | Soil Samples Sampled Int. $\square$ Lab Sample | Water Levels Static $\qquad$ During Drilling <br> PTION | Well: HMW-30D Elev.: |
| 0 保 | $\begin{aligned} & \text { HA-1/ } \\ & 0.0-2.0 \end{aligned}$ <br> HA-2/ $2.0-4.0$ $\begin{gathered} \text { SS-3 } \\ 4.0-6.0 \end{gathered}$ <br> SS-4 <br> 6.0-8.0 <br> SS-5 <br> 8.0-10.0 <br> SS-6 <br> 10.0-12.0 <br> SS-7 12.0-14.0 | 24/24 <br> 24/20 <br> 24/18 <br> 24/18 <br> 24/10 | 0.0 <br> 0.2 <br> 0.7 <br> 0.8 <br> 1.6 <br> 1.0 <br> 0.9 | $4-10-4$ <br> 3-4-3 <br> 2-4-2 <br> 4-6-4 |  |  | Asphalt top 3", crus <br> Brown clayey SAND moist <br> Same as above <br> Brown fine to mediu silt, trace gravel, m <br> Same as above, tra <br> Same as above <br> Same as above <br> Same as above <br> Same as above, in <br> Same as above | hed limestone to trace gravel, <br> m SAND, trace ist ce clay interbeded <br> rease gravel |  |
| . |  |  |  |  |  |  |  |  |  |






|  |  |  |  | Date Started <br> Date Completed <br> Logged by <br> Reviewed by <br> Drilling Contractor <br> Drilling Method <br> Sampling Method <br> Total Depth (ft.) <br> S. Water Level Date <br> S. Water Level (ft.) |  |  | $\begin{aligned} & : 09 / 05 / 01 \\ & : 09 / 05 / 11 \\ & : \text { Matt Young } \\ & : \\ & : \text { TopFlight } \\ & : 4.25 \text { ID HSA } \\ & : \text { Split Spoon } \\ & : 70^{\prime} \\ & : \\ & : \\ & \hline \end{aligned}$ |  | LOG OF BORING HMW-30D <br> (Page 5 of 5) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | G. Elev PID/FID PID/FID |  |  |
|  |  |  |  | Drum |  |  |
| Depth <br> in <br> Feet Surf. <br> Elev. |  |  | $\begin{aligned} & \text { 틈 } \\ & \text { 믕 } \\ & \text { 은 } \\ & \text { 믕 } \end{aligned}$ |  |  |  |  |  |  | Soil Samples Sampled Int. Lab Sample <br> DESCR | Water Levels Static $\qquad$ During Drilling | Well: HMW-30D Elev.: |
|  |  | 16/14 <br> 5/5 <br> 21/20 <br> 22/16 <br> 21/18 <br> $24 / 20$ <br> 15/15 | 102 <br> 119 <br> 179 <br> 117 <br> 68.3 <br> 65.8 <br> 0.0 |  |  |  |  |  |  | Same as above, no <br> Same as above, tra increase silt <br> Same as above <br> Same as above <br> Same as above <br> Same as above <br> Grey very dense sit sand, trace gravel, <br> End of boring at 70 | gravel <br> e gravel, <br> CLAY, trace <br> ry |  |



|  |  |  |  | Date Started <br> Date Completed <br> Logged by <br> Reviewed by <br> Drilling Contractor <br> Drilling Method <br> Sampling Method <br> Total Depth (ft.) <br> S. Water Level Date <br> S. Water Level (ft.) |  |  | : 09/10/01 <br> : 09/10/01 <br> Matt Young <br> : TopFlight <br> : 4.25 ID HSA <br> : No Sampling |  | LOG OF BORING HMW-31I <br> (Page 1 of 1) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | G. Elev. PID/FID PID/FID |  |  |
|  |  |  |  |  |  |  |
| Depth <br> in <br> Feet Surf. <br> Elev. |  |  | 틈 음 믐 믄 |  |  |  |  |  |  | Soil Samples $\qquad$ <br> DESCR | Water Levels Static $\qquad$ During Drilling <br> PTION | Well: HMW-31I Elev.: |
|  |  |  |  |  |  |  |  |  |  | See HMW-31D for | ology |  |



|  |  |  |  | Date Started <br> Date Completed <br> Logged by <br> Reviewed by Drilling Contractor Drilling Method Sampling Method Total Depth (ft.) <br> S. Water Level Date <br> S. Water Level (ft.) |  |  | $\begin{aligned} & : 09 / 04 / 01 \\ & : 09 / 04 / 01 \\ & : \text { Matt Young } \\ & : \\ & : \text { TopFlight } \\ & : 4.25 \text { ID HSA } \\ & : \text { Split Spoon } \\ & : 62.0^{\prime} \end{aligned}$ |  | LOG OF BORING HMW-31D <br> (Page 1 of 4) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | G. Elev PID/FI PID/FI |  |  |
|  |  |  |  | Drum |  |  |
| Depth <br> in <br> Feet Surf. <br> Elev. |  |  | $\widehat{ㅌ ㅡ ㅇ ~}$ 은 믐 믐 |  |  |  |  |  |  | Soil Samples Sampled Int $\square$ Lab Sample <br> DESCR | Water Levels Static During Drilling | Well: HMW-31D Elev.: |
| 0 0 <br> 保  | $\begin{gathered} \text { HA-1/ } \\ 0.0-2.0 \\ \\ \text { HA-21 } \\ 2.0-4.0 \\ \\ \\ \text { SS-3 } \\ 4.0-6.0 \\ \\ \\ \text { SS-4 } \\ 6.0-8.0 \\ \\ \text { SS-5 } \\ 8.0-10.0 \\ \\ \text { SS-6 } \\ 10.0-12.0 \\ \text { SS-7 } \\ 12.0-14.0 \\ \text { SS-8 } \\ 14.0-16.0 \end{gathered}$ | 24/18 <br> 24/16 <br> 24/14 <br> 24/16 <br> 24/8 <br> 24/12 | 0.0 <br> 0.0 <br> 0.0 <br> 0.0 <br> 0.0 <br> 0.0 <br> 0.0 <br> 0.0 |  |  |  | 1-4-3 <br> 3-11-7 <br> 3-8-6 <br> 3-5-2 <br> 2-1-1 <br> 2-2-1 |  |  | Black sandy FILL, gravel, crushed as <br> Brown clayey SAN moist <br> Brown medium to clay, trace gravel, <br> Light brown mediu Trace silt, trace gra <br> Same as above <br> Same as above, <br> Same as above, <br> Same as above, le | w clay, few halt noted, moist <br> , trace gravel, <br> arse SAND, few oist <br> to coarse SAND, el, moist <br> clay interbeded <br> rease gravel <br> gravel |  |






|  |  |  |  | Date Started $: 09 / 06 / 01$ <br> Date Completed $: 09 / 06 / 01$ <br> Logged by $:$ Matt Young <br> Reviewed by $:$ <br> Drilling Contractor $:$ TopFlight <br> Driling Method $: 4.25$ ID HSA <br> Sampling Method $:$ Split Spoon <br> Total Depth (ft.) $: 94.0^{\prime}$ <br> S. Water Level Date $:$ <br> S. Water Level (ft.) $:$ |  |  |  | LOG | OF BORING HMW-32D <br> (Page 2 of 5) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | G. Elev. PID/FID PID/FID | ft. USGS) : Not Surveyed <br> Model $: 2020 / 100 \mathrm{ppm}$ Iso. <br> Calibration $: 100 \mathrm{ppm}$ Isobutylene |
|  |  |  |  | Drum | ID |
| Depth <br> in <br> Feet Surf. <br> Elev. |  |  | $\widehat{ }$ 흠 은 믐 |  |  |  |  |  |  | $\begin{aligned} & 00 \\ & \frac{0}{0} \\ & \stackrel{0}{E} \\ & \stackrel{0}{0} \\ & \hline \mathbf{0} \end{aligned}$ | Soil Samples Sampled Int. $\square$ Lab Sample <br> DESCR | Water Levels $\square$ Static $\qquad$ During Drilling <br> IPTION | Well: HMW-32D Elev.: |
|  | $\begin{gathered} \text { SS-10 } \\ \text { 20.0-22.0 } \\ \\ \text { SS-11 } \\ 22.0-24.0 \\ \\ \\ \text { SS-12 } \\ 24.0-26.0 \\ \\ \\ \text { SS-13 } \\ 26.0-28.0 \\ \\ \text { SS-14 } \\ 28.0-30.0 \\ \\ \text { SS-15 } \\ 30.0-32.0 \\ \\ S S-16 \\ 32.0-34.0 \\ \hline \end{gathered}$ | 24/16 <br> 24/12 <br> 24/12 <br> 24/12 <br> 24/18 <br> 24/14 <br> 24/16 <br> 24/14 <br> 24/18 | 3.4 <br> 1.9 <br> 4.2 <br> 5.4 <br> 5.8 <br> 4.5 <br> 3.1 <br> 8.9 <br> 1618 |  |  |  |  | $9-26-22$ <br> 6-35-23 <br> $10-31-12$ <br> $12-25-8$ <br> $11-34-23$ <br> $11-44-36$ <br> $7-18-13$ <br> $8-29-98$ <br> $8-23$ |  |  | Same as above <br> Same as above, fe clay, wet <br> Same as above <br> Same as above <br> Same as above <br> Same as above, tra increase silt, no clay <br> Same as above, de <br> Same as above <br> Same as above <br> Same as above, bla odor | gravel, trace <br> ce gravel, y <br> crease silt <br> ack staining, strong |  |

















11-28-2001 F:ICLIENTSISBIISBBIOO2ISOIL BORING LOGSIGB-13.BOR



















# REPORT FOR AN INITIAL PHASE II ENVIRONMENTAL SITE ASSESSMENT 

 FOR THE SOUTH BEND AREA A PROPERTIESLocated at: SOUTH OF SAMPLE STREET, EAST OF PRAIRIE AVENUE, NORTH OF CONRAIL, AND WEST OF FRANKLIN STREET SOUTH BEND, INDIANA

Prepared for:
THE CITY OF SOUTH BEND DEPARTMENT OF COMMUNITY AND ECONOMIC DEVELOPMENT 1200 COUNTY-CITY BUILDING SOUTH BEND, INDIANA 46601

FEBRUARY 2002

VOLUME 2
\& associates, inc.

## APPENDIX B

Monitoring Well Development Field Data Sheets



HULL \& ASSOCLATES, INC. WEDL DEVELOPMENT FORM

IMHOFF CONE TEST Start Time:
d. Cumulative gallons
e. Depth to water.
h. Specific conductance, $\mu$ mhos $/ \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).
i. Visual unless otherwise noted.
HULL \& ASSOCLATES, INC. WELL DEVELOPMENT FORM

IMHOFF CONE TEST
Start Time:
a. Top of casing.
b. NAPL - nonaqueous phase liquid.
c. Gallons per minute.
Volume Water:_
mulative gallons
1 welf eral -0.41
f. Standard units
g. ${ }^{\circ} \mathrm{C}$, unless ${ }^{\circ} \mathrm{F}$ noted.
Volume Sediment:_
h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).
i. Visusl unless otherwise noted.
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HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM

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| $88.3-0.0$ | 1902 |  |  |  |  |  |  |  |  |  |  |
|  |  | " |  |  | H6.90 | 9, | 37 | ${ }^{20.1}$ |  |  |  |
| ${ }^{1}$ | 943 | " |  |  | 0. |  | 7 2 | 21.8 | ${ }^{1031}$ | ${ }^{\prime \prime}$ |  |
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IMHOFF CONE TEST
Volume Water:

Start Time:____
c. Gallons per minute.
h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).
i. Visual unless otherwise noted.
4. リと/ Volume

| Job Number SBIce 2 Site: Arėn t+ Developers MLitt lovur |  |  | Well No. and Type: HHW-2 Initial Total Depth (ft TOC):24:09 Final Total Depth (ft TOC): $5 C 1.6$ Z |  |  |  |  | Static Water Depth (ft TOC ${ }^{*}$ ): Depth to NAPL ${ }^{\text {b }}$ N/ $A$ <br> Weather: $\qquad$ |  | at 800 hrs. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Time | Purge Mehod | Pumping Rate | Volume <br> Purged ${ }^{\text {d }}$ | DTW ${ }^{\circ}$ | $\mathrm{pH}^{\text {1 }}$ | Temp. ${ }^{8}$ | Spec. Cond. ${ }^{\text {h }}$ | Turbidity' | Comments |
| $8-3001$ | (8).40 |  |  | initio |  | 7.11 | $20: 2$ | 004 | Veryturbid |  |
|  | (0).50 |  |  | 3,0 | 24.12 | 7.12 | 10.5 | 085 | 1 |  |
|  | 9:00 |  |  | 3.0 | 24.13 | 7.12 | 17.7 | 900 | 1 | . |
|  | $\pi: 0$ |  |  | $5: 0$ | 24.12 | 7.23 | 17.4 | \%9, Gl8 |  |  |
|  |  |  |  | 5.0 | $24.12$ | 7.24 | 19.4 | 841 |  |  |
| $V$ | 4.27 |  |  | $5.0$ | $26.1 \div$ | $\therefore 7.24$ |  | $996$ | $\sqrt{7}$ |  |
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[^7]d. Cumulative gallons
e. Depth to water.
sheel of

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HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM

| Somb | SBICow |  |  |  | maric | (1) | 24.3 |  | Reptif | ${ }_{\text {a }}^{\text {a matill }}$ |
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| $88.29,-01$ | 1432 | Wevera |  |  | 23.90 | 6.50 | 24.4 | 306 | Brom sit |  |
|  | 14.48 | " |  | 7.0 | 03.8 | $\underline{7.03}$ | 20.4 | $\frac{129}{75}$ |  |  |
|  |  | T |  | 10.502 | 23.90 | 7.10 | 30.8 | 72 |  |  |
|  | 1503 |  |  |  | 63,90 | 2.13 | 20.6 | 808 |  |  |
| $\stackrel{4}{4}$ | 1510 | $\cdots$ |  | 17.50 | 23.90 | 2.11 | 206 | 780 |  |  |
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Volume Water:
h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).
i. Visual uniess otherwise noted.
HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM

IMHOFF CONE TEST
a. Top of casing
b. NAPL - nonaqueous phase liquid. c. Gallons per minute.
sheel of $\perp$


IMHOFF CONE TEST
Start Time:
Volume Sediment:
1.0 gl pui ove.

IMHOFF CONE TEST
d. Cumulative gallons
c. Depth to water.
f. Standard units
g. ${ }^{\circ} \mathrm{C}$, unless ${ }^{\circ} \mathrm{F}$ noted.
Volume Water:______
h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).
i. Visual unless otherwise noted.


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[^9]d. Cumulative gallions
e. Depth to water,
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| 9,4.01 | 18:15 | St:aticil |  | nitad | 22.91 | 1.43 | 13.8 | 84 | S. Tumbid |  |
|  | 18:/9 |  |  | 1.0 | 22.96 | 2.30 | 12.7 | 892 | Herytured |  |
|  | 18:22 |  |  | 2.0 | 22.92 | 7.32 | 12.5 | ${ }^{888}$ | Veryturbed |  |
|  | 18:25 |  |  | 3.0 | 22.94 | 1.36 | 12.4 | ${ }_{85}$ |  |  |
|  | ${ }^{18,29}$ |  |  | 4.0 | 22.24 | 7.29 | 12.2 | Q90 | ". |  |
| $\downarrow$ | 18:33 | $\checkmark$ |  | 5.0 | 22.44 | 7.25 | 12.4 | 888 |  |  |
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[^10]HULL \& ASSOCLATES, INC. WELL DEVELOPMENT FORM
Volume Sediment:___L_L
h. Specific conductance, $\mu$ mhos $/ \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).
i. Visual unless otherwise noted.


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| $9-4-00$ | 1235 | Jatera |  | inital | 2.6 | 92\% 18 | 163 | 928 | very tupor |  |
| 5.4.0] | 1240 |  |  | 4.25 | 22.6 | 7.22 | 14.6 | 1131 | uf foutial |  |
|  | 1277 |  |  | $8.5{ }^{\circ}$ | 226 | 7.48 | 14.6 | 1114 |  |  |
|  | 50 |  |  | 12.75 |  | 7.32 |  | 1137 | Veryturid |  |
| $\checkmark$ | H7:55 |  |  | 11.0 | 22.60 | $\frac{7.32}{7.35}$ | 12.9 | $1 / 41$ |  |  |
| $\checkmark$ | 18:00 | $\downarrow$ |  | 24.25 | 22.6 | 7.3) | 12.9 | 1134 | very turin |  |
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[^11]d. Cumulative gallons
c. Depth to water.
HULL \& ASSOCLATES, INC. WELL DEVELOPMENT FORM
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sina
Volume Sediment:________
h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ). i. Visual unless otherwise noted.
sheet -1 of 1

## Volume $7750 T D$

HULL \& ASSOCIATES, INC. WELL DEYELOBMENT FORM

IMHOFF CONE TEST
d. Cumulative gallons
c. Depth to water.
End Time:
f. Standard units
g. ${ }^{\circ} \mathrm{C}$, unless ${ }^{\circ} \mathrm{F}$ noted.
h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).

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HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM

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| 9.9 .001 | $15: 45$ | corotim |  | Intial | 23.10 | 7.11 | 17.8 | 980 | clear |  |
|  | 15:46 |  |  |  |  |  |  |  | Sl.clear |  |
|  | 15.48 |  |  | 4 | 23.10 | 6.99 | 14.9 | 1016 | si.clear |  |
|  | 15:70 |  |  | . 6 |  | 7,04 |  |  | S. Tur bra |  |
| V |  | $\downarrow$ |  | . 8 |  |  |  | 985 | S. Clear |  |
|  | 15:34 |  |  | 10 | 23.9 | 6.97 | 14.3 | 1004 | Sl.clear |  |
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HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM

| Job Numb Site: Area Developer | $\text { S } 585002$ | Well No. and Type: in $W-B D$ <br> Initial Total Depth (ft TOC): Final Total Depth (ft TOC): |  |  |  |  |  | Static Water Depth (ft TOC'): at hrs. Depth to NAPL ${ }^{\text {b }} N / / A$ <br> Weather: siunny $80^{\circ} \mathrm{S}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Time | Purge Method | Pumping Rate | Volume Purged ${ }^{\text {d }}$ | DTW ${ }^{\text {c }}$ | $\mathrm{pH}^{\text {t }}$ | Temp. ${ }^{\text {g }}$ | Spec. Cond, ${ }^{\text {h }}$ | Turbidity' | Comments |
| 6i3-4-01 | 15:00 | Watera |  | Inrtic 1 | 21.68 | 7.36 | 18.4 | 1074 | Sl, turbid |  |
| í | $15: 05$ |  |  | L.O | $21: 65$ | 7.36 | 15.4 | 1083 | $\underline{L}$ | - /ervturbipt |
|  | $15: 09$ |  |  | 8.0 | 21.65 | 7.34 | 14.2 | 1113 | 11 |  |
|  | $15: 13$ |  |  | 12.0 | 21.65 | 7.30 | 13.4 | 943 | 51. Turbict |  |
|  | $15: 17$ |  |  | 16,0 | 21.05 | 7.3 | 13,0 | 1122 | S1.clear |  |
| $\sqrt{ }$ | 15.21 | $V$ |  | 20.0 | $7165$ | 7.20 | 12.9 | 173 | si.clear |  |
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IMHOFF CONE TEST
d. Cumulative gallons
e. Depth to water.

Start Time:
a. Top of casing.
b. NAPL - nonaqueous phase liquid.
c. Gallons per minute.
h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ). i. Visual unless otherwise noted.
HULL \＆ASSOCIATES，INC．WELL DEVELOPMENT FORM

| Job Numb Site：Are Developers | $\begin{aligned} & \mathrm{SBIOO} \\ & \mathrm{~A} \\ & \mathrm{M} . \mathrm{CV} \end{aligned}$ | $r c h o l$ |  | Well No．and Type：MTW－8S Initial Total Depth（ft TOC）： 23.60 Final Total Depth（ft TOC）： 23.60 |  |  |  | Static Water Depth（ft TOC＊）： Depth to NAPL ${ }^{\mathbf{b}} N / \underset{8}{ }$ Weather：sunny $80^{\circ}$ s |  | hrs． at hrs． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Time | Purge Method 4x．Stee | Pumping Rate | Volume Purged ${ }^{\text {d }}$ | DTW | $\mathrm{pH}^{\mathrm{i}}$ | Temp．${ }^{8}$ | Spec． Cond．${ }^{h}$ | Turbidity ${ }^{2}$ | Comments |
| 9－i－01 | $15: 00$ | dsascoss |  | Tuitral | 23.60 | 7.73 | 17.4 | 8286 | St．turbid |  |
| － | 15.02 | － |  | $\cdots 4$ | 21.6 | 7,513 | 16.3 | 892 | st．Tuabid |  |
|  | 15.05 |  |  | $88$ | $21: 6$ | $7.44$ | forme | 850 | Sl．Turbid |  |
| $1$ | 15.08 |  |  | 1.7 | 21.65 | $7.41$ | 14.0 | 912 | St．Terbid |  |
| $+1$ | $15: 12$ |  |  | 1.6 | 21．65 | 7.35 | 13,3 | 916 | $l \downarrow$ |  |
| $\sqrt{ }$ | 15：15 | $\sqrt{ }$ |  | 8.0 | $21.65$ | 7.36 | 13.0 | 951 | 11. |  |
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IMHOFF CONE TEST
Start Time：
d．Cumulative gallons
e．Depth to water．
f．Standard units
g．${ }^{\circ} \mathrm{C}$ ，unless ${ }^{\circ} \mathrm{F}$ n
h．Specific conductance，$\mu \mathrm{mhos} / \mathrm{cm}$（or $\mu \mathrm{S} / \mathrm{cm}$ ）．
i．Visual uniess otherwise noted．
HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM


[^13]d. Cumulative gallons
e. Depth to water.
f. Standard units
g. ${ }^{\circ} \mathrm{C}$, unless ${ }^{\circ} \mathrm{F}$ noted.
luel vol $=0.68$ galums

## ff <br> sheet ${ }_{\perp}$

Volume Sediment:___________
h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).
i. Visual uniless otherwise noted.

## HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM


IMHOFF CONE TEST
Volume Water:______
h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{s} / \mathrm{cm}$ ). i. Visual uniess otherwise noted.

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| $\sqrt{\text { Job Nomam }}$ | SSBIOO |  |  | Nent | Trep | 700: 2 |  | Smitic | meph | ${ }^{4} \mathrm{mam}_{4 \mathrm{tmm}}$ |
|  |  | Purgenemod | Finpmeate |  |  | Too: ${ }_{\text {Pr }}$ |  |  | Tutuidy | 析 |
| 8.30.01 | 11:00 | Ss.asien |  | umbl | 2429 | 6.17 | 20.9 | 1042 | Pemsit |  |
|  | 1:05 |  |  | 0.75 | 24.30 | 6.86 | 20.3 | 1048 |  |  |
|  | 11:-9 | " |  | 1.50 | 22.30 | 6.85 | 18.3 | 1038 |  |  |
|  | 11:15 |  |  | 2.25 | 24.39 | 6.89 | 8.4 | 1087 |  |  |
|  | 112 20 | $\cdots$ |  |  | 2430 | \% 81 | 17.1 | ${ }^{1095}$ |  |  |
|  | 1125 |  |  | (3) | 24.30 | . 88 | 18.4 | 1070 |  |  |
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IMHOFF CONE TEST Start Time:___
a. Top of casing.
b. NAPL - nonaueous phase liquid.
c. Gallons per minute.

Volume Sediment:

## HULL \& ASSOCLATES, INC. WELL DEVELOPMENT FORM

 $25.13 \quad 9: 06$| $\begin{aligned} & \begin{array}{l} \text { Job Number SBTooz } \\ \text { Site: } \\ \text { Developers. S.Deith } \end{array} \\ & \hline \end{aligned}$ |  |  |  | Well No. and Type: (Hmw 16 Initial Total Depth (ft TOC): 65.93 Final Total Depth (ft TOC): |  |  |  | Staic Water Depth (ft ToC'): at hrs at hrs.Depht o NAALWeater: $65^{\circ}$ Sunny |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Time | Purge Method | Pumping Rate | Volume Purred | DTW ${ }^{\circ}$ | $\mathrm{pH}^{\text { }}$ | Temp, ${ }^{\text {g }}$ |  | . Tubiditity | Comments |
| 9-5-01 | 919 | \% |  | inde | 25.13 | 7.30 | 136 | 1089 | $\mathrm{Q}_{4}$ |  |
|  | 920 |  |  | 6.75 | 25.5 | 7.36 | 12.8 | 1083 | Brom Sity |  |
|  | 935 |  |  | 12.5 | 25.18 | 7.26 | 12.7 | 1087 | 17 |  |
|  | 944 |  |  | 20.25 | 2519 | 7.27 | 12.8 | 1068 | 4 |  |
|  | 951 |  |  | 27.0 | 25.18 | 7.26 | 12.8 | 1099 | " |  |
|  | 1002 |  |  | 33.75 | 2520 | 7.25 | 12.7 | 1095 | 4 |  |
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[^14]Fwetron $=6.65$
d. Cumulative gallons
e. Depth to water.
$\mathrm{g}^{\circ} \mathrm{C}$, unless ${ }^{\circ} \mathrm{F}$ noted.
f. Standard units

Volume Sediment:
h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).
i. Visual uniess otherwise noted.
i. Visual uniess otherwise noted.

FORMS.300.0003.DOC
HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM

IMHOFF CONE TEST
Volume Water:_
d. Cumulative gallons
e. Depth to water.
End Time:
h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ). i. Visual unless otherwise noted.
HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM


[^15]d. Cumulative gallons
e. Depth to water.
b. NAPL - nonaqueous phase liquid. c. Gallons per minute.




IMHOFF CONE TEST Start Time:
a. Top of casing.
d. Cumulative gallons
e. Depth to water.
b. NAPL - nonaqueous phase liquid.
c. Gallons per minute.
of
sheet


[^16]Volume Water:
e. Depth to water.
End Time:
f. Standard units
g. ${ }^{\circ} \mathrm{C}$, unless ${ }^{\circ} \mathrm{F}$ noted.
$\left|w_{N}\right|=315 \mathrm{gal}$
HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM

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| 9.72 | 0875 | Werica |  | ia | 22.98 | 2.30 | 15.0 | 891 | ver 70.6 bu |  |
| 9-200 | 940 | Waricam |  | 10.0 | 2298 | 7.22 | 140 | 931 |  |  |
| 2,7-0, | 849 | warua |  | 20.0 |  |  | 15.1 | 9066 | ver 7 Tobd |  |
| 2-2-1 | 8558 | Werica |  | $\frac{340}{40.0}$ | 22.99 | 2.31 | 15.1 | 888 |  |  |
| $\frac{9-7-01}{2-2 \cdot 0}$ | 9 | ${ }_{\text {nater }}^{\text {nuram }}$ |  | 500 |  | 7.33 | 15.1 | 801 |  |  |
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TMEOFE CONETEST
d. Cumulative gallons
e. Depth to water.
Volume Water:
End Time:
Standard units h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).
i. Visual unless otherwise noted.
HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM

| Job Numb Site: <br> Developer | SSBI* |  |  | Well No. and Type: $17 W-255$ Initial Total Depth (ft TOC): 28.10 Final Total Depth (ft TOC): |  |  |  | Static Water Depth (ft TOC ${ }^{\text {² }}$ ): <br> Depth to NAPL ${ }^{\text {b }}$ <br> Weather: $65^{\circ}$ Sunny |  | hrs. at |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Time | Purge Method | Pumping Ratè | Volume <br> Purged ${ }^{\text {d }}$ | DTW | $\mathrm{pH}^{\text {I }}$ | Temp. ${ }^{8}$ | Spec. Cond. ${ }^{\text {h }}$ | Turddity' | Comments |
| 8-10-01 | 0825 | Sixurider |  | 0.75 | 24.80 | 7.31 | $13 \cdot 0$ | 1080 |  |  |
| 9,s-1 | Ô2\% | Dif isuct |  | 0.75 | 24.80 | 7.3 | 12.9 | 1044 |  |  |
| 9.5006 | 2330 | Disp Le.jas |  | 0. 21 | 24.80 | 7.28 | 12.8 | 1028 |  |  |
| 7501 | 683 r | DYP 子-1/4 |  | 0.75 | 24.80 | 7.25 | 12.7 | 1051 |  |  |
| 4.31 | 0837 | Dip sa/er |  | 0.76 | 24.80 | 7. 26 | 12.7 | 1040 |  |  |
| 9.301 | 0832 | Prpratur |  | 0.75 | 24.8 | 7.27 | 12.7 | 1032 |  |  |
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[^17]f. Standard units
g. ${ }^{\circ} \mathrm{C}$, unless ${ }^{\circ} \mathrm{F}$ noted.
h. Spécific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).

Volume Sediment:
\[

$$
\begin{aligned}
& \text { h. Specific conductance, } \mu \text { mhos } / \mathrm{cm}(\text { or } \mu \mathrm{S} / \mathrm{cm} \text { ) } \\
& \text { i. Visual unless otherwise noted. }
\end{aligned}
$$
\]

End Time:________
End Time:

HULL \& ASSOCLATES, INC. WELL DEVELOPMENT FORM

IMHOFR CONE TEST
Start Time:
a. Top of casing.
b. NAPL- nonaqueous phase liquid.
c. Gallons per minute.
End Time:
h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).
i. Visual unless otherwise noted.

HULL \＆ASSOCIATES，INC．WELL DEVELOPMENT FORM Well No and Type： $\mathrm{Hmm}-17 \Delta_{56}$ Initial Total Depth（ft TOC）： 65.56 Static Water Depth（ft TOC＇）：at hrs． Depth to NAPL ${ }^{\text {b }}$ NMI at hrs． Weather： $65^{\circ}$ sunny \begin{tabular}{|l|l|}
\hline Turbidity \& Comments <br>
\hline

 

\hline Very Turbid <br>
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\end{tabular} （and Spec．

Cond． $\frac{990}{1035}$ 1060 1059
1072
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Temp．${ }^{8}$
14.9
13.6

| 6.75 | 25.90 | 7.18 | 13.1 |
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13.2
$\mathrm{pH}^{\mathrm{t}}$
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| 6.75 | 25.90 | 7.26 |
| :--- | :--- | :--- |
| 6.75 | 2589 | 733 |


|  | $\begin{array}{l}\text { Volume } \\ \text { Purged }\end{array}$ |
| :--- | :--- |
|  | DTW |
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| HULL \＆ASSOCIATES，INC．WELL DEVELOPMENT FORM |  |  |  |  |  |  |  |  |  |  |
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| Job Numbe <br> Site：Ar <br> Developers |  | chol |  | Well No． Initial To Final Tot | Type： 1 Depth（ft Depth（ft T | $\begin{aligned} & \text { mw- } 170 \\ & \text { roc): } 655^{\circ} \\ & 00): 65 . \end{aligned}$ |  | Static Wat Depth to N Weather： | Depth（ft TOC＇）： $\mathrm{PL}^{\mathrm{b}}$ MMI $65^{\circ}$ junny | hrs． at hrs． |
| Date | Time | Purge Method | Pumping Rate | Volume Purged ${ }^{\text {d }}$ | DTW＊ | $\mathrm{pH}^{\text {f }}$ | Temp．${ }^{8}$ | Spec． Cond．${ }^{\text {h }}$ | Turbidity | Comments |
| Gft60i | ． 740 | waterai |  | Fr．t | 25゙50 | 7.17 | 14.9 | 990 | Very Turbid |  |
| 9．5．01 | 0748 | Q 7 warens |  | 6.75 | 25.90 | 7.23 | 13.6 | 1035 | ras，ruobud |  |
| 9.521 | 075 | unsters |  | 6.75 | 25.90 | 7.18 | 13.1 | 1060 | wary rurbid |  |
| 9，5－01 | 0803 | wsekRn |  | 6． 75 | 2s．90 | 7.26 | 13.1 | 1059 | vary rursid |  |
| 9．501 | 0808 | Was ERAS |  | 6.75 | 25.89 | 7.33 | 133 | 1072 | very ru－b．d |  |
| 9.501 | 0815 | WGTERA |  | 6.75 | 25．90 | 7.36 | 13.2 | 心69 | vai Turbid |  |
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IMHOFF CONE TEST
Start Time：＿＿＿＿＿＿
a．Top of casing
b．NAPL－nonaqueous phase liquid．
c．Gallons per minute．
f．Standard units
g．${ }^{\circ} \mathrm{C}$ ，unless ${ }^{\circ} \mathrm{F}$ noted．
6.64
Volume Sediment：
h．Specific conductance，$\mu$ mosos $/ \mathrm{cm}$（or $\mu \mathrm{S} / \mathrm{cm}$ ）．
i．Visual unless otherwise noted．
HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM

IMHOFF CONE TEST

[^18]f. Standard units
g. ${ }^{\circ} \mathrm{C}$, unless ${ }^{\circ} \mathrm{F}$ noted.
h. Specific conductance, $\mu$ mhos $/ \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).
FORMS.300.0003.DOC

## HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM



[^19]d. Cumulative gallons
e. Depth to water.
f. Standard units
g. ${ }^{\circ} \mathrm{C}$, unless ${ }^{\circ} \mathrm{F}$ noted.
0.47 gol
$w^{\prime}=$
HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM $24.51 \quad 1938$



| Job Num Site: A Develope | $\begin{aligned} & 1532002 \\ & \text { A } \\ & \text { S.lyeath } \end{aligned}$ |  |  | Well No. and Type: $H M \omega-6 D$ Initial Total Depth (ft TOC): 85.98 Final Total Depth (ft TOC): 85.00 |  |  |  | Static Water Depth (ft TOC'): at hrs. <br> Depth to NAPL ${ }^{\mathrm{b}} / \mathbb{A}$ <br> Weather: Schny $80^{\circ} 5$ <br> at hrs. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Time | Purge Method | Pumping Rate | Volume <br> Purged ${ }^{\text {d }}$ | DTW ${ }^{\text {b }}$ | $\mathrm{pH}^{\text {l }}$ | Temp. ${ }^{\text {b }}$ | Spec. Cond. ${ }^{\text {h }}$ | Turbidity | Comments |
| a-5-01 | 1005170 | Watera |  | initicl | 70.07 | $7.44$ | 18, |  | 51.Clee |  |
|  | 17.23 | 1 |  | 10.5 | 20.07 | 7.31 | 13.0 | 744 | turbid |  |
|  | $17: 33$ |  |  | 511.0 | 20.11 | 7.57 | 15.1 | 728 | 11 |  |
|  | 1739 | , |  |  |  | $7.36$ | 130 | 740 | 11 |  |
|  | $9=48$ |  |  | $42.0$ |  | 7.30 | 12.9 |  |  |  |
| $\sqrt{7}$ | $17: 58$ | $\checkmark$ |  | $525$ | $20.10$ | $7.4$ | 13.1 | 740 | $\Delta$ |  |
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IMHORE CONE TEST
d. Cumulative gallons
HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM
HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM $\begin{array}{ll}20.9 \mid & |73| \\ \text { Static Water Depth }\left(\mathrm{ft}^{2} \mathrm{TOC}^{\circ}\right): \text { at } & \text { hrs. }\end{array}$

IMHOEFCONE TEST
d. Cumulative gallons
e. Depth to water.
h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ). i. Visual unless otherwise noted.

Volume Sediment:________
f. Standard units
g. ${ }^{\circ} \mathrm{C}$, uniess ${ }^{\circ} \mathrm{F}$ noted.

## uell rax 0.57 gax



| Job Numb Site：Area Developers | $\begin{aligned} & r S 3 I 00 \% \\ & a \\ & m . c h a r e l \end{aligned}$ |  |  | Well No．and Type：HWW／S3－1 Initial Total Depth（ft TOC）： 24.35 Final Total Depth（ft TOC）： 24.35 |  |  |  | Static Water Depth（ $\mathrm{ft} \mathrm{TOC}^{*}$ ）：at hrs． Depth to NAPL ${ }^{\text {b }} \quad N / A$ <br> Weather：Sunny $80^{\circ} \mathrm{S}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Time | Purge Method | Pumping Rate | $\begin{aligned} & \text { Volume } \\ & \text { Purged }{ }^{\text {d }} \end{aligned}$ | DTW ${ }^{\circ}$ | $\mathrm{pH}^{\text {i }}$ | Temp．${ }^{8}$ | Spec． Cond．${ }^{h}$ | Turbidity ${ }^{\text {a }}$ | Comments |
| $9.5-01$ | 1705 | － $\begin{gathered}\text { Visposable } \\ \text { cailer }\end{gathered}$ |  | initial | 19.65 | 7.15 | 14.9 | 959 | Veryturbid | sheen on sa |
| 1 | 17：08 |  |  | 1，0 | 19.66 | 7.13 | 14.3 | 933 | I | 1 |
|  | 17：09 |  |  | 2.0 | 19.66 | 7.12 | 14.0 | 981 |  |  |
|  | $17: 12$ |  |  | 3,0 | 19.66 | 7.13 | 13.8 | 978 |  |  |
|  | $17: 14$ |  |  | 4.0 | 19.66 | 7.25 | 14.5 | 961 | 1 |  |
| V | $17: 16$ | $V$ |  | 5.0 | 19.66 | 7.19 | 14.0 | 969 | $\downarrow$ | $V$ |
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[^20]d．Cumulative gallons e．Depth to water．

Smioff Cone test
Start IIme:___
a. Top of casing.
b. NAPL - nonaqueous phase liquid.
c. Gallons per minute. c. Gallons per minute.
sheet of 1

## $\stackrel{L n}{2 n} \cdot p$

HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM

| Job Numb Site: Area Developers | $\begin{aligned} & \text { SBIOO } \\ & \mathrm{m} . \mathrm{Ch} \end{aligned}$ | chel |  | Well No. and Type: Hmw-45 <br> Initial Total Depth (ft TOC): 24.67 <br> Final Total Depth (ft TOC): 24,70 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Time | Purge Method | Pumping Ráte | Volume Purged ${ }^{\text {d }}$ | DTW ${ }^{\circ}$ | $\mathrm{pH}^{\text {1 }}$ | Temp. ${ }^{\text {g }}$ | Spec. Cond. ${ }^{\text {b }}$ | Turbidity' | Comments |
| 9-5-01 | 16.41 | $\begin{aligned} & \text { Disposebtr } \\ & \text { bailer } \\ & \hline \end{aligned}$ |  | initial | 20.95 | 7.70 | 15.9 | 805 | Yery Turbid |  |
| 1 | 16.13 |  |  | .75 | 20.97 | 7.42 | 14.9 | 806 | 15 |  |
|  | 16.44 |  |  | 1.5 | 70.97 | 7.3 | 14.6 | 830 | c |  |
|  | $16: 45$ |  |  | 2.25 | 20.97 | 7.36 | 14.2 | 839 | ¢ |  |
|  | $16: 46$ |  |  | 3.0 |  | 7.33 | 13,9 | 839 | 11 |  |
| $V$ | $16^{\circ} .47$ | $V$ |  | 3.75 | 20.97 | 7.33 | 13.9 | 852 | 11 |  |
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[^21]d. Cumulative gallons
Volume Water:
f. Standard units
g. ${ }^{\circ} \mathrm{C}$, unless ${ }^{\circ} \mathrm{F}$ noted.
Volume Sediment:
h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).
i. Visual unless otherwise noted.
HULL \& ASSOCLATES, INC. WELL DEVELOPMENT FORM

IMHOFF CONE TEST
b. NAPL - nonaqueous phase liquid. c. Gallons per minute.
HULL \& ASSOCLATES, INC. WELL DEVELOPMENT FORM

|  |  |  |  | Weink |  | No.2I |  | Sticteme |  | $\begin{array}{lll} \text { at } & \text { hrs. } & \\ & \text { at } & \text { hrs. } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Pursememod | Pumingal | dind | dr | ${ }^{\text {Pr }}$ | ${ }_{\text {Tamp }}$ ? | Welmer | Stany | Comanes |
| $9-5-0$ | 158 | mompoilen |  |  | 25.70 | 7.65 | M.O | 93 | Rum Six |  |
|  | 53 | , |  | 699\% | +25.76 | 7.32 | 13.3 | 914 |  |  |
|  | 1534 |  |  |  |  |  |  | 934 |  |  |
|  | 1338 |  |  | \% 8.3 | 1235.75 |  | 12.9 | 933 |  |  |
|  | 542 | d |  | \% 5 5,0 | 25.76 | 7.21 | 12.7 | 935 | $\stackrel{\square}{4}$ |  |
|  | 1545 | , |  | - 6.80 | 225.74 | 7.23 | 12.6 | 938 | 4 |  |
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[^22]d. Cumulative gallons
e. Depth to water.
f. Standers ${ }^{\circ} \mathrm{F}$ noted.
well wh: 1.15 ghl
HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM


[^23]| $1 \mathrm{mel} \text { adel } 0.55 \mathrm{gel}$ |
| :---: |
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Volume Sediment:______
h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).
i. Visual unless otherwise noted.


[^24]

Volume Sediment:
h. Specific conductance, $\mu$ mhos $/ \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ). i. Visual unless otherwise noted.

| IMHOFF CONE TEST |  |
| :--- | :--- |
| Start Time: | Volume Water:___ |
| $\begin{array}{ll}\text { a. Top of casing } & \text { d. Cumulative gallons } \\ \text { e. Depth to water. } \\ \text { c. Gallons per minute. }\end{array}$ |  |

Volume Water:___
d. Cumulative gallons
c. Depth to water.
End Time:______
f. Standard units
g. ${ }^{\circ} \mathrm{C}$, unless ${ }^{\circ} \mathrm{F}$ noted.
End Time:____
f. Standard units
f. Standard units
g. ${ }^{\circ} \mathrm{C}$, unless ${ }^{\circ} \mathrm{F}$ noted.
End Time:____
f. Standard units
g ${ }^{\circ} \mathrm{C}$, unless ${ }^{\circ} \mathrm{F}$ noted.
HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM

| Job Num <br> Site: <br> Develope | $\triangle B I \alpha$ |  | Well No and Type: $M W-215$ Initial Total Depth (ft TOC): 29.68 <br> Final Total Depth (ft TOC): 29.71 |  |  |  |  | Static Wate Depth to NA Weather: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Tine | Purge Method | Pumping Rate | Volume <br> Purged ${ }^{\text {d }}$ | DTW ${ }^{\circ}$ | $\mathrm{pH}^{\text {d }}$ | Temp. ${ }^{8}$ | Spec. Cond. ${ }^{\text {h }}$ |
| 9-5.01 | 1356 | Disposable Brita |  | ract | 24.56 | 6.91 | 15.5 | 928 |
| 9-8~0 | 1400 | Dos posable bailas | . | 1.3 | 24.76 | 7.12 | 14.3 | 958 |
| 9-5.01 | 14060 |  |  | 2.0 | 24.56 | 7.18 | 137 | 965 |
| 9-500 | 1109 |  |  | -3, | 24.96 | 7.11 | 13.4 | 964 |
| cu5.0i | 1414 | Deparobile bri.far |  | 4.0 | 24.96 | 7.16 | 13.3 | 965 |
| 9-5-u1 | 1417 | Piscrable sader |  | 5, | 24.98 | 7.23 | 13.4 | 970 |
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IMHOFF CONE TEST
Volume Water:______
f. Standard units
g. ${ }^{\circ} \mathrm{C}$, unless ${ }^{\circ} \mathrm{F}$ noted.

h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ). i. Visual unless otherwise noted.
HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM

| HULL \& ASSOCLATES, INC. WELL DEVELOPMENT FORM |  |  |  |  |  |  |  |  |  | 24.691348 |
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| Job Numb Site: <br> Developer | $\begin{gathered} \text { SBI00 } \\ \text { S. } \end{gathered}$ |  | Well No. and Type: $H M W-24 D$ Initial Total Depth (it TOC): 54.30 Final Total Depth (ft TOC): 54.17 |  |  |  |  | Static Water Depth (ft TOC'): <br> Depth to NAPL ${ }^{b}$ <br> Weather: $80^{\circ}$ Sunny |  | hrs. at hrs. |
| Date | Time | Purge Method | Pumping Rate | Volume Purged ${ }^{\text {d }}$ | DTW ${ }^{\circ}$ | $\mathrm{pH}^{\text {² }}$ | Temp. ${ }^{8}$ | Spec. Cond. ${ }^{\text {h }}$ | Turbidity' | Comments |
| 9-5-01 | 1400 | W=\% EfM |  | 5.0 | 24.65 | 7.14 | 14.8 | 930 | veivy Turdial |  |
| 9.5.01 | 1405 | mosern |  | 10.0 | 24.75 | 7.23 | 138 | $94 / 5$ | very Tu.6.1 |  |
| 9.5.01 | 1410 | Nat EMA |  | is.0 | 24.87 | 7.24 | 1'35 | 821 | very rorbud |  |
| 9-5-01 | 1414 | WATFRRA |  | 2.0 .0 | 24.88 | 7.23 | 13.5 | 954 | Very Turbud |  |
| 9-5'01 | 1422 | NOTERA |  | 25.0 | 24.88 | 7.31 | 13.5 | 9.52 | very rusbid |  |
| 9,5101 | 7428 | WATARSA |  | 330 | 24.79 | 7.33 | 13.4 | 948 | ver 7 T $\rightarrow$ 6, 1 |  |
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IMHOFF CONE TEST
b. NAPL - nonaqueous phase liquid.
d. Cumulative gallons
e. Depth to water.
sheet of 1
tart 1
f. Standard units h. Specific conductance, $\mu$ mhos $/ \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).

Volume Sediment:
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HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM

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| 950. | 1221 | Visprat de |  | mitep | 24.66 | 7.14 | 13.8 | 882 | Bromot sity |  |
|  | 12:28 |  |  | 3.0 | 24.68 | 7.19 |  | 906 | Verutabid |  |
|  | 12:34 |  |  | 6.0 |  | 7.24 | 13.3 | 905 | i, |  |
|  | ${ }^{12} 237$ |  |  | 9,0 | 24.68 | 7.14 | 13.1 | 889 | "' |  |
|  | 12:40 | , |  | $\frac{12.0}{15.0}$ |  | 1.19 | $\frac{13.1}{131}$ | $\frac{894}{870}$ | ! |  |
| - | 12:13 | $\checkmark$ |  | 15.0 | 24.68 | 7.30 | 13.1 | 870 |  |  |
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[^25]h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ). i. Visual unless otherwise noted.
HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM

| Jotereme | $5_{55502}$ |  |  | Nentis | Topeit | Ho, |  | Sind | Rpplit |  |
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|  | M, Trime | Prug Memod | Pumpigrac | Hex | div | ${ }_{\text {pr }}{ }^{\text {P }}$ | ${ }_{\text {tampt }}$ | Natari | cosmdid |  |
| 97.501 | 12:28 | Di.a |  |  | 25.02 | 7.11 | 13.2 | 865 | st.clear |  |
|  | 12:30 |  |  | . 8 |  | 2.01 | 13.2 | 1057 | verytubid |  |
|  | 12:32 |  |  | 1.6 | 25.03 | 2.03 | 13.2 |  |  |  |
|  | 12:34 |  |  | 2.4 |  | 7.09 | 13.2 | 1034 | $\because$ |  |
|  | 12,34 |  |  | 3.2 | ${ }_{25}^{25,03}$ | 7.03 | 13.3 |  | 1 |  |
| $\checkmark$ | 12:38 | $\checkmark$ |  | 4.0 | 25.03 | 7.07 | 13.2 | 1035 | " |  |
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IMHOFF CONE TEST
Start Time:
d. Cumulative gallons
e. Depth to water.
f. Standard units
g. ${ }^{\circ} \mathrm{C}$, unless ${ }^{\circ} \mathrm{F}$ noted.
0.80 gl
h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).
i. Visual unless otherwise noted.
HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM


[^26]
## well $\mathrm{vol}=0.40 \mathrm{gh}$

HULL \＆ASSOCLATES，INC．WELL DEVELOPMENT FORM

| Job Numb <br> Site： <br> Developer | SBIOQ | Well No．and Type： 4 m Un $19 D$ <br> Initial Total Depth（ft TOC） $57.7067,70$ <br> Final Total Depth（ft TOC）： $0 \times 67,55$ |  |  |  |  |  | Static Water Depth（ft TOC＂） Depth to NAPL ${ }^{6}$ Weather： $70^{\circ}$ Sunay |  | hrs． at |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Time | Purge Method | Pumping Rate | Volume Purged ${ }^{\text {d }}$ | DTW ${ }^{\circ}$ | $\begin{gathered} \mathrm{pH}^{1} \\ 4 \end{gathered}$ | Temp，${ }^{8}$ | Spec． Cond．${ }^{\text {h }}$ | Turbidity＇ | Comments |
| $9-5-0$ | 1045 | hotema |  | stice | 25.4 |  | 13.2 |  | $\mathrm{ClO}_{4}$ |  |
| 9.501 | 1050 | NHTERA |  | 7.0 | 25.91 | 7.40 | 13.3 | 841 | ver. TiRB.D |  |
| 7．5心1 | 1058 | Nus能荗 |  | 7.2 | 25.91 | 7.49 | 3.1 | 853 | very Tarbip |  |
| 9－5．01 | 1102 | Wertinn |  | 7：0 | $25 \cdot 91$ | 7.37 | 133 | 915 | Very Tuskd |  |
| atol | 1113 | Wirchs |  | 2.2 | 25.91 | 7.37 | 13.2 | 864 | very Tus bid |  |
| 915101 | 1120 | WOTARR |  | 7.0 | 25.88 | 7.51 | 13.2 | $55^{2} 2$ | vart row ${ }^{\text {a }}$ ， |  |
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IMHOFE CONE TEST
Stan IINe
a．Top of casing．
b．NAPL－nonaqueous phase liquid．
g．${ }^{\circ} \mathrm{C}$ ，unless ${ }^{\circ} \mathrm{F}$ noted．
1 wevorl： 6.82
HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM


[^27]d. Cumulative gallons
c. Depth to water.
$\because$
woll $00=7.27$
HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM
IMHOFF CONE TEST
Start Time:

200's000008'SWZOI
End Time:
f. Standard units
g. ${ }^{\circ} \mathrm{C}$, unless ${ }^{\circ} \mathrm{F}$ noted.

HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM
a. Top of casing.
b. NAPL - nonaqueous phase liquid. c. Gallons per minute.
\[

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& \text { Tur bidity } \\
& \text { opogure / Clowdy } \\
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[^28]HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM

IMHOFF CONE TEST
Start Time:
a. Top of casing.
b. NAPL - nonaqueous phase liquid.
c. Gallons per minute.

$\dagger^{\circ}$ sheet
 Volume Water:
d. Cumulative gallons
e. Depth to water.
End Time:
h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).
i. Visual unless otherwise noted.
FORMS.300.0003.DOC
HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM

| Job Numb Site: Ar <br> Developer | $\begin{aligned} & \int B J 00 \\ & a A \\ & m \cdot c h o \end{aligned}$ |  | Well No. and Type: Hmw-15S Initial Total Depth (ft TOC): 29.95 Final Total Depth (ft TOC): 29.95 |  |  |  |  | Static Water Depth (ft Depth to NAPL ${ }^{\text {b }} N / A$ Weather: $60^{\circ}$ Suing |  | hrs. at hrs. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Time | Purge Method | Pumping Rate | Volume <br> Purged ${ }^{\text {d }}$ | DTW ${ }^{\text {c }}$ | $\mathrm{pH}^{\mathbf{1}}$ | Temp, ${ }^{\text {g }}$ | Spec. Cond. ${ }^{\text {h }}$ | Turbidity ${ }^{\text {a }}$ | Comments |
| $9-6-01$ | $6: 45$ | Tisposable Baileir |  | initial | 24.71 | 6.71 | $13,7$ | 938 | Veryturbid |  |
| 1 | $6: 50$ | '1 |  | 1.0 | 21.71 | 6.85 | 18,7 | $985$ | ' |  |
|  | 6.53 |  |  | 2.0 | 24.71 | (0,87 | 12.5 | 970 | 11 |  |
|  | 10.55 |  |  | 3.0 |  | 6.90 | 2.4 | 970 | 11 | . |
|  | $6: 56$ |  |  | 1.0 |  | 6,97 | 12.3 | 986 | 11 |  |
| $\sqrt{ }$ | $10: 58$ |  |  | 5.0 | 24.71 | 6.94 | 12.3 | 985 | 11 |  |
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[^29]> Volume Sediment:
> h. Specific conductance, $\mu$ mhos $/ \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).
i. Visual unless otherwise noted.

HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM

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| Some | Tine | Prugemetiod | Pimpugrat |  |  | Pi | Tme? |  | Turudity |  |
| 9.601 | 6:49 | watera |  | inital | 24.68 | 711 | 14 | 938 | clear |  |
|  | 6:54 |  |  | 9.5 | 24.80 | 7.05 |  |  | verytubid |  |
|  | 7:10 | 7 |  |  | 24.79 |  |  | 975 |  |  |
|  | 7:20 |  |  | 28.5 | 21.80 | 7.52 | 13.8 | 1030 | \#1 |  |
|  | 7730 |  |  | 37.0 |  | 7.38 | 14.0 |  | ${ }^{\prime}$ |  |
| $\checkmark$ | 740 | $\downarrow$ |  | 46.5 | 24.75 | \% ${ }^{3}$ | 14.1 | 965 |  |  |
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IMHOEF CONE TEST
Stant Time:
a. Top of casing.
b. NAPL - nonaqueous phase liquid. c. Gallons per minute.
sheet of 1
shaw or 1


[^30]
d. Cumulative gallons
e. Depth to water.
h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ). i. Visual unless otherwise noted.
HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM


[^31]sheet . if
sheet
HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM Static Water Depth (ft TOC ${ }^{1}$ ): at hrs. Depth to NAPL ${ }^{\text {b }}$ NA at
 Weather
Spec.
Cold.
662
622
$\frac{5}{3} \frac{\pi}{3}$
4
3
3
$6+5$
Temp. ${ }^{8}$
15.3
162
$7.39 \quad 14.6$
135
145


[^32]Volume Water:
h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).
i. Visual unless otherwise noted.

| Job Numb Site: <br> Developers | $3500$ |  | Well No. and Type: $1+m W-1 I$ Initial Total Depth (ft TOC): 47-96 Final Total Depth (ft TOC): $\quad 47.94$ |  |  |  |  | Static Water Depth ( ft TOC ${ }^{*}$ ): <br> Depth to NAPL ${ }^{\text {b }}$ NA Weather: Semmp |  | hrs. at hrs. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Time | Purge Method | Pumping Rate | Volume Purged ${ }^{\text {d }}$ | DTW | $\mathrm{pH}^{\mathbf{1}}$ | Temp. ${ }^{8}$ | Spec. Cond. ${ }^{h}$ | Turbidity ${ }^{\text {a }}$ | Comments |
| $9-601$ |  | Sinf luat |  | unt | 1.98 | 7.82 | 164 | 743 | Brown silty |  |
|  |  |  |  |  |  |  | $13.5$ |  |  |  |
|  |  |  |  |  | $19^{4}$ |  | 14.3 | $776$ | I |  |
|  |  |  |  | 2.75 | $196$ | 7.41 | $13.3$ | 716 | 11 |  |
|  |  |  |  | 70 | $1.95$ | $7.45$ | $3.5$ | 800 | $11 \%$ |  |
|  |  |  |  |  | $194$ | $742$ | $125$ | $70$ |  |  |
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h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).
i. Visual unless otherwise noted.

Volume Sediment:_________

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\begin{aligned}
& \text { h. Specific conductance, umhos/c } \\
& \text { i. Visual unless otherwise noted. }
\end{aligned}
$$

[^33]Volume Water:
f. Standard units
g. ${ }^{\circ} \mathrm{C}$, unless ${ }^{\circ} \mathrm{F}$ noted
4.23 gat
HULL \& ASSOCIATES, INC, HED L DEVELOPMENT FORM


[^34]HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM

| 5 |  |  |  | Melino.e. | andiper | 边 |  | Smatema | beply |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Time | Prugenetid | Pimpurgat | dination | ${ }^{\text {depmem }}$ | Hoc: | Trant ${ }^{\text {a }}$ | Welter | ds.undify |  |
| 99.101 | 750 | uravara |  | Lit | 24.0 | 6.80 | 15.6 | 851 | Vaytrod |  |
|  | 755 |  |  | 4.25 |  | 712 | 14.2 | 876 | /: |  |
|  | 807 | 4 |  | 8.50 | 2399 | 7.16 | 13.7 | 898 | , |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  | 817 | " |  |  | 23.99 | 7.17 | 13.1 | 9 |  |  |
|  | 817 | " |  | 21.25 | 23.98 | 7.18 | 13.1 | 901 |  |  |
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[^35]d. Cumulative gallons
e. Depth to water.
a. Top of casing
b. NAPL-nonaqueous phase liquid.
i. Visual unless otherwise noted.
FORMS, 300.0003.DOC


[^36]HULL \& ASSOCIATES, INC. WELL DEVELOPMENT FORM

|  | [5EMV |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Prusemeud | Pmanigra |  |  |  |  |  |  |  |
| 9 cba | 172 | bisparar |  | int | 25,60 | 0 7.43 | 13.8 | 943 | clear |  |
|  |  |  |  | 3.75 |  | 7.33 | 13.0 | 894 | Vent tubid |  |
|  | 17:44 | watera |  | 15 | 27.1 | 7.28 | 13,2 | 885 |  |  |
|  | $\frac{17: 50}{17: 56}$ | " |  | $\frac{1851425}{150}$ | $\frac{26,05}{2594}$ | 7.27 | $\frac{12.9}{12.9}$ | 903 | 4 |  |
|  | 18:01 |  |  | 18.15 | 25.82 | 27.27 | 13.0 | 802 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |
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[^37]d. Cumulative gallons
e. Depth to water.
f. Standard units
g. ${ }^{\circ} \mathrm{C}$, unless ${ }^{\circ} \mathrm{F}$ noted.
End Time:
Volume Water:_______
h. Specific conductance, $\mu$ mhos $/ \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).

|  |  |  |  |  | maty | N |  | Sticter | pepmitroct |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Phus |  |  |  |  |  | Smami | ITulut |  |
| 9.500 | $11: 2$ | Ferice |  | - | 24.40 | 7.38 | ${ }^{15,3}$ | 957 | st turbid |  |
|  | 17:31 |  |  | 3.5 | 24.41 | 7.34 | 13.6 | 906 | veryturbeid |  |
|  | 17:36 |  |  | 7.0 | 29.41 |  | 13,3 | 916 |  |  |
|  | 17:42 | - |  | 10.5 |  | 7.28 | 12.9 | $9 / 3$ |  |  |
| $\checkmark$ | 17:43 |  |  | 14.0 |  | 7.26 | 13.0 | 906 | " |  |
|  | ${ }_{\text {\% }}^{1 / s^{2}}$ | $\checkmark$ |  | 17.5 | 24.41 | 7.25 | 12.8 | 924 | " |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

[^38]d. Cumulative gallons
e. Depth to water.
End Time:
f. ${ }^{\circ} \mathrm{C}$, unless ${ }^{\circ} \mathrm{F}$ noted.
f. Standard units
h. Specific conductance, $\mu \mathrm{mhos} / \mathrm{cm}$ (or $\mu \mathrm{S} / \mathrm{cm}$ ).
i. Visual unless otherwise noted.
Volume Sediment:____________

## APPENDIX C

Monitoring Well Groundwater Sampling Field Data Sheets

Hull \& Associates, Inc.
GROUNDWATER SAMPLING
FIELD DATA SHEET




Drum Inventory: Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

Hull \& Associates, Inc.
6130 Wilcox Road
Dublin, Ohio 43016
GROUNDWATER SAMPLING FIELD DATA SHEET

Client
Site No.
Weather Conditions \& Approx. Air Temperature Type of Well Construction $\partial^{r} p \mathcal{C}$ Condition of Well (Good/ Poor); if poor, specify

## Cap Locked (Yes/ No)

Depth to Water $2 \longdiv { 1 6 }$ feet
NAPL (Yes / No), Depth to NAPL $\qquad$ Lock No.
Total Depth of Well 80.15 feet

NAPL Thickness
Sample Date
$9-18-001720$

Well I.D. Site Location

Project No. \& Phase feet feet Sample No. So3Ioco: Hmm 0:09/801.5c

 One Well Volume Equals 9.6 Comments $\qquad$
$\qquad$ NAPL $\qquad$

Hull \& Associates, Inc.
GROUNDWATER SAMPLING
FIELD DATA SHEET


Type of Well Construction $\qquad$
Condition of Well (Good / Poor); if poor, specify Good
$\qquad$ Lock No. $\qquad$
Depth to Water $\quad 22,08$ feet Total Depth of Well $\qquad$ LNAPL (Yes / No), Depth to LNAPL MIC feet LNAPL Thickness $\qquad$ feet



One Well Volume Equals $\qquad$

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory:
Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

FIELD DATA SHEET


LNAPL (Yes / No), Depth to LNAPL NIL feet
LNAPL Thickness $\qquad$
Sample Date $\qquad$ $9.18-01$ (e 1700 feet

Purging Method sailer Smaneno. SB1002:HmulS:Go9ged:529


One Well Volume Equals

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory: $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

Hull \& Associates, Inc.
GROUNDWATER SAMPLING
FIELD DATA SHEET


LNAPL (Yes / No No , Depth to LNAPL NIL_ feet
LNAPL Thickness $\qquad$ feet
$\qquad$


One Well Volume Equals .15

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory:
Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$ FIELD DATA SHEET


Well I.D.
Site Location
Site No. $\qquad$ Project No. \& Phase


Weather Conditions \& Approx. Air Temperature . Cloudy $80^{\circ} \mathrm{s}$
Type of Well Construction
Condition of Well (Good / Poor); if poor, specify
$\qquad$


LNAPL (Yes / No), Depth to LNAPL - XI L feet

LNAPL Thickness $\qquad$ feet

$\qquad$


One Well Volume Equals


Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory: $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

Hull \& Associates, inc.
GROUNDWATER SAMPLING
FIELD DATA SHEET

Client


Well I.D.

Site No. $\qquad$ Project No. \& Phase


Weather Conditions \& Approx. Air Temperature $\operatorname{sen} \mathrm{sen} 75^{\circ} 5$
Type of Well Construction
$2 r$
Condition of Well (Good / Poor); if poor, specify $\square$
00
Cap Locked (Yes / No) $\qquad$ Lock No.

Depth to Water
 feet Total Depth of Well $24.70 \quad$ feet
LNAPL (Yes / No), Depth to LNAPL NIL feet

LNAPL Thickness feet
 Sample No. SBIOOz:HMZS:GO9180/: SZF

One Well Volume Equals
85
Gallons

Comments $\qquad$
$\qquad$
$\qquad$
Drum Inventory: Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

FIELD DATA SHEET


LNAPL (Yes / No), Depth to íNAPL : aI
LNAPL Thickness $\qquad$

$\qquad$
Purging Method Bailed


One Well Volume Equals $\qquad$

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$ Purge Water $\qquad$ LNAPL $\qquad$


LNAPL (Yes / No), Depth to LNAPL $\qquad$ MEL feet

- LNAPL Thickness $\qquad$
Sample Date $\qquad$ $9-20-d$ (c) 815 feet

Purging Method bailer 1


One Well Volume Equals $\qquad$

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

Client


Site No. $\qquad$ Project No. \& Phase HolliS
Aapleins 535002

Weather Conditions \& Approx. Air Temperature
judy $65^{\circ} \mathrm{s}$

Well I.D.
Site Location

Type of Well Construction Zn

## $\xrightarrow{\text { Good }}$

Cap Locked (Yes / No)
$\frac{Y(5)}{2.05}$

Lock No.
3476
Depth to Water
LNAPL (Yes / No), Depth to LNAPL NE L
LNAPL (Yes / No), Depth to LNAPL NIL
Total Depth of Well
$-24.68 \quad$ feet feet ;'

LNAPL Thickness
Sample Date 9-20-01 0 8:05 feet

Purging Method $\qquad$


One Well Volume Equals
.59
Gallons

Comments $\qquad$
$\qquad$
$\qquad$

Drum Inventory:
Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

Hull \& Associates, Inc.
GROUNDWATER SAMPLING
FIELD DATA SHEET


LNAPL (Yes / No), Depth to LNAPL XI L feet
$\qquad$
Sample Date $9-20.018$ Sample No. SBIOOD: HM W6D:6040001.523

Purging Method keck

$\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory:
Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$ FIELD DATA SHEET


One Well Volume Equals $\qquad$
Comments $\qquad$ title sheen
$\qquad$
$\qquad$
$\qquad$
$\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

Hull \& Associates, Inc.
GROUNDWATER SAMPLING FIELD DATA SHEET



One Well Volume Equals
.78
Gallons

Comments $\qquad$
$\qquad$
$\qquad$

Drum Inventory:
Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

Hull \& Associates, Inc.
GROUNDWATER SAMPLING FIELD DATA SHEET



One Well Volume Equals


Gallons

Comments $\qquad$
$\qquad$
$\qquad$

Drum Inventory: Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

Hull \& Associates, Inc.

## GROUNDWATER SAMPLING

FIELD DATA SHEET


Purging Method


$$
\text { One Well Volume Equals } 4.32 \quad \text { Gallons }
$$

Comments $\qquad$
$\qquad$
$\qquad$

Drum Inventory: Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$


LNAPL (Yes / No), Depth to LNAPL $\qquad$ NIL Total Depth of Well $\qquad$

LNAPL Thickness $\qquad$ feet

Sample Date $\qquad$ $9-17-01 \theta 1650$ feet

Purging Method $\qquad$


One Well Volume Equals
Sample No. SBIoe?: HmW8S:Gc91701:S22

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory:
Soil $\qquad$ Purge Water $\qquad$
$\qquad$

Client
Site No. $\qquad$
Weather Conditions \& Approx. Air Temperature cloudy $80^{\circ}$ s
Type of Well Construction $2^{\prime \prime}$ well
Condition of Well (Good / Poor); if poor, specify Good
Cap Locked (Yes / No) $\qquad$
Depth to Water $\square$ Lock No. 3476 Total Depth of Well 44.64 feet

LNAPL (Yes / No), Depth to LNAPL NIL; feet

LNAPL Thickness feet

Purging Method bailer


One Well Volume Equals $\square$
3.71 Gallons

## Comments

$\qquad$
$\qquad$
$\qquad$

Drum Inventory: Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$


| WELL PURGING |  |  | PARAMETERS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TIME | APPROX. VOLUME PURGED(GALLONS)/ WELL VOLUME | NO. OF WELL VOLUMES | $\begin{aligned} & \text { TEMP. } \\ & { }^{\circ} \mathrm{C} \end{aligned}$ | $\begin{gathered} \mathrm{pH}(\mathrm{~S} . \mathrm{U} .) \\ \text { at } 25^{\circ} \mathrm{C} \end{gathered}$ | $\begin{aligned} & \text { COND. } \\ & \text { Units } \frac{\text { at }}{25^{\circ} \mathrm{C}} \end{aligned}$ | Turbidity <br> Units | Units | Units |
| 13.15 | NA | Static Conditions | 10.9 | $7,08$ | 662 | 贸.Clear |  |  |
| 13:16 | $.50$ | 1 | 10.4 | 7.18 | 661 | S1. Clear |  |  |
| $13: 17$ | 1.0 | 2 | 10.0 | $7.17$ | 681 | )( |  |  |
| $13: 18$ |  | 3 | 10.0 | $7.18$ | 1046 | 11 |  |  |
|  |  | 4 |  |  |  |  |  |  |
|  |  | 5 |  |  |  |  |  |  |

One Well Volume Equals $\qquad$

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

Hull \& Associates, Inc.
GROUNDWATER SAMPLING
FIELD DATA SHEET

Well I.D.


Client


Site Location
Site No. $\qquad$ Project No. \& Phase
Weather Conditions \& Approx. Air (hannperature
Type of Well Construction
Condition of Well (Good / Poor); if poor, specify


LNAPL (Yes / No), Depth to LNAPL NI C
.


LNAPL Thickness
Sample Date $9-19-010<1620$ Purging Method keck


One Well Volume Equals


Gallons

Comments $\qquad$
$\qquad$
$\qquad$

Drum Inventory: Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

Hull \& Associates, Inc.


Site No. $\qquad$ Project No. \& Phase FIELD DATA SHEET

Well I.D.
Site Location


Weather Conditions \& Approx. Air Temperature Indoors
Type of Well Construction
Condition of Well (Good / Poor); if poor, specify GOOd
$\qquad$ Lock No. $\quad 3476$
$\qquad$ Total Depth of Well $\qquad$
LNAPL (Yes / No), Depth to LNAPL NIL_ feet ;
LNAPL Thickness $\qquad$ feet
Sample Date $9-19-01$ e 1540 Sample No. SBIOOZ: $14 m W 9$ I:G09 190
$\qquad$ 521


One Well Volume Equals

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory: $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

Hull \& Associates, Inc.



One Well Volume Equals
1.63 Gallons

## Comments

$\qquad$
.Drum Inventory: Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

## GROUNDWATER SAMPLING FIELD DATA SHEET

Client


Well I.D. Site Location

Site No. $\qquad$ Project No. \& Phase


Weather Conditions \& Approx. Air Temperature Sunny $75^{\circ} \mathrm{S}$
Type of Well Construction $2^{\prime \prime}$
Condition of Well (Good / Poor); if poor, specify
Cap Locked (Yes / No) Good
Depth to Water $\quad 24.55$ Lock No. 3476 Total Depth of Well 28.20 feet
LNAPL (Yes / No), Depth to LNAPL
N 1 し feet
LNAPL Thickness feet

Sample Date $\qquad$ $.11: 90$ far

Purging Method $\qquad$


One Well Volume Equals $.59 \quad$ Gallons

Comments $\qquad$
$\qquad$
$\qquad$

Drum Inventory: Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$


LNAPL (Yes / No), Depth to'LNAPL ; $M(\leq \quad$ feet
LNAPL Thickness $\qquad$ feet
Sample Date 9.18-01 9:52 Sample No. S3I002:14mWl10:17091801:5c Purging Method Keck


One Well Volume Equals


Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory:
Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$
South Bend

Well I.D.
HMWHII Site Location Project No. \& Phase 511002


Site No. $\qquad$
$\qquad$ 5
Weather Conditions \& Approx. Air Temperature $15 \mathrm{Lun} y 75^{\circ} \mathrm{s}$
Type of Well Construction
Condition of Well (Good / Poor); if poor, specify
Cap Locked (Yes / No)
 Lock No.

Depth to Water Total Depth of Well 38.00 feet LNAPL (Yes / No), Depth to LNAPL NI C
LNAPL Thickness
Sample Date 9-18-9 10:00 feet

Purging Method bailer


One Well Volume Equals 2.29 Gallons

Comments $\frac{\text { Sheen on Scerface, Few ill spots on surface, }}{\text { Strong odor }}$
$\qquad$

Drum Inventory: Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

Hull \& Associates, Inc.
GROUNDWATER SAMPLING FIELD DATA SHEET


LNAPL (Yes / No), Depth to LNAPL NI feet
LNAPL Thickness feet



One Well Volume Equals $\qquad$

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory:
Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$


LNAPL (Yes / No), Depth to LNAPL $\qquad$ NE Total Depth of Well
 LNAPL Thickness $\qquad$ feet



One Well Volume Equals


Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$ Drum Inventory: Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

Hull \& Associates, Inc.
GROUNDWATER SAMPLING FIELD DATA SHEET



One Well Volume Equals $\square$
.80 Gallons

## Comments

$\qquad$

Drum Inventory: Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

Hull \& Associates, Inc.
GROUNDWATER SAMPLING FIELD DATA SHEET

Well I.D.
Client So -th yen ied
Site No. $\qquad$ Site Location Project No. \& Phase
$\frac{\text { HMW-12D }}{\frac{\text { Allied }}{\text { SBIoor }}}$

Weather Conditions \& Approx. Air Temperature
Sunny $70^{\circ} s$ Type of Well Construction
Condition of Well (Good / Poor); if poor, specify C Tool
Cap Locked (Yes/No) V les
Depth to Water 25,17 feet

LNAPL (Yes / No), Depth to LNAPL $\qquad$ NIL Lock No.
 Total Depth of Well $\qquad$ feet

LNAPL Thickness
Sample Date $91-18-0180$ feet
Sample No. SBIOOz:HmoulzD:4091801:5.
Purging Method Keck


[^39]Comments $\qquad$
$\qquad$
$\qquad$

Drum Inventory: Soil $\qquad$
$\qquad$ LNAPL $\qquad$


LNAPL (Yes / No), Depth to LNAPL 人( IL feet
LNAPL Thickness feet



One Well Volume Equals $\qquad$ .84

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory:
Soil $\qquad$
$\qquad$
$\qquad$

FIELD DATA SHEET

Well I.D.
Site Location
Site No. $\qquad$ Project No. \& Phase - Indoor
$\qquad$
$\qquad$
Weather Conditions \& Approx. Air Temperature
$\qquad$
LNAPL (Yes / No), Depth to LNAPL NIL feet
LNAPL Thickness $\qquad$ feet

Purging Method Keck


One Well Volume Equals $\qquad$

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory: $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

## GROUNDWATER SAMPLING

FIELD DATA SHEET

Client
South Bend

Well I.D.
Site Location
Site No. $\qquad$ Project No. \& Phase


Weather Conditions \& Approx. Air Temperature Indoors
Type of Well Construction $2^{\prime \prime}$
Condition of Well (Good / Poor); if poor, specify $\quad$ Co od Cap Locked (Yes / No)


Lock No.
3476
Depth to Water 25.11_ feet LNAPL (Yes / No), Depth to LNAPL $\quad x / \pm L$ Total Depth of Well $\frac{28.12 \quad \text { feet }}{i \quad}$ LNAPL Thickness feet Sample Date

$12 a: l e r$
Purging Method $\qquad$


> One Well Volume Equals
$\qquad$
$\qquad$

Drum Inventory: Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

Hull \& Associates, Inc.

Well I.D.
Site Location
Project No. \& Phase

GROUNDWATER SAMPLING FIELD DATA SHEET

SBIOOZ

Site No. $\qquad$ Indoors
Weather Conditions \& Approx. Air Temperature
Type of Well Construction $2^{\prime \prime}$
Condition of Well (Good / Poor); if poor, specify Good

Cap Locked (Yes / No) Yes
Depth to Water

$\square$ Lock No.

3476

LNAPL (Yes / No), Depth to LNAPL $\qquad$ NIL

Total Depth of Well


LNAPL Thickness
Sample Date


Purging Method bailer


One Well Volume Equals
3.15

Gallons

## Comments

$\qquad$
$\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

Hull \& Associates, inc.



One Well Volume Equals $\qquad$

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory:
Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

Well I.D. Site Location
Client


Site No. $\qquad$ Project No. \& Phase


5131002

Weather Conditions \& Approx. Air Temperature

- Mount y $65^{\circ} 5$

Type of Well Construction
Condition of Well (Good / Poor); if poor, specify


Cap Locked (Yes / No)
$\frac{1 / e s^{5}}{24.53}$ Lock No.


Depth to Water
$\frac{24.53}{\text { D }} \frac{\text { Pet }}{}$

LNAPL (Yes / No), Depth to LNAPL NIL
LNAPL Thickness
Sample Date 9-19-01 0 1/45 Total Depth of Well 31.26 feet feet

Purging Method $\qquad$


One Well Volume Equals
1.10 Gallons

Comments $\qquad$
$\qquad$
$\qquad$

Drum Inventory: Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

GROUNDWATER SAMPLING FIELD DATA SHEET



[^40]Comments $\qquad$
$\qquad$

Hull \& Associates, Inc.
GROUNDWATER SAMPLING
FIELD DATA SHEET



LNAPL (Yes / No), Depth to LNAPL NC feet

LNAPL Thickness $\qquad$ feet
Sample Date $9-19-1 \rho 104 \delta$ Sample No. SBIood: How 150: Go 91901:50;
Purging Method keck.


One Well Volume Equals
6.14 Gallons

Comments
$\qquad$
$\qquad$

Drum Inventory: Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

Hull \& Associates, Inc.
GROUNDWATER SAMPLING
FIELD DATA SHEET

feet
Cap Locked (Yes / No)
Depth to Water


## / Poor); if poor, specify

$\square$

Lock No. Total Depth of Well 43.27 feet
 Total
feet
LNAPL Thickness 友
Sample Date 9-18-01 Purging Method Mailer
$\qquad$ feet


One Well Volume Equals $\quad 2.85$ Gallons

Comments $\qquad$
$\qquad$
$\qquad$ LNAPL $\qquad$

FIELD DATA SHEET


LNAPL" $\mathrm{Yes} / \mathrm{No}$ ), Depth to LNAPL X/ IL_ feet.
LNAPL Thickness $\qquad$ feet
Smart Due $9-18-01 \quad 6: 15$

Purging Method Keck


One Well Volume Equals $\qquad$

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$ Purge Water $\qquad$ LNAPL: $\qquad$


LNAPL (Yes / No), Depth to LNAPL NIC ; feet
LNAPL Thickness
Sample Date
$\qquad$
$\qquad$ feet

Purging Method Keck


One Well Volume Equals


Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory:
Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

Hull \& Associates, Inc.

## GROUNDWATER SAMPLING FIELD DATA SHEET

Well I.D.
Site Location
Project No. \& Phase
Cloudy $65^{\circ} 5$

How 185
SB SBIOO2

Site No. $\qquad$
South Bend

Weather Conditions \& Approx. Air Temperature $2^{\prime \prime}$
Type of Well Construction $\qquad$
Condition of Well (Good / Poor); if poor, specify GOOd

Lock No. 3476
Depth to Water $\quad 25.64$ feet
LNAPL (Yes / No), Depth to LNAPL NIL $\qquad$ Total Depth of Well 32.28 feet

LNAPL Thickness
Sample Date


Purging Method barer


$$
\text { One Well Volume Equals } \quad 1.08 \quad \text { Gallons }
$$

Comments $\qquad$
$\qquad$
$\qquad$
Drum Inventory: Soil $\qquad$ Purge Water LNAPL $\qquad$

Hull \& Associates, Inc.
GROUNDWATER SAMPLING


LNAPL (Yes / No), Dent to LNAPL AFL._ feet
LNAPL Thickness feet
Sample Date 9-18-01 6:30 Sample No. SELD00 z:HMW-190: :0091801:505


One Well Volume Equals
6.82 Gallons

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory:
Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$


LNAPL Thickness $\qquad$ feet
Sample Date 9-18-01 $7: 30 \quad$ Sample No.
SBCOO2: HMul95: G091801D:505
SBFOOZ: HMWMS: GO4100iSOS
Purging Method


One Well Volume Equals $\qquad$
Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory: Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

GROUNDWATER SAMPLING
FIELD DATA SHEET
cion South Bend
Well I.D.

## Site No.

Weather Conditions \& Approx. Air Temperature $\square$ Project No. \& Phase sunny Type of Well Construction $\partial " g v c$
Condition of Well (Good Poor); if poor, specify

Cap Locked (rest No)
Depth to Water 24.6
NAPL (Yes (KO), Depth to NAPL
NAPL Thickness
Sample Date


930
feet $20-d($

## Lock No.

Total Depth of Well $27-73$ feet feet
feet Sample No. S\$,00D: Hm w Dos 6 o97aol: S?

Site Location
Sic Location
$\%$
$\qquad$


One Well Volume Equals 0.50 Gallons

Comments $\qquad$

Drum Inventory: Soil $\square$
$\qquad$

Hull \& Associates, Inc.
GROUNDWATER SAMPLING FIELD DATA SHEET

| Gient Guttrend | Well I.D. <br> Site Location | $\begin{aligned} & \text { HMLu-zPb } \\ & \text { Allied } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: |
| Site No. Project No. \& Phase Sillooz |  |  |  |
| Weather Conditions \& Approx. Air Temperature I IN(OOV? |  |  |  |
| Type of Well Construction |  |  |  |
| Condition of Well (Good / Poor): if poor, specify |  |  |  |
| Cap Locked (Yes/No) Yes | Lock No. 3476 |  |  |
| Depth to Water 24.58 feet | Total Depth of Well | 43.71 | fee |
| LNAPL (Yes / No), Depth to LNAPL NLI |  |  |  |
| LNAPL Thickness |  |  |  |
| Sample Date $9-\overline{19-01(2) 100}$ | Sample No. SDIood: Hmwain: Go9 |  |  |
| Purging Method bailer |  |  |  |


| WELL PURGING |  |  | PARAMETERS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TIME | APPROX. VOLUME PURGED(GALLONS)/ WELL VOLUME | NO. OF WELL VOLUMES | TEMP. ${ }^{\circ} \mathrm{C}$ | $\begin{gathered} \mathrm{pH}(\mathrm{~S} . \mathrm{U} .) \\ \text { at } 25^{\circ} \mathrm{C} \end{gathered}$ | COND. <br> Units U at $25^{\circ} \mathrm{C}$ | $\frac{\text { Turbiclity }}{\text { Units }}$ | Units | Units |
| 13.54 | NA | Static Conditions | 11.7 | 609 | $1 \sqrt{50}$ | char |  |  |
| $13: 56$ | $3 \cdot 25$ | 1 | 10,8 | $7.04$ | 1161 | $5 \text { Tuebid }$ |  |  |
| $13: 58$ | $(0,50$ | 2 | 10.1 | 7.10 | 1167 | Turbic |  |  |
| 14.00 |  | 3 | 10.1 | 7.21 | 1168 | $1 /$ |  |  |
|  |  | 4 |  |  |  |  |  |  |
|  |  | 5 |  |  |  |  |  |  |
| One Well Volume Equals |  |  |  |  |  |  |  |  |

Comments $\qquad$
$\qquad$

Drum Inventory: Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$



One Well Volume Equals $\qquad$

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory: $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

FIELD DATA SHEET


Weather Conditions \& Approx. Air Temperature 0 Yercast $80^{\circ} \mathrm{s}$
$\qquad$


LNAPL Thickness $\qquad$ feet
$\qquad$
Purging Method $\qquad$


One Well Volume Equals 8.9 Gallons

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory: $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$


Client


Well I.D.
Site Location
Site No. $\qquad$ Project No. \& Phase


Weather Conditions \& Approx. Air Temperature Scenny $60^{\circ} 5$
Type of Well Construction
Condition of Well (Good / Poor); if poor, specify Good
$\qquad$
Depth to Water 24.85

LNAPL (Yes / No), Depth to LNAPL $\qquad$ | Lock No. | 3476 |
| :--- | :--- | :--- |
| Total Depth of Well 43.71 | feet |

LNAPL Thickness $\qquad$ feet
Sample Date $\qquad$ 9-18-01 $\quad 7: 10$ Sample No.

$$
\text { SBTOOz: } M \omega z=3 D:=09801: 50 .
$$

$\qquad$
Purging Method bailer


One Well Volume Equals $\qquad$ Gallons

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory: Soil $\qquad$
$\qquad$ LNAPL $\qquad$
$\qquad$ Well I.D.
Site Location
Site No. $\qquad$ Project No. \& Phase


Weather Conditions \& Approx. Air Temperature $\quad \operatorname{sunn} y 60^{\circ} 5$
$\qquad$
Condition of Well (Good / Poor); if poor, specify Good
$\qquad$ Lock No. 3476
$\qquad$ Total Depth of Well
LNAPL (Yes / No), Depth to LNAPL NIC feet
LNAPL Thickness $\qquad$ feet
Sample Date 9-18-0) 7:05 Sample No. SBI002:MW20:G091801:505
Purging Method bailer


One Well Volume Equals $\qquad$

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$ Drum Inventory:

Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$


LNAPL (Yes / No), Depth to LNAPL_
LNAPL Thickness
Sample Date $\qquad$ $9-18-01$ feet

Purging Method $\qquad$


One Well Volume Equals $\qquad$

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$ Purge Water $\qquad$ LNAPL $\qquad$


LNAPL Thickness $\qquad$ feet
Sample Date $\quad$ 9-18-01 11.10 Sample No. 53F002:HMW23D:G091801:505
Purging Method Keck/Bailer


One Well Volume Equals


Gallons
comments keck Froze Due to excessive Sand/ silt Had to tail Q 10 gallon.
$\qquad$
$\qquad$
Drum Inventory: $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

FIELD DATA SHEET


LNAPL (Yes / No), Depth to LNAPL NIC feet

LNAPL Thickness $\qquad$ feet

Sample Date $\qquad$ $9.18-01 \quad 11: 00$ Sample No. $\qquad$ S3I002:MuN24D:*0918d:505

Purging Method


One Well Volume Equals

$$
3.31
$$

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory:
Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$


LNAPL (Yes / No i); Depth to LNAPL
LNAPL Thickness $\qquad$ feet
Sample Date $9-20 » 1$ Sample No.
SB /000: Haw 24N: Goqว00: :s
$\qquad$ Purging Method Keck


One Well Volume Equals $\qquad$

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory: Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$


LNAPL (Yes / No), Depth to LNAPL ;NIL feet

LNAPL Thickness $\qquad$ feet
$\qquad$


One Well Volume Equals $\qquad$ .56 Gallons

Comments lusty loured
$\qquad$
$\qquad$
$\qquad$
Drum Inventory:
Soil $\qquad$ Purge Water $\qquad$
$\qquad$

Hull \& Associates, Inc.

## GROUNDWATER SAMPLING <br> FIELD DATA SHEET




$$
\text { One Well Volume Equals } \frac{3.07}{\text { Rusty/ Solons }}
$$

Drum Inventory: Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$



One Well Volume Equals $\qquad$ Gallons

## Comments

$\qquad$
$\qquad$
$\qquad$

Drum Inventory: Soil $\qquad$
$\qquad$ LNAPL $\qquad$ FIELD DATA SHEET


LNAPL (Yes / No), Depth to LNAPL $\qquad$ $\therefore$ NIL feet

LNAPL Thickness
 feet
Sample Date $\overline{9-19-01 C \quad 755}$ Sample No. SBIOA7: Hmw26S:Go919d:5z: Purging Method Sailed


One Well Volume Equals $\qquad$

Comments $\qquad$ - $\qquad$
$\qquad$
$\qquad$
$\qquad$ Purge Water $\qquad$ LNAPL $\qquad$


LNAPL (Yes / No), Depth to íNAPL _ NIL feet ;
LNAPL Thickness feet

Purging Method bailer
$918-01$


One Well Volume Equals $\qquad$

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory:
Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

FIELD DATA SHEET


LNAPL (Yes / No), Depth to LNAP'L NIL
LNAPL Thickness $\qquad$ feet
$\qquad$ $\frac{9-18-d}{\text { bailer }}$

Sample No. $\qquad$ SB100Z:MW280:Lio91801:S05
Purging Method bailer


One Well Volume Equals $\qquad$

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$ Purge Water $\qquad$
$\qquad$

$\qquad$
Site No. $\qquad$


Weather Conditions \& Approx. Air Temperature, 5 many $70^{\circ s}$
$\qquad$
Condition of Well (Good / Poor); if poor, specify Gro of
Cap Locked (Yes / No) Yes

Lock No. 3476
Depth to Water 25.08 feet Total Depth of Well 27.60 feet
LNAPL (Yes / No), Depth to LNAPL $N \succeq$ ! feet
LNAPL Thickness $\qquad$ feet



One Well Volume Equals $\qquad$

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory: $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

## GROUNDWATER SAMPLING field data sheet

Client
sect
$50 m$ Site No.
$\qquad$


Project No. \& Phase

Weather Conditions \& Approx. Air Temperature Sunn $/ 20^{\circ} s$


SBTOOZ

Type of Well Construction $\qquad$
Condition of Well (Good (Food); if poor, specify OPCH, Nocaf on well
Cap Locked (Yes I(No) Lock No.
Depth to Water
 Total Depth of Well
NAPL (Yes / No). Depth to NAPL

$\qquad$
feet

NAPL Thickness foot
Sample Date $9-20-01$
Purging Method Nailer


Comments $\qquad$
$\square$ Purge Water $\qquad$ NAPE $\qquad$


LNAPL Thickness



One Well Volume Equals $\qquad$

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$ Drum Inventory: $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$


Well I.D.
Site Location
Site No. $\qquad$
N. Side of sample SBIOOR
Weather Conditions \& Approx. Air Temperature' OVercast
Type of Well Construction $2^{\prime r} u$ ell
Condition of Well (Good / Poor); if poor, specify GOOCl
Cap Locked (Yes / No) Yes_ Lock No. 3476
Depth to Water $23.22_{\text {feet }}$ Total Depth of Well $\qquad$
LNAPL (Yes / No), Depth to LNAPL NIL_ feet
LNAPL Thickness feet
Sample Date $\qquad$ $9-17-0 \mid \quad 12: 50$ Sample No.
$\qquad$ SBIOO2:HMW31I:G091701:52
911.0 Purging Method $\partial^{\prime \prime}$ Dip Baden


One Well Volume Equals $\qquad$ Comments Strong odor
$\qquad$
$\qquad$ Drum Inventory: $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$


LNAPL (Yes / No), Depth to LNAPL $\qquad$ feet
LNAPL Thickness NIL feet
$\qquad$ Sample No.
$0^{\text {Purging Method }} \partial^{\prime \prime}$ Dap Paula


One Well Volume Equals $\qquad$
Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

FIELD DATA SHEET


LNAPL (Yes / No), Depth to LNAPL NIL $\qquad$ feet LNAPL Thickness $\qquad$ feet
$\qquad$ $9-19-01$ (C 1350 Sample No. $\qquad$


One Well Volume Equals


Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory: $\qquad$
$\qquad$ LNAPL $\qquad$


Client


Well I.D.
Site Location
Site No. $\qquad$ Project No. \& Phase Indoors


LNAPL (Yes / No), Depth to LNAPL $\qquad$ $N I C$

LNAPL Thickness
 feet Sample No. $\qquad$ SBI OD: Hm w $335: G-99001:$


One Well Volume Equals $\qquad$

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory:
Soil $\qquad$ Purge Water $\qquad$
$\qquad$

Hull \& Associates, Inc.
GROUNDWATER SAMPLING
FIELD DATA SHEET


LNAPL (Yes / No), Depth to LNAPL_NIL_feet
LNAPL Thickness feet
Sample Date 9 9-18-01 (0 10:00 Sample No. SBI002: Hm w345:6091901:5\%;
Purging Method bailer


One Well Volume Equals $\qquad$

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory: $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

Hull \& Associates, Inc.
GROUNDWATER SAMPLING
FIELD DATA SHEET


LNAPL (Yes / No), Depth to LNAPL NIL feet
LNAPL Thickness $\qquad$ feet
Sample Date $9-17-010$ 18:00 Sample No. SBI002: Hmw35s:G091701:50
Purging Method bailer


One Well Volume Equals $\qquad$

Comments $\qquad$
$\qquad$
$\qquad$
$\qquad$
Drum Inventory:
Soil $\qquad$ Purge Water $\qquad$ LNAPL $\qquad$

GIGlI COCHRAN ROAD. SUITE A
SOLON, OHIO 44139
TELEPHONE (440) 519-2555


$$
\begin{aligned}
& \text { DATE: } \frac{9-M-01}{\text { WELL ID. }+\operatorname{Hon} \omega-2 \rho D}
\end{aligned}
$$

CLIENT $\qquad$ site location Fire fiatiches
$\qquad$
SITE NO. $\qquad$ PROJECT NO. SBIO O 1 $\qquad$
TYPE OF WELL CONSTRUCTION_ Z" PVC
CONDITION OF WELL circle (GOOD / POOR) if poor, specify $\qquad$ DEPTH TO WATER CO. 6

FREE PRODUCT circle (YES / NO) DEPTH TO PRODUCT $\qquad$ FEET $581001: 4 m 6 x+6$


RECOVERY: gard
ONE WELL VOLUME EQUALS: $\quad 11.76$
GALLONS
TOTAL DEPTH (FINAL): CQQQA
COMMENTS: $\qquad$
$\qquad$
$\qquad$
$4^{\circ}-.65$ gal. $12^{*}-5.89$ gal.
$6^{6}-1.47$ gal.


FIELD DATA SHEET
We t eve racist
Parge/sample
date: $9-13-01$
wELL I.O. Hm (u)-32I

CLIENT $\qquad$ SITE LOCATIONS. Joseph's Jail
SITE NO. $\qquad$ PROJECT NO. SBTODI
TYPE OF WELL CONSTRUCTION_ 己" PVC
CONDITION OF WELL circle (GOOD , POOR) if poor, specify. $\qquad$ DEPTH TO WATER 23.54 FEET TOTAL DEPTH (INITIAL) 4010 FEET

FREE PRODUCT circle (YES / NO)
DEPTH TO PRODUCT $\qquad$ FEET SRI ODD: HM U $32 I: 505$


RECOVERY: Good.
ONE WELL VOLUME EQUALS: 2.64 GALLONS
TOTAL DEPTH (FINAL): dot for ma/ Com dy COMMENTS: $\qquad$
$\qquad$
$\qquad$
$6^{0}-1.47$ gal.

## APPENDIX D

Laboratory Reports and Chain of Custody Forms for Soil Samples

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman

```
HULL & ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016 Job Number: 01.14423
```

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

Sample Number

Sample Description
699247 SBI002:HMW8D:S010020:505

Date Taken 08/09/2001 08/10/2001

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted entirety.

Enclosure


## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin) 6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14423
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting | Analyst | Number |
| Limit | Initials Method Reference |  |  |  |  |  |  |

SAMPLE NO. 699247

SAMPLE DESCRIPTION
SBIO02 : HMW8D: S010020:505
$08 / 20 / 2001$

08/20/2001

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14423
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 699247

SBI002: HMW8D:S010020:505

08/20/2001

Limit Initials

DATE/TIME TAKEN 08/09/2001 07:40

| -urbon disulfide | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carbon tetrachloride | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | < 5.2 | bmh | SW | 8260A |
| Chlorobenzene | $<5.2$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| Chloroethane | $<10.5$ | ug/kg dw | 08/14/2001 | 1462 | $<10.5$ | bmh | SW | 8260A |
| 2-Chlorotoluene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| 4-Chlorotoluene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| Chloroform | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| Chloromethane | $<10.5$ | ug/kg dw | 08/14/2001 | 1462 | $<10.5$ | bmh | SW | 8260A |
| Dibromochloromethane | $<5.2$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| Dibromomethane | <5.2 | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.2$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<5.2$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.2$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<5.2$ | $u \mathrm{f} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.2$ | bmb | SW | 8260A |
| 1,3-Dichloropropane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A. |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.

Dublin, OH 43016

Job Number: 01.14423
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Rún <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPJE | NO. | SAMPLE DE | SCRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 699247 |  | SBI 002 : HM | N8D | 01002 | : 505 |  |  |  | 08/ | 9/2001 | 1 07:40 |


| trans-1,3-Dichloropropene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ethylbenzene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmin | Sw | 8260A |
| Hexachlorobutadiene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| $n$-Hexane | $<20.9$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<20.9$ | bmh | SW | 8260A |
| 2-Hexanone | $<52.3$ | ug/kg dw | 08/14/2001 | 1462 | <52.3 | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| p-Isopropyltoluene | <5.2 | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| Bromomethane | $<10.5$ | ug/kg dw | 08/14/2001 | 1462 | <10.5 | bmh | SW | 8260A |
| Methylene Chloride | $<10.5$ | ug/kg dw | 08/14/2001 | 1462 | $<10.5$ | bma | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<52.3$ | ug/kg dw | 08/14/2001 | 1462 | $<52.3$ | bmh | SW | 8260A |
| n-Propylbenzene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| Styrene | $<5.2$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| Naphthalene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | sw | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| Tetrachloroethene | $<5.2$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| Toluene | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| Trichloroethene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| Trichlorofluoromethane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmih | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULI, \& ASSOC. (Dublin) 08/20/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14423
Client Project ID: South Bend Indiana SBI002

|  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE NO. | SAMPLE D | CRI | PIION |  |  |  |  | DAT | /TIME | TAKEN |
| 699247 | SBIO02: HM | N8D : | S0100 | : 505 |  |  |  | 08/ | 9/2001 | 1 07:40 |


| -.3.5-Trimethylbenzene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Acetate | <5.2 | $\underline{u g} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | < 5.2 | $b m h$ | SW 8260A |
| Vinyl Chloride | $<2.1$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<2.1$ | bmh | SW 8260A |
| Xylenes, Total | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW B260A |
| d4-1,2-Dichloroethane (surr) | 111 | $\%$ | 08/14/2001 | 1462 |  | bmh | SW 8260A |
| Dibromofluoromethane (surr) | 103 | $t$ | 08/14/2001 | 1462 |  | bruh | SW 8260A |
| ds-Toluene (surr) | 95 | 4 | 08/14/2001 | 1462 |  | bmh | SW 8260A |
| Bromofluorobenzene(surr) | 95 | \% | 08/14/2001 | 1462 |  | bmh | SW 8260A |

## QUALITY CONTROL FLAG DEFINITIONS

Job Number: 01.14423
(*) Indicates an out-of-control QC. The analytical data was reported based on other supporting quality control information.
(Note) Indicates to review the notes and comments section of the analytical report as there is additional information concerning this analytical result.
(MS) Indicates that the Matrix Spike (MS) was out of statistical advisory limits.
(MSD) Indicates that the Matrix Spike Duplicate (MSD) was out of statistical advisory limits.
(RPD) Indicates that the Relative Percent Difference (RPD) for the MS/MSD pair was outside of statistical advisory limits.
(SS) Indicates that the MS and MSD were out of statistical advisory limits.
(SSR) Indicates that the MS, MSD and RPD were out of statistical advisory limits.
(MSR) Indicates that the MS and RPD were out of statistical advisory limits.
(MSDR) Indicates that the MSD and RPD were out of statistical advisory limits.
(DL) Indicates that the MS and MSD were diluted out and the percent recoveries of the spikes could not be calculated.
(LS) Indicates that statistical accuracy and precision data is not available for spike concentrations which are $<1 / 4$ of the sample amount. Care should be used in interpreting this data.
(J) Indicates estimated concentration due to internal standard areas or surrogate recoveries outside of control limits. A sample matrix effect is usually indicated.
(DW) Indicates Dry Weight.
Analytical Reporting Limits
The reporting limits listed for non-aqueous samples in the analytical report section are Practical Quantitation Limits (PQLs). These PQLs are based upon a typical standard weight used for a non-aqueous sample. The reporting limit for a sample may be different from the PQL listed depending upon the actual weight of sample used, the samples moisture content and any dilutions used during the analysis.
$1.14423$


## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman

HULL \& ASSOC. (Dublin) 6130 Wilcox Rd.
Dublin, OH 43016

08/23/2001
Job Number: 01.14439

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

## Sample <br> Number

Sample Description
699274 SBI002:HMW19S:S000020:428
699275 SBIO02:HMW23S:S100115:428 699276 SBIO02:HMW23S:S060070:428 699281

SBI002:HMW33D:S000020:428

## Date

 Taken
## 08/08/2001

08/10/2001
08/08/2001 08/10/2001
08/09/2001 08/10/2001

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted only entirety.


## ANALYTICAL REPORT

## Kevin Wildman

HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/23/2001

Job Number: 01.14439
Client Project ID: South Bend Indiana SBIO02

|  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result |  | Date | Batch | Batch | Reporting Analyst |  |
| Anits | Analyzed | Number | Number | Limit | Initials Method Reference |  |

## SAMPLE NO. 699274

SAMPLE DESCRIPTION
SBI002:HMW19S:S000020:428

DATE/TIME TAKEN 08/08/2001 10:40


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/23/2001

Job Number: 01.14439
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 699274

SAMPLE DESCRIPTION
SBI002:HMW19S:S000020:428

DATE/TIME TAKEN 08/08/2001 10:40

| Bromobenzene | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Butanone (MEK) | $<56$ | ug/kg dw | 08/14/2001 | 1462 | <56 | bmh | SW | 8260A |
| Carbon disulfide | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | < 5.6 | bmh | SW | 8260A |
| Carbon tetrachloride | $<5.6$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| Chlorobenzene | <5.6 | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| Chloroethane | $<11.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<11.2$ | bmh | SW | 8260A |
| 2-Chlorotoluene | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| 4-Chlorotoluene | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | <5.6 | bmh | SW | 8260A |
| Chloroform | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| Chloromethane | $<11.2$ | ug/kg dw | 08/14/2001 | 1462 | $<11.2$ | bmh | SW | 8260A |
| Dibromochloromethane | <5.6 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| Dibromomethane | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| Dichlorodifluoromethane | <5.6 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/14/2001 | 1462 | <5.6 | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.6 | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | <5.6 | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | <5.6 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.6 | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | <5.6 | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | <5.6 | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| 1,2-Dichloropropane, | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | <5.6 | bmh | SW | 8260A |
| 2,2-Dichloropropane | <5.6 | ug/kg dw | 08/14/2001 | 1462 | <5.6 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/23/2001<br>6130 Wilcox Rd<br>Dublin, OH 43016

Job Number: 01.14439
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting | Analyst |

SAMPLE NO. 699274

SAMPLE DESCRIPTION
SBIO02:HMW19S:S000020:428

DATE/TIME TAKEN 08/08/2001 10:40

| 1,1-Dichloropropene | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| cis-1,3-Dichloropropene | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bruh | SW | 8260A |
| Ethylbenzene | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | <5.6 | bmh | SW | 8260A |
| n -Hexane | <22.4 | ug/kg dw | 08/14/2001 | 1462 | <22.4 | bmh | SW | 8260A |
| 2-Hexanone | $<55.9$ | ug/kg dw | 08/14/2001 | 1462 | $<55.9$ | bmh | sw | 8260A |
| Isopropylbenzene (Cumene) | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| p-Isopropyltoluene | <5.6 | ug/kg dw | 08/14/2001 | 1462 | <5.6 | bmh | SW | 8260A |
| Bromomethane | $<11.2$ | ug/kg dw | 08/14/2001 | 1462 | $<11.2$ | bmh | SW | 8260A |
| Methylene Chloride | $<11.2$ | ug/kg dw | 08/14/2001 | 1462 | $<11.2$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| 4-Methyi-2-pentanone (MIBK) | $<55.9$ | ug/kg dw | 08/14/2001 | 1462 | $<55.9$ | bmh | SW | 8260A |
| n-Propylbenzene | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.6 | bmh | SW | 8260A |
| Styrene | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | <5.6 | bmh | SW | 8260A |
| Naphthalene | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.6$ | ug/kg dw | 08/14/2001 | 2462 | < 5.6 | bmh | SW | 8260A |
| Tetrachloroethene | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| Toluene | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | <5.6 | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | <5.6 | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| Trichloroethene | $<5.6$ | ug/kg dw | 08/14/2001 | 1462 | $<5.6$ | bmh | SW | 8260A |
| Trichlorofluoromethane | <5.6 | ug/kg dw | 08/14/2001 | 1462 | <5.6 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/23/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14439
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 699274

SAMPLE DESCRIPTION SBIO02:HMW19S:S000020:428

DATE/TIME TAKEN 08/08/2001 10:40

| 1,2,3-Trichloropropane | $<5.6$ | ug/kg dw | 08/14/2001 |  | 1462 | < 5.6 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,4-Trimethylbenzene | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | <5.6 | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.6$ | ug/kg dw | 08/14/2001 |  | 1462 | <5.6 | bmh | SW | 8260A |
| Vinyl Acetate | <5.6 | ug/kg dw | 08/14/2001 |  | 1462 | <5.6 | bmh | SW | 8260A |
| Vinyl Chloride | <2.2 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | $<2.2$ | bmh | SW | 8260A |
| Xylenes, Total | <5.6 | ug/kg dw | 08/14/2001 |  | 1462 | <5.6 | bmh | SW | B260A |
| d4-1,2-Dichloroethane (surr) | 107 | 8 | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 102 | ${ }^{8}$ | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| d8-Toluene (surr) | 95 | 8 | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 94 | \% | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| BASE NEUT. COMPS. -8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<369$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jcs | SW | 8270 C |
| Acenaphthylene | <369 | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jcs | Sw | 8270 C |
| Anthracene | <369 | ug/kg dw | 08/19/2001 | 948 | 1464 | <369 | jcs | SW | 8270 C |
| Benzo (a) anthracene | 821 | $u g / \mathrm{kg}$ dw | 08/19/2001 | 948 | 1464 | $<369$ | jcs | SW | 8270 C |
| Benzo(b) fluoranthene | 1,300 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW | 8270 C |
| Benzo(k) fluoranthene | 414 | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW | 82700 |
| Benzo (a) pyrene | 779 | ug/kg dw | 08/19/2001 | 948 | 1464 | $<185$ | jcs | SW | 8270 C |
| Benzyl alcohol | $<369$ | ug/kg dw | 08/19/2001 | 948 | 1464 | <369 | jes | SW | 8270 C |
| Benzyl butyl phthalate | $<369$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | $<369$ | jcs | SW | 8270 C |
| Bis (2-chloroethyl) ether | $<369$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW | 8270 C |
| Bis (2-chloroethoxy) methane | $<369$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW | 8270C |
| Bis (2-ethylhexyl) phthalate | $<369$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jcs | SW | 8270C |
| 2,2'-oxybis(1-Chloropropane) | <369 | ug/kg dw | 08/19/2001 | 948 | 1464 | <369 | jcs | SW | 82700 |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/23/2001

Job Number: 01.14439
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |

SAMPLE NO. SAMPLE DESCRIPTION
$699274 \quad$ SBIOO2:HMW19S:S000020:428

| 4-Bromophenyl phenyl ether | <369 | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jcs | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Chloroaniline | <369 | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW | 8270C |
| 2-Chloronaphthalene | <369 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW | 8270C |
| Chrysene | 909 | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | $<369$ | jcs | SW | 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<185$ | ug/kg dw | 08/19/2001 | 948 | 1464 ' | $<185$ | jcs | SW | 8270 C |
| Dibenzofuran | <369 | $u g / \mathrm{kg}$ dw | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW | 8270 C |
| 1,2-Dichlorobenzene | $<369$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/19/2001 | 948 | 1464 | $<369$ | jcs | SW | 82700 |
| 1,3-Dichlorobenzene | <369 | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jcs | SW | 8270C |
| 1,4-Dichlorobenzene | $<369$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<738$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<738$ | jcs | SW | 8270C |
| Diethyl phthalate | <369 | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW | 8270C |
| Dimethyl phthalate | <369 | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW | 8270C |
| 2,4-Dinitrotoluene | $<369$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jcs | SW | 8270C |
| 2,6-Dinitrotoluene | $<369$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW | 8270 C |
| Di-n-octylphthalate | <369 | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW | $8270{ }^{\circ}$ |
| Fluoranthene | 1,480 | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jcs | SW | 8270C |
| Fluorene | <369 | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW | 8270 C |
| Hexachlorobenzene | <369 | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<369$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jcs | SW | 8270C |
| Hexachlorocyclopentadiene | $<738$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<738$ | jes | SW | 8270C |
| Hexachloroethane | $<369$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW | 8270C |
| Indeno (1, 2,3-cd) pyrene | $<369$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW | 8270C |
| Isophorone | $<369$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW | 8270 C |
| Naphthalene | $<369$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW | 8270C |
| Nitrobenzene | <369 | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14439
Client Project ID: South Bend Indiana SBI002

Date |  | Prep |
| :--- | :--- | :--- |
| Batch |  |
| Batch Reporting Analyst |  |

Result Flag Units Analyzed Number Number Limit Initials Method Reference

| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 699274 | SBIOO2 $:$ HMW19S:S000020:428 | $08 / 08 / 2001$ 10:40 |


| N -Nitrosodi-n-propylamine | $<369$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Phenanthrene | 1,330 | ug/kg dw | 08/19/2001 | 948 | 1464 | <369 | jcs | SW 8270C |
| Pyrene | 1,790 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | <369 | jcs | SW 8270C |
| 1,2,4-Trichlorobenzene | $<369$ | ug/kg dw | 08/19/2001 | 948 | 1464 | <369 | jcs | SW 8270C |
| Surrogate: d5-Nitrobenzene | 71 | $\%$ | 08/19/2001 | 948 | 1464 |  | jcs | SW 8270C |
| Surrogate: 2-Fluorobiphenyl | 73 | 8 | 08/19/2001 | 948 | 1464 |  | jcs | SW 8270C |
| Surrogate: d14-Terphenyl | 81 | 8 | 08/19/2001 | 948 | 1464 |  | jes | SW 8270C |


| Benzoic Acid | $<1,850$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | <1,850 | jcs | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Chloro-3-methylphenol | $<369$ | ug/kg dw | 08/19/2001 | 948 | 1464 | <369 | jcs | SW | $8270{ }^{\text {c }}$ |
| 2-Chlorophenol | $<369$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jcs | SW | 8270C |
| 2,4-Dichlorophenol | $<369$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 948 | 1464 | $<369$ | jcs | SW | 8270 C |
| 2,4-Dimethylphenol | $<369$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | <369 | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/19/2001 | 948 | 1464 | <369 | jes | SW | 82700 |
| 2-Methylphenol | $<369$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 948 | -1464 | $<369$ | jcs | Sw | 8270 C |
| meta \& para-Methylphenol | $<369$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW | $8270{ }^{\text {C }}$ |
| 2-Nitrophenol | $<369$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | $<369$ | jes | SW | 8270C |
| Pentachlorophenol | $<369$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jcs | SW | 8270 C |
| Phenol | $<369$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | $<369$ | jcs | Sw | 8270 C |
| 2,4,5-Trichlorophenol | $<369$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jes | Sw | 8270 C |
| 2,4,6-Trichlorophenol | $<369$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<369$ | jcs | SW | 8270C |
| Surrogate: d6-Phenol | 64 | \% | 08/19/2001 | 948 | 1464 |  | jcs | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 59 | \% | 08/19/2001 | 948 | 1464 |  | jcs | SW | 8270 C |
| Surrogate: Tribromophenol | 73 | \% | 08/19/2001 | 948 | 1464 |  | jes | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14439
Client Project ID: South Bend Indiana SBI002


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14439
Client Project ID: South Bend Indiana SBI002


| cnlorobenzene | <5.4 | ug/kg dw | 08/14/2001 | 1462 | <5.4 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chloroethane | $<10.7$ | ug/kg dw | 08/14/2001 | 1462 | $<10.7$ | bmh | SW | 8260A |
| 2-Chlorotoluene | <5.4 | ug/kg dw | 08/14/2001 | 1462 | $<5.4$ | bmh | Sw | 8260A |
| 4-Chlorotoluene | <5.4 | ug/kg dw | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| Chloroform | $<5.4$ | ug/kg dw | 08/14/2001 | 1462 | <5.4 | bmh | SW | 8260A |
| Chloromethane | $<10.7$ | ug/kg dw | 08/14/2001 | 1462 | $<10.7$ | bmh | SW | 8260A |
| Dibromochloromethane | $<5.4$ | ug/kg dw | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| Dibromomethane | $<5.4$ | ug/kg dw | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<5.4$ | $u g / \mathrm{kg}$ dw | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.4$ | ug/kg dw | 08/14/2001 | 1462 | <5.4 | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | <5.4 | ug/kg dw | 08/14/2001 | 1462 | <5.4 | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | <5.4 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.4 | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<5.4$ | ug/kg dw | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | <5.4 | ug/kg dw | 08/14/2001 | 1462 | <5.4 | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.4$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| Cis-1,2-Dichloroethene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.4$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.4 | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<5.4$ | ug/kg dw | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | <5.4 | ug/kg dw | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.4$ | ug/kg dw | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<5.4$ | ug/kg dw | 08/14/2001 | 1462 | <5.4 | bmh | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.4$ | ug/kg dw | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| Ethylbenzene | $<5.4$ | ug/kg dw | 08/14/2001 | 1462 | <5.4 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14439
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |  |

SAMPLE NO. 699275

SAMPLE DESCRIPTION
SBIO02:HMW23S:S100115:428
DATE/TIME TAKEN 08/08/2001 08:30

| Hexachlorobutadiene | $<5.4$ | ug/kg dw | 08/14/2001 | 1462 | < 5.4 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n -Hexane | $<21.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<21.4$ | bmh | SW | 8260A |
| 2-Hexanone | $<53.6$ | ug/kg dw | 08/14/2001 | 1462 | $<53.6$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.4$ | ug/kg dw | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| p-Isopropyltoluene | $<5.4$ | ug/kg dw | 08/14/2001 | 1462 | <5.4 | bmh | SW | 8260A |
| Bromomethane | $<10.7$ | ug/kg dw | 08/14/2001 | 1462 | $<10.7$ | bmh | SW | 8260A |
| Methylene Chloride | $<10.7$ | ug/kg dw | 08/14/2001 | 1462 | $<10.7$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.4$ | ug/kg dw | 08/14/2001 | 1462 | <5.4 | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<53.6$ | ug/kg dw | 08/14/2001 | 1462 | $<53.6$ | bmh | SW | 8260A |
| n-Propylbenzene | $<5.4$ | ug/kg dw | 08/14/2001 | 1462 | <5.4 | bmh | SW | 8260A |
| Styrene | $<5.4$ | ug/kg dw | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| Naphthalene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.4$ | ug/kg dw | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.4$ | ug/kg dw | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| Tetrachloroethene | $<5.4$ | ug/kg dw | 08/14/2001 | 1462 | <5.4 | bmh | sw | 8260A |
| Toluene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| Trichloroethene | $<5.4$ | ug/kg dw | 08/14/2001 | 1462 | <5.4 | bmh | SW | 8260A |
| Trichlorofluoromethane | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.4$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.4 | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.4 | bmh | SW | 8260A |
| Vinyl Acetate | $<5.4$ | ug/kg dw | 08/14/2001 | 1462 | <5.4 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14439
Client Project ID: South Bend Indiana SBI002

08/23/2001

| Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Batch | Batch | Reporting | Analyst |  |
| Number | Number | Limit | Initials | Method Reference |

DATE/TIME TAKEN 08/08/2001 08:30

| vanyl Chloride | $<2.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | <2.1 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Xylenes, Total | <5.4 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | <5.4 | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 103 | \% | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 99 | \% | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| d8-Toluene (surr) | 94 | \% | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 95 | 4 | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| BASE NEUT. COMPS. -8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | <354 | jcs | SW | 8270C |
| Acenaphthylene | $<354$ | ug/kg dw | 08/19/2001 | 948 | 1464 | <354 | jcs | SW | 8270C |
| Anthracene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | <354 | jcs | SW | 8270C |
| Benzo(a) anthracene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | <354 | jcs | SW | 8270 C |
| Benzo (b) fluoranthene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | <354 | jes | SW | 8270C |
| Benzo(k) fluoranthene | $<354$ | ug/kg dw | 08/19/2001 | 948 | 1464 | <354 | jcs | SW | 8270C |
| Benzo(a) pyrene | $<177$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | $<177$ | jcs | SW | 8270 C |
| Benzyl alcohol | $<354$ | ug/kg dw | 08/19/2001 | 948 | 1464 | <354 | jcs | SW | 8270C |
| Benzyl butyl phthalate | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | <354 | jca | SW | 8270C |
| Bis (2-chloroethyl)ether | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | $<354$ | jes | SW | 8270C |
| Bis (2-chloroethoxy) methane | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | <354 | jcs | SW | 8270C |
| Bis (2-ethylhexyl) phthalate | $<354$ | ug/kg dw | 08/19/2001 | 948 | 1464 | <354 | jes | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<354$ | ug/kg dw | 08/19/2001 | 948 | 1464 | <354 | jcs | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<354$ | ug/kg dw | 08/19/2001 | 948 | 1464 | <354 | jes | SW | 8270 C |
| 4-Chloroaniline | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | <354 | jes | SW | 8270C |
| 2-Chloronaphthalene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | <354 | jes | SW | 8270 C |
| Chrysene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | <354 | jes | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.14439
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst <br> Initials | Method R | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 699275 |  | SBI002: HM | N23S | S1001 | 5:428 |  |  |  | 08/ | 8/2001 | 1 08:30 |


| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<177$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<177$ | jcs | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzofuran | $<354$ | ug/kg dw | 08/19/2001 | 948 | 1464 | <354 | jcs | SW 8270C |
| 1,2-Dichlorobenzene | <354 | $u g / \mathrm{kg}$ dw | 08/19/2001 | 948 | 1464 | <354 | jcs | SW 8270C |
| 1,3-Dichlorobenzene | $<354$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<354$ | jcs | SW 8270C |
| 1,4-Dichlorobenzene | $<354$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<354$ | jcs | SW 8270 C |
| 3,3'-Dichlorobenzidine | $<707$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | $<707$ | jes | SW 8270C |
| Diethyl phthalate | <354 | ug/kg dw | 08/19/2001 | 948 | 1464 | $<354$ | jes | SW 8270C |
| Dimethyl phthalate | $<354$ | ug/kg dw | 08/19/2001 | 948 | 1464 | <354 | jcs | SW 8270C |
| 2,4-Dinitrotoluene | <354 | ug/kg dw | 08/19/2001 | 948 | 1464 | <354 | jcs | SW 8270 C |
| 2,6-Dinitrotoluene | $<354$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<354$ | jes | SW 8270C |
| Di-n-octylphthalate | <354 | ug/kg dw | 08/19/2001 | 948 | 1464 | <354 | jcs | SW 8270 C |
| Fluoranthene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | <354 | jcs | SW 8270C |
| Fluorene | <354 | ug/kg dw | 08/19/2001 | 948 | 1464 | <354 | jcs | SW 8270C |
| Hexachlorobenzene | $<354$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<354$ | jes | SW 8270C |
| Hexachloro-1,3-butadiene | <354 | ug/kg dw | 08/19/2001 | 948 | 1464 | $<354$ | jes | SW 8270 C |
| Hexachlorocyclopentadiene | $<707$ | ug/kg dw | 08/19/2001 | 948 | 1464 | $<707$ | jcs | SW 8270 C |
| Hexachloroethane | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | <354 | jcs | SW 82700 |
| Indeno (1,2,3-cd) pyrene | <354 | ug/kg dw | 08/19/2001 | 948 | 1464 | $<354$ | jcs | SW 8270 C |
| Isophorone | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | $<354$ | jes | SW 8270C |
| Naphthalene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | <354 | jcs | SW 8270C |
| Nitrobenzene | <354 | $u g / \mathrm{kg}$ dw | 08/19/2001 | 948 | 1464 | <354 | jcs | SW 8270 C |
| N-Nitrosodi-n-propylamine | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | <354 | jcs | SW 8270C |
| Phenanthrene | <354 | ug/kg dw | 08/19/2001 | 948 | 1464 | $<354$ | jcs | SW 82700 |
| Pyrene | $<354$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/19/2001 | 948 | 1464 | <354 | jes | SW 8270C |
| 1,2,4-Trichlorobenzene | <354 | ug/kg dw | 08/19/2001 | 948 | 1464 | <354 | jes | SW 8270 |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/23/2001

Job Number: 01.14439
Client Project ID: South Bend Indiana SBI002


DATE/TIME TAKEN 08/08/2001 08:30

| surrogate: d5-Nitrobenzene | 70 | 8 | 08/19/2001 | 948 | 1464 |  | jes | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorobiphenyl | 71 | 8 | 08/19/2001 | 948 | 1464 |  | jes | SW | 8270C |
| Surrogate: d14-Terphenyl | - 66 | 8 | 08/19/2001 | 948 | 1464 |  | jcs | SW | 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,770$ | ug/kg dw | 08/19/2001 | 948 | 1464 | <1,770 | jcs | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<354$ | ug/kg dw | 08/19/2001 | 948 | 1464 | <354 | jcs | SW | 8270C |
| 2-Chlorophenol | <354 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | <354 | jcs | SW | 8270C |
| 2,4-Dichlorophenol | <354 | ug/kg dw | 08/19/2001 | 948 | 1464 | $<354$ | jcs | SW | 8270C |
| 2,4-Dimethylphenol | <354 | ug/kg dw | 08/19/2001 | 948 | 1464 | <354 | jсs | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | <354 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | $<354$ | jes | SW | 8270 C |
| 2-Methylphenol | $<354$ | ug/kg dw | 08/19/2001 | 948 | 1464 | <354 | jes | SW | 82700 |
| meta \& para-Methylphenol | <354 | ug/kg dw | 08/19/2001 | 948 | 1464 | $<354$ | jся | SW | 8270C |
| 2-Nitrophenol | <354 | $u g / \mathrm{kg}$ dw | 08/19/2001 | 948 | 1464 | <354 | jes | SW | $8270{ }^{\text {c }}$ |
| Pentachlorophenol | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | <354 | jcs | SW | 8270C |
| Phenol | <354 | ug/kg dw | 08/19/2001 | 948 | 1464 | <354 | jcs | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 948 | 1464 | <354 | jcs | SW | 8270C |
| 2,4,6-Trichlorophenol | $<354$ | ug/kg dw | 08/19/2001 | 948 | 1464 | <354 | jcs | SW | 8270C |
| Surrogate: d6-Phenol | 62 | \% | 08/19/2001 | 948 | 1464 |  | jcs | Sw | 82700 |
| Surrogate: 2-Fluorophenol | 64 | \% | 08/19/2001 | 948 | 1464 |  | jcs | SW | 8270C |
| Surrogate: Tribromophenol | 74 | \% | 08/19/2001 | 948 | 1464 |  | jcs | SW | 82700 |
| TPH - GRO (Non-Aqueous) | <5 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 |  | 246 | <5 | meb | SW | 8015M |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
08/23/2001

Job Number: 01.14439
Client Project ID: South Bend Indiana SBI002


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/23/2001
6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.14439
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 699276 |  | SBI002:H | 235 | :S060 | $70: 428$ |  |  |  | 08/ | 8/2001 | 08:30 |


| H/Chlorodifluoromethane | $<6.1$ | ug/kg dw | 08/14/2001 | 1462 | <6.1 | bmh | SH | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dibromo-3-chloropropane | <6.1 | ug/kg dw | 08/14/2001 | 1462 | <6.1 | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | <6. 1 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<6.1$ | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<6.1$ | ug/kg dw | 08/14/2001 | 1462 | <6.1 | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<6.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <6.1 | bmah | SW | 8260A |
| 1,1-Dichloroethane | <6.1 | ug/kg dw | 08/14/2001 | 1462 | $<6.1$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<6.1$ | ug/kg dw | 08/14/2001 | 1462 | <6.1 | bmh | SW | 8260A |
| 1,1-Dichloroethene | <6.1 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <6.1 | brh | SW | 8260A |
| cis-1, 2-Dichloroethene | $<6.1$ | ug/kg dw | 08/14/2001 | 1462 | $<6.1$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | <6.1 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<6.1$ | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<6.1$ | ug/kg dw | 08/14/2001 | 1462 | <6.1 | bmh | SW | 8260A |
| 1,3-Dichloropropane | <6.1 | ug/kg dw | 08/14/2001 | 1462 | <6.1 | bruh | SW | 8260A |
| 2,2-Dichloropropane | $<6.1$ | ug/kg dw | 08/14/2001 | 1462 | $<6.1$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | <6.1 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <6.1 | bmh | SW | 8260A |
| cis-1,3-Dichloropropene | <6.1 | ug/ kg dw | 08/14/2001 | 1462 | $<6.1$ | bmh | SW | 8260A |
| trans-1.3-Dichloropropene | $<6.1$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<6.1$ | bmh | SW | 8260A |
| Ethylbenzene | $<6.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <6.1 | bmh | Sw | 8260A |
| Hexachlorobutadiene | <6.1 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<6.1$ | bruh | SW | 8260A |
| n -Hexane | $<24.3$ | ug/kg dw | 08/14/2001 | 1462 | $<24.3$ | bmh | SW | 8260A |
| 2-Hexanone | $<60.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<60.7$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<6.1$ | ug/kg dw | 08/14/2001 | 1462 | <6.1 | bmh | SW | 8260A |
| p-Isopropyltoluene | <6.1 | ug/kg dw | 08/14/2001 | 1462 | $<6.1$ | bmah | SW | 8260A |
| Bromomethane | <12.1 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<12.1$ | bmh | SW | 8260A |
| Methylene Chloride | $<12.1$ | ug/kg dw | 08/14/2001 | 1462 | $<12.1$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | <6.1 | ug/kg dw | 08/14/2001 | 1462 | <6.1 | bmh | sผ่ | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14439
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting | Analyst | Number |
| Limit | Initials Method Reference |  |  |  |  |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 699276 SBIO02:HMW23S:S060070:428

| 4-Methyl-2-pentanone (MIBK) | $<60.7$ | ug/kg dw | 08/14/2001 | 1462 | $<60.7$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n-Propylbenzene | $<6.1$ | $u g / \mathrm{kg}$ dw | 08/14/2001 | 1462 | <6.1 | bmh | SW | 8260A |
| Styrene | $<6.1$ | ug/kg dw | 08/14/2001 | 1462 | $<6.1$ | bmh | SW | 8260A |
| Naphthalene | <6.1 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <6.1 | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<6.1$ | ug/kg dw | 08/14/2001 | 1462 | <6.1 | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<6.1$ | ug/kg dw | 08/14/2001 | 1462 | <6.1 | bmh | SW | 8260A |
| Tetrachloroethene | <6.1 | ug/kg dw | 08/14/2001 | 1462 | <6.1 | bmh | SW | B260A |
| Toluene | $<6.1$ | ug/kg dw | 08/14/2001 | 1462 | <6.1 | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<6.1$ | ug/kg dw | 08/14/2001 | 1462 | $<6.1$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<6.1$ | ug/kg dw | 08/14/2001 | 1462 | <6.1 | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<6.1$ | ug/kg dw | 08/14/2001 | 1462 | <6.1 | bmh | SW | 8260A |
| Trichloroethene | $<6.1$ | ug/kg dw | 08/14/2001 | 1462 | $<6.1$ | bmh | SW | 8260A |
| Trichlorofluoromethane | <6.1 | ug/kg dw | 08/14/2001 | 1462 | <6.1 | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | $<6.1$ | ug/kg dw | 08/14/2001 | 1462 | <6.1 | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<6.1$ | ug/kg dw | 08/14/2001 | 1462 | $<6.1$ | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | <6.1 | ug/kg dw | 08/14/2001 | 1462 | <6.1 | bmh | SW | 8260A |
| Vinyl Acetate | <6.1 | ug/kg dw | 08/14/2001 | 1462 | <6.1 | bmh | SW | 8260A |
| Vinyl Chloride | <2.4 | ug/kg dw | 08/14/2001 | 1462 | $<2.4$ | bmh | SW | 8260A |
| Xylenes, Total | <6.1 | ug/kg dw | 08/14/2001 | 1462 | <6.1 | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 106 | \% | 08/14/2001 | 1462 |  | bmh | Sw | 8260A |
| Dibromofluoromethane (surr) | 97 | * | 08/14/2001 | 1462 |  | bmh | SW | 8260A |
| ds-Toluene (surr) | 92 | \% | 08/14/2001 | 1462 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 95 | \% | 08/14/2001 | 1462 |  | bmh | SW | 8260A |

BASE NEUT. COMPS. -8270 Non-aq

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/23/2001

Job Number: 01.14439
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |  |

SAMPLE NO. 699276

SAMPLE DESCRIPTION
SBIO02:HMW23S:S060070:428

DATE/TIME TAKEN 08/08/2001 08:30
1

| Acenaphthene | <400 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 948 | 1458 | $<400$ | jcs | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | $<400$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 948 | 1458 | $<400$ | jes | SW 8270C |
| Anthracene | $<400$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 948 | 1458 | $<400$ | jes | SW 8270C |
| Benzo(a) anthracene | $<400$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 948 | 1458 | $<400$ | jes | SW 8270C |
| Benzo (b) fluoranthene | $<400$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | OB/17/2001 | 948 | 1458 | $<400$ | jcs | SW 8270C |
| Benzo(k) fluoranthene | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jcs | SW 8270C |
| Benzo(a) pyrene | <200 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 948 | 1458 | <200 | jes | Sk 8270C |
| Benzyl alcohol | $<400$ | ug/kg dw | 08/17/2001 | $948{ }^{\circ}$ | 1458 | $<400$ | jes | SW 8270C |
| Benzyl butyl phthalate | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jcs | SW 8270C |
| Bis (2-chloroethyl)ether | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jcs | SW 8270C |
| Bis (2-chloroethoxy)methane | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jcs | SW 8270C |
| Bis (2-ethylhexyl)phthalate | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jcs | SW 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jcs | SW 8270C |
| 4-Bromophenyl phenyl ether | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jcs | SW 8270C |
| 4-Chloroaniline | $<400$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 948 | 1458 | $<400$ | jes | SW 8270C |
| 2-Chloronaphthalene | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jes | SW 8270C |
| Chrysene | $<400$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 948 | 1458 | $<400$ | jcs | SW 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<200$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 948 | 1458 | $<200$ | jcs | SW 8270C |
| Dibenzofuran | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jcs | SW 8270C |
| 1,2-Dichlorobenzene | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jes | SW 8270C |
| 1,3-Dichlorobenzene | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jcs | SW 8270C |
| 1,4-Dichlorobenzene | $<400$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 948 | 1458 | $<400$ | jcs | SW 8270C |
| 3,3'-Dichlorobenzidine | $<801$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 948 | 1458 | $<801$ | jes | SW 8270C |
| Diethyl phthalate | $<400$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 948 | 1458 | $<400$ | jcs | SW 8270C |
| Dimethyl phthalate | $<400$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 948 | 1458 | $<400$ | jcs | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/23/2001

Job Number: 01. 14439
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 699276 |  | SBI002: HM | N23S | :S060 | $70: 428$ |  |  |  | 08/ | 8/2001 | 1 08:30 |


| 2,4-Dinitrotoluene | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jcs | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,6-Dinitrotoluene | <400 | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jcs | SW | 82700 |
| Di-n-octylphthalate | $<400$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 948 | 1458 | $<400$ | jes | SW | 8270C |
| Fluoranthene | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jes | SW | 8270 C |
| Fluorene | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jes | SW | 8270 C |
| Hexachlorobenzene | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jcs | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<400$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 948 | 1458 | $<400$ | jes | SW | 8270C |
| Hexachlorocyclopentadiene | $<801$ | ug/kg dw | 08/17/2001 | 948 | 1458 | <801 | jcs | SW | 8270C |
| Hexachloroethane | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jcs | SW | 8270C |
| Indeno (1,2,3-cd) pyrene | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jcs | SW | 8270C |
| Isophorone | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jcs | SW | 8270C |
| Naphthalene | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jсs | SW | 8270 C |
| Nitrobenzene | <400 | ug/kg dw | 08/17/2001 | 948 | 1458 | <400 | jcs | SW | 8270 C |
| N-Nitrosodi-n-propylamine | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jes | SW | 8270C |
| Phenanthrene | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400^{\circ}$ | jcs | SW | 8270C |
| Pyrene | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jce | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jes | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 73 | 8 | 08/17/2001 | 948 | 1458 |  | jes | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 65 | \% | 08/17/2001 | 948 | 1458 |  | jcs | SW | 8270C |
| Surrogate: d14-Terphenyl | 77 | 8 | 08/17/2001 | 948 | 1458 |  | jcs | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <2,000 | ug/kg dw | 08/17/2001 | 948 | 1458 | $<2,000$ | jcs | SW | 8270C |
| 4-Chloro-3-methylphenol | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jes | SW | 8270C |
| 2-Chlorophenol | <400 | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jes | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/23/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14439
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst <br> Initials | Method Ref | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | SCRI | PIOI |  |  |  |  | DAT | /TIME | TAKEN |
| 699276 |  | SBIOO2: HM | N23S | :S060 | $70: 428$ |  | . |  | 08/0 | 8/2001 | 08:30 |


| 2,4-Dichlorophenol | <400 | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jes | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dimethylphenol | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | <400 | jes | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jes | SW 8270C |
| 2-Methylphenol | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jes | SW 8270C |
| meta \& para-Methylphenol | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jes | SW 8270C |
| 2-Nitrophenol | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jes | SW 8270C |
| Pentachlorophenol | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jcs | SW 8270C |
| Phenol | $<400$. | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 948 | 1458 | <400 | jes | SW 8270C |
| 2,4,5-Trichlorophenol | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jes | SW 8270C |
| 2,4,6-Trichlorophenol | $<400$ | ug/kg dw | 08/17/2001 | 948 | 1458 | $<400$ | jсs | SW 8270C |
| Surrogate: d6-Phenol | 75 | $\%$ | 08/17/2001 | 948 | 1458 |  | jes | SW 8270C |
| Surrogate: 2-Fluorophenol | 75 | $t$ | 08/17/2001 | 948 | 1458 |  | jcs | SW 8270C |
| Surrogate: Tribromophenol | 82 | $\%$ | 08/17/2001 | 948 | 1458 |  | jes | SW 8270C |
| TPH - GRO (Non-Aqueous) | <6 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 |  | 246 | $<6$ | meb | SW 8015M |

SAMPLE DESCRTPTTON
699281 SBIO02:HMW33D:S000020:428
DATE/TIME TAKEN 08/09/2001 15:30

| Dry Weight | 90.6 | \% | 08/16/2001 |  | 1478 |  | mhg |  | 2540 G . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/16/2001 |  | 1229 | Complete | emd | Sh | 6010B |
| Arsenic, ICP | <7.3 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2956 | $<7.3$ | emd |  | 6010B |
| Barium, ICP | 177 | $\mathrm{mg} / \mathrm{kg} \cdot \mathrm{dw}$ | 08/16/2001 | 901 | 2887 | <1.4 | emd |  | 6010B |

## ANALYTICAL REPORT

Kevin Wildman

HULL \& ASSOC. (Dublin)<br>08/23/2001<br>6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.14439
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | IION |  |  |  |  | DAT | /TIME | TAKEN |
| 699281 |  | SBI002:H | W3D | SOOO | 2: 428 |  |  |  | 08/ | 9/2001 | 1 15:30 |


| Cadmium, ICP | <2.2 | mg/kg dw | 08/16/2001 | 901 | 2869 | $<2.2$ | emd | SW | 6010B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chromiun, ICP | 9.2 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2857 | $<2.9$ | emd | SW | 6010B |
| Lead, ICP | 2,720 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2858 | <5.8 | emd | SW | 6010B |
| Mercury, CVAA | 30.9 | $m g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 610 | 625 | $<1.72$ | epk | SW | 7471A |
| Selenium, ICP | $<7.3$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2936 | $<7.3$ | emd | SW | 6010B |
| Silver, ICP | <2.9 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2889 | $<2.9$ | emd | SW | 6010B |
| ICP Digestion, Nonaqueous | Complete |  | 08/15/2001 | 901 |  | Complete | mrt | Sw | 3050B |
| Mercury Digestion, Non-Aq | Complete |  | 08/16/2001 | 610 |  | Complete | epk | SW | 7471A |
| VOLATILE COMPOUNDS-8260 NOR-Aq |  |  |  |  |  |  |  |  |  |
| 8260 - SWB46 (Non-aq) | Complete |  | 08/14/2001 |  | 1462 | Complete | bmh |  |  |
| Acetone | $<110$ | ug/kg dw | 08/14/2001 |  | 1462 | $<110$ | bmh | SW | 8260A |
| Benzene | <5.5 | ug/kg dw | 08/14/2001 |  | 1462 | $<5.5$ | bmh | SW | 8260A |
| tert-Butylbenzene | $<5.5$ | ug/kg dw | 08/14/2001 |  | 1462 | $<5.5$ | bmh | SW | 8260A |
| sec-Butylbenzene | $<5.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | $<5.5$ | bmh | Sw | 8260A |
| n-Butylbenzene | $<5.5$ | ug/kg dw | 08/14/2001 |  | 1462 | <5.5 | bmh | SW | 8260A |
| Bromochloromethane | < 5.5 | ug/kg dw | 08/14/2001 |  | 1462 | $<5.5$ | bmh | SW | 8260A |
| Bromodichloromethane | $<5.5$ | ug/kg dw | 08/14/2001 |  | 1462 | $<5.5$ | bmh | Sw | 8260A |
| Bromoform | <5.5 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | $<5.5$ | bmh | SW | 8260A |
| Bromobenzene | $<5.5$ | ug/kg dw | 08/14/2001 |  | 1462 | $<5.5$ | bmh | SW | 8260A |
| 2-Butanone (MEK) | $<55$ | ug/kg dw | 08/14/2001 |  | 1462 | $<55$ | bmh | SW | 8260A |
| Carbon disulfide | <5.5 | ug/kg dw | 08/14/2001 |  | 1462 | < 5.5 | bmh | SW | 8260A |
| Carbon tetrachloride | $<5.5$ | ug/kg dw | 08/14/2001 |  | 1462 | $<5.5$ | bmh | SW | 8260A |
| Chlorobenzene | <5.5 | $u g / \mathrm{kg} \mathrm{d} w$ | 08/14/2001 |  | 1462 | $<5.5$ | bmh | SW | 8260A |
| Chloroethane | $<11.0$ | ug/kg dw | 08/14/2001 |  | 1462 | <11.0 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14439
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |

## SAMPLE NO.

 699281SAMPLE DESCRIPTION
SBIOO2:HMW33D:S000020:428

DATE/TIME TAKEN 08/09/2001 15:30

| 2-Chlorotoluene | $<5.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.5$ | bmh | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Chlorotoluene | $<5.5$ | $u g / \mathrm{kg}$ dw | 08/14/2001 | 1462 | <5.5 | bmh | SW 8260A |
| Chloroform | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | <5.5 | bmh | SW 8260A |
| Chloramethane | $<11.0$ | ug/kg dw | 08/14/2001 | 1462 | $<11.0$ | bmh | SW 8260A |
| Dibromochloromethane | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.5 | bmh | SW 8260A |
| Dibromomethane | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | < 5.5 | bmh | SW 8260A |
| Dichlorodifluoromethane | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.5 | bmh | SW 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.5$ | bmh | SW 8260A |
| 1,2-Dichlorobenzene | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 ' | $<5.5$ | bmh | SW 8260A |
| 1,3-Dichlorobenzene | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW 8260A |
| 1,4-Dichlorobenzene | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW 8260A |
| 1,1-Dichloroethane | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW 8260A |
| 1,2-Dichloroethane | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | < 5.5 | bmh | SW 8260A |
| 1,1-Dichloroethene | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | < 5.5 | bmh | SW 8260A |
| Cis-1,2-Dichloroethene | < 5.5 | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW 8260A |
| trans-1,2-Dichloroethene | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW 8260A |
| 1,2-Dichloropropane | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.5$ | bmh | SW 8260A |
| 1,3-Dichloropropane | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW 8260A |
| 2,2-Dichloropropane | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW 8260A |
| 1,1-Dichloropropene | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | <5.5 | bmh | SW 8260A |
| Cis-1, 3-Dichloropropene | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | < 5.5 | bmh | SW 8260A |
| trans-1,3-Dichloropropene | $<5.5$ | ug/kg dw | 08/14/2001 | 1462. | <5.5 | bmh | SW 8260A |
| Ethylbenzene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.5$ | bmh | SW 8260A |
| Hexachlorobutadiene | $<5.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | < 5.5 | bmh | SW 8260A |
| n -Hexane | <22.1 | ug/kg dw | 08/14/2001 | 1462 | <22.1 | bmh | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$08 / 23 / 2001$

Job Number: 01.14439
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 699281 | SBIOO2:HMW3 3D:S000020:428 |

DATE/TIME TAKEN 08/09/2001 15:30

| 2-Hexanone | <55.2 | ug/kg dw | 08/14/2001 | 1462 | <55.2 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Isopropylbenzene (Cumene) | <5.5 | ug/kg dw | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |
| p-Isopropyltoluene | <5.5 | ug/kg dw | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |
| Bromomethane | $<11.0$ | ug/kg dw | 08/14/2001 | 1462 | $<11.0$ | bmh | SW | 8260A |
| Methylene Chloride | $<11.0$ | ug/kg dw | 08/14/2001 | 1462 | $<11.0$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<55.2$ | ug/kg dw | 08/14/2001 | 1462 | $<55.2$ | bmh | SW | 8260A |
| n-Propylbenzene | <5.5 | ug/kg dw | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |
| Styrene | <5.5 | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| Naphthalene | 63.8 | $u g / \mathrm{kg}$ dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | <5.5 | bmh | Sw | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| Tetrachloroethene | <5.5 | ug/kg dw | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |
| Toluene | <5.5 | ug/kg dw | 08/14/2001 | 1462 | <5.5 | bmh | Sw | 8260A |
| 1,2,4-Trichlorobenzene | <5.5 | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | < 5.5 | ug/kg dw | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |
| Trichloroethene | $<5.5$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| Trichlorofluoromethane | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | < 5.5 | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | <5.5 | ug/kg dw | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| Vinyl Acetate | < 5.5 | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| Vinyl Chloride | $<2.2$ | ug/ kg dw | 08/14/2001 | 1462 | <2.2 | bmh | SW | 8260A |
| Xylenes, Total | <5.5 | $u g / \mathrm{kg}$ dw | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULIL \& ASSOC. (Dublin) 08/23/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14439
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 699281

SBI002 : HMW33D: S000020:428

DATE/TIME TAKEN 08/09/2001 15:30

| u4-1,2-Dichloroethane (surr) | 109 | q | $08 / 14 / 2001$ | 1462 | SWh | S260A |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Dibromofluoromethane (surr) | 102 | $\%$ | $08 / 14 / 2001$ | 1462 | bmh | SW 8260A |
| d8-Toluene (surr) | 94 | $\%$ | $08 / 14 / 2001$ | 1462 | bmh | SW 8260A |
| Bromofluorobenzene (surr) | 94 | $\%$ | $08 / 14 / 2001$ | 1462 | bmh | SW B260A |

## QUALITY CONTROL FLAG DEFINITIONS

Job Number: 01. 14439
(*) Indicates an out-of-control QC. The analytical data was reported based on other supporting quality control information.
(Note) Indicates to review the notes and comments section of the analytical report as there is additional information concerning this analytical result.
(MS) Indicates that the Matrix Spike (MS) was out of statistical advisory limits.
(MSD) Indicates that the Matrix Spike Duplicate (MSD) was out of statistical advisory limits.
(RPD) Indicates that the Relative Percent Difference (RPD) for the MS/MSD pair was outside of statistical advisory limits.
(SS) Indicates that the MS and MSD were out of statistical advisory limits.
(SSR) Indicates that the MS, MSD and RPD were out of statistical advisory limits.
(MSR) Indicates that the MS and RPD were out of statistical advisory limits.
(MSDR) Indicates that the MSD and RPD were out of statistical advisory limits.
(DL) Indicates that the MS and MSD were diluted out and the percent recoveries of the spikes could not be calculated.
(LS) Indicates that statistical accuracy and precision data is not available for spike concentrations which are $<1 / 4$ of the sample amount. Care should be used in interpreting this data.
(J) Indicates estimated concentration due to internal standard areas or surrogate recoveries outside of control limits. A sample matrix effect is usually indicated.
(DW) Indicates Dry Weight.
Analytical Reporting Limits
The reporting limits listed for non-aqueous samples in the analytical report section are Practical Quantitation Limits (PQLS). These PQLs are based upon a typical standard weight used for a non-aqueous sample. The reporting limit for a sample may be different from the PQL listed depending upon the actual weight of sample used, the samples moisture content and any dilutions used during the analysis.
1.14439 CHAIN OF CUSTODY RECORD $\quad \begin{aligned} & \text { PAGE } \_ \text {of } \perp \\ & \text { no. } \quad 5319\end{aligned}$

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin) 08/23/2001
6130 Wilcox Rd.
Dublin, OH 43016 Job Number: 01.13924

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

Sample
Number
Sample Description
697715 SBI002:SB4:S010020:428
697716 SBI002:SB1:S100115:428
697717 SBI002:SB3:S000020:428
697718 SBI002:HMW13S:S140150:428
697719 SBIO02:HMW13S:S060070:428
697720 SBI002:HMW2S:S020020:428
697721 SBI002:SBI:S160170:428
697722 SBI002:HMW6S:S040060:505
697723 SBI002:HMW6S:S180200:505

Date Taken

08/03/2001 08/06/2001
08/03/2001 08/06/2001
08/02/2001 08/06/2001
08/02/2001 08/06/2001
08/02/2001 08/06/2001
08/02/2001 08/06/2001
08/03/2001 08/06/2001
08/02/2001 08/06/2001
08/02/2001 08/06/2001

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted entirety.

Enclosure


## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/23/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 697715 | SBIOO2:SB4:S010020:428 |

DATE/TIME TAKEN 08/03/2001 09:45

| Dry Weight | 87.4 | 7 | 08/14/2001 |  | 1476 |  | mhg | SM 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/16/2001 |  | 1229 | Complete | emd | SW 6010日 |
| Arsenic, ICP | $<3.7$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 898 | 2956 | $<3.7$ | emd | SW 6010B |
| Barium, ICP | 48.9 | $\mathrm{mg} / \mathrm{kg}$ dw | 08/16/2001 | 898 | 2887 | $<0.73$ | emd | SN 6010B |
| Cadmium, ICP | <1.1 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 898 | 2869 | <1.1 | emd | SW 6010B |
| Chromium, ICP | 11 | $\mathrm{mg} / \mathrm{kg}$ dw | 08/16/2001 | 898 | 2857 | $<1.5$ | emd | SW 6010B |
| Lead, ICP | 18.3 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 898 | 2858 | $<3.0$ | emd | SW 6010B |
| Mercury, CVAA | 0.014 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 604 | 616 | $<0.009$ | epk | SW 7471A |
| Selenium, ICP | $<3.7$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 898 | 2936 | $<3.7$ | emd | SW 6010B |
| Silver, ICP | $<1.5$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 898 | 2889 | $<1.5$ | emd | SW 6010B |
| ICP Digestion, Nonaqueous | Complete |  | 08/08/2001 | 898 |  | Complete | mrt | SW 3050B |
| Mercury Digestion, Non-Aq | Complete |  | 08/11/2001 | 604 |  | Complete | epk | SW 7471A |
| Prep, BNA Non-Aq | Complete |  | 08/09/2001 | 945 |  | Complete | mlr | EPA 625; SW 3540C; SW 3545 |
| VOLATILE COMPOUNDS-8260 Non-Aq |  |  | . |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/07/2001 |  | 1450 | Complete | jxc |  |
| Acetone | $<114$ | ug/kg dw | 08/07/2001 |  | 1450 | <114 | jxc | SW 8260A |
| Benzene | $<5.7$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.7$ | jxc | SW 8260A |
| tert-Butylbenzene | $<5.7$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<5.7$ | jxc | SW 8260A |
| sec-Butylbenzene | $<5.7$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.7$ | jxc | SW 8260A |
| n-Butylbenzene | $<5.7$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.7$ | jxc | SW 8260A |
| Bromochloromethane | $<5.7$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.7$ | jxc | SW 8260A |
| Bromodichloromethane | $<5.7$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.7$ | jxc | SW 8260A. |
| Bromoform | $<5.7$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.7$ | jxc | SW 8260A |
| Bromobenzene | <5.7 | ug/kg dw | 08/07/2001 |  | 1450 | $<5.7$ | jxc | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$08 / 23 / 2001$

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002

|  |  |  | Date | Prep <br> Batch | Run <br> Batch | Reporting | Analyst |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Result | Flag | Units | Analyzed | Number | Number | Limit | Initials | Method reference |

SAMPLE NO. 697715

SAMPLE DESCRIPTION
SBIO02:SB4:S010020:428

DATE/TIME TAKEN 08/03/2001 09:45

| 2-Butanone (MEK) | $<57$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<57$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carbon disulfide | $<5.7$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Carbon tetrachloride | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Chlorobenzene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | <5.7 | jxc | SW | 8260A |
| Chloroethane | $<11.4$ | ug/kg dw | 08/07/2001 | 1450 | $<11.4$ | jxc | SW | 8260A |
| 2-Chlorotoluene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 4-Chlorotoluene | $<5.7$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Chloroform | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Chloromethane | $<11.4$ | ug/kg dw | 08/07/2001 | 1450 | $<11.4$ | jxc | SW | 8260A |
| Dibromochloromethane | <5.7 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Dibromomethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | Sw | 8260A |
| Dichlorodifluoromethane | <5.7 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.7 | jxc | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxe | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.7$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | sw | 8260A |
| 1,1-Dichloroethane | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,2-Dichloroethane | $<5.7$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | <5.7 | jxc | SW | 8260A |
| 1,1-Dichloroethene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxe | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,2-Dichloropropane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,3-Dichloropropane | <5.7 | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | Sw | 8260A |
| 2,2-Dichloropropane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxe | SW | 8260A |
| 1,1-Dichloropropene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/23/2001

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002


| cis-1,3-Dichloropropene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans-1,3-Dichloropropene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Ethylbenzene | <5.7 | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | B260A |
| Hexachlorobutadiene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| n -Hexane | $<22.9$ | ug/kg dw | 08/07/2001 | 1450 | $<22.9$ | jxc | SW | 8260A |
| 2-Hexanone | $<57.2$ | ug/kg dw | 08/07/2001 | 1450 | $<57.2$ | jxc | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| p-Isopropyltoluene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | <5.7 | jxc | SW | 8250A |
| Bromomethane | $<11.4$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<11.4$ | jxc | SW | 8260A |
| Nethylene Chloride | $<11.4$ | ug/kg dw | 08/07/2001 | 1450 | $<11.4$ | jxc | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | <5.7 | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<57.2$ | ug/kg dw | 08/07/2001 | 1450 | $<57.2$ | jxc | SW | 8260A |
| n-Propylbenzene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Styrene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Naphthaiene | $<5.7$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Tetrachloroethene | $<5.7$ | ug/ kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Toluene | 67.2 | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Trichloroethene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Trichlorofluoromethane | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$. | jxc | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin) 08/23/2001
6130 Wilcox Rd
Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002

SAMPLE NO . 697715

SAMPLE DESCRIPTION
SBI002:SB4:S010020:428

| Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Batch | Batch | Reporting | Analyst |  |
| Number | Number Limit | Initials Method Reference |  |  |

DATE/TIME TAKEN 08/03/2001 09:45

| 1,2,4-Trimethylbenzene | $<5.7$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.7$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,3,5-Trimethylbenzene | $<5.7$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<5.7$ | jxs | SW | 8260A |
| Vinyl Acetate | <5.7 | $u g / \mathrm{kg}$ dw | 08/07/2001 |  | 1450 | <5.7 | jxc | SW | 8260A |
| Vinyl Chloride | $<2.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<2.3$ | jxc | SW | 8260A |
| Xylenes, Total | 6.4 | $u g / \mathrm{kg} \mathrm{d} w$ | 08/07/2001 |  | 1450 | <5.7 | jxc | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 98 | \% | 08/07/2001 |  | 1450 |  | jxc | SW | B260A |
| Dibromofluoromethane (surr) | 95 | 4 | 08/07/2001 |  | 1450 |  | jxc | SN | 8260A |
| di-Toluene (aurr) | 96 | \% | 08/07/2001 |  | 1450 |  | jxc | SH | 8260A |
| Bromofluorobenzene (surr) | 91 | \% | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| BASE NEUT, COMPS. -8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW | 82700 |
| Acenaphthylene | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW | 8270 C |
| Anthracene | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW | 8270 C |
| Benzo (a)anthracene | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW | 8270C |
| Benzo (b) fluoranthene | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<378$ | jrw | Sw | 8270 C |
| Benzo(k) fluoranthene | <378 | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW | 8270 C |
| Benzo(a)pyrene | $<189$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<189$ | jrw | SW | 8270 C |
| Benzyl alcohol | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW | 82700 |
| Benzyl butyl phthalate | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SN | 8270 C |
| Bis (2-chloroethyl)ether | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW | 82700 |
| Bis (2-chloroethoxy) methane | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW | 82700 |
| Bis (2-ethylhexyl) phthalate | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW | 82700 |
| 2.2'-oxybis(1-Chioropropane) | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW | $8270 C^{\prime}$ |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>08/23/2001

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
|  | Analyzed | Number | Number Limit | Initials Method Reference |  |

SAMPLE NO. 697715

SAMPLE DESCRIPTION
SBI002:SB4:S010020:428

DATE/TIME TAKEN 08/03/2001 09:45

| 4-Chloroaniline | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Chloronaphthalene | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW 8270C |
| Chrysene | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW 8270 C |
| Dibenzo (a, h) anthracene | $<189$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<189$ | jrw | SW 8270C |
| Dibenzofuran | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW 8270C |
| 1,2-Dichlorobenzene | <378 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW 8270C |
| 1,3-Dichlorobenzene | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW 8270C |
| 1,4-Dichlorobenzene | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW 8270C |
| 3,3'-Dichlorobenzidine | $<755$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<755$ | jrw | SW 8270C |
| Diethyl phthalate | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW 8270C |
| Dimethyl phthalate | $<378$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW 8270C |
| 2,4-Dinitrotoluene | $<378$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW 8270C |
| 2,6-Dinitrotoluene | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW 8270C |
| Di-n-octylphthalate | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW 8270C |
| Fluoranthene | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW 8270C |
| Fluorene | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW 8270C |
| Hexachlorobenzene | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW 8270C |
| Hexachloro-1,3-butadiene | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW 8270C |
| Hexachlorocyclopentadiene | $<755$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<755$ | jrw | SW 8270C |
| Hexachloroethane | $<378$ | $u g / k g d w$ | 08/14/2001 | 945 | 1457 | <378 | jrw | SW 8270C |
| Indeno (1, 2, 3-cd) pyrene | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<378$ | jrw | Sw 8270C |
| Isophorone | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW 8270C |
| Naphthalene | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW 8270C |
| Nitrobenzene | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW 8270C |
| N-Nitrosodi-n-propylamine | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 697715

SBI002:SB4:S010020:428

| Phenanthrene | $<378$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | . 5 W | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pyrene | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | <378 | jrw | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 81 | $\%$ | 08/14/2001 | 945 | 1457 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 84 | $\%$ | 08/14/2001 | 945 | 1457 |  | jrw | SW | 8270C |
| Surrogate: d14-Terphenyl | 92 | 8 | 08/14/2001 | 945 | 1457 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1.890$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<1,890$ | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | <378 | jrw | SW | 8270C |
| 2-Chlorophenol | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | <378 | jrw | SW | 8270C |
| 2,4-Dichlorophenol | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jxw | SW | 8270 C |
| 2,4-Dimethylphenol | <378 | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW | 8270C |
| 2-Methylphenol | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | <378 | jrw | SW | 8270 C |
| meta \& para-Methylphenol | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW | 8270 C |
| 2-Nitrophenol | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW | 8270 C |
| Pentachlorophenol | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW | 8270C |
| Phenol | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<378$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<378$ | jrw | SW | 8270 C |
| 2,4,6-Trichlorophenol | <378 | ug/kg dw | 08/14/2001 | 945 | 1457 | <378 | jrw | SW | 8270 C |
| Surrogate: d6-Phenol | 76 | \% | 08/14/2001. | 945 | 1457 |  | jxw | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 76 | 8 | 08/14/2001 | 945 | 1457 |  | jxw | SW | 8270 C |
| Surrogate: Tribromophenol | 80 | $\%$ | 08/14/2001 | 945 | 1457 |  | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd. Dublin, OH 43016

08/23/2001

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 697716

SAMPLE DESCRIPTION
SBI002:SB1:S100115:428

DATE/TIME TAKEN 08/03/2001 09:15


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002

08/23/2001
Prep Run

Batch Batch Reporting Analyst
Analyzed Number Number Limit Initials Method Reference

SAMPLE DESCRIPTION
SBI002:SB1:S100115:428

DATE/TIME TAKEN
08/03/2001 09:15

| Dibromochloromethane | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | $<5.9$ | jxc | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibromomethane | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | $<5.9$ | jxc | SW 8260A |
| Dichlorodifluoromethane | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | <5.9 | jxc | SW 8260A |
| 1,2-Dibromo-3-chloropropane | <5.9 | $u \mathrm{f} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.9 | jxc | SW 8260A |
| 1,2-Dichlorobenzene | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | <5.9 | jxc | SW 8260A |
| 1,3-Dichlorobenzene | $<5.9$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.9$ | jxc | SW 8260A |
| 1,4-Dichlorobenzene | $<5.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.9$ | jxc | SW 8260A |
| 1,1-Dichloroethane | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | <5.9 | jxc | SW 8260A |
| 1,2-Dichloroethane | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | $<5.9$ | jxc | SW 8260A |
| 1,1-Dichloroethene | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | $<5.9$ | jxc | SW 8260A |
| cis-1,2-Dichloroethene | $<5.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.9$ | jxc | SW 8260A |
| trans-1,2-Dichloroethene | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | $<5.9$ | jxc | SW 8260A |
| 1,2-Dichloropropane | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | < 5.9 | jxc | SW 8260A |
| 1,3-Dichloropropane | <5.9 | ug/kg dw | 08/07/2001 | 1450 | < 5.9 | jxc | SW 8260A |
| 2,2-Dichloropropane | $<5.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/07/2001 | 1450 | $<5.9$ | jxc | SW 8260A |
| 1,1-Dichloropropene | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | $<5.9$ | jxc | SW 8260A |
| cis-1,3-Dichloropropene | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | $<5.9$ | jxc | SW 8260A |
| trans-1,3-Dichloropropene | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | $<5.9$ | jxc | SW 8260A |
| Ethylbenzene | $<5.9$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<5.9$ | jxc | SW 8260A |
| Hexachlorobutadiene | $<5.9$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<5.9$ | jxc | SW 8260A |
| n -Hexane | $<23.5$ | ug/kg dw | 08/07/2001 | 1450 | $<23.5$ | jxc | SW 8260A |
| 2-Hexanone | $<58.8$ | ug/kg dw | 08/07/2001 | 1450 | $<58.8$ | jxc | SW 8260A |
| Isopropylbenzene (Cumene) | $<5.9$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.9$ | jxc | SW 8260A |
| p-Isopropyltoluene | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | <5.9 | jxc | SW 8260A |
| Bromomethane | <11.8 | ug/kg dw | 08/07/2001 | 1450 | <11.8 | jxc | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002

|  |  | Reault | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | PIO |  |  |  |  | DAT | /TIME | TAKEN |
| 697716 |  | SBI002: | :S1 | 00115 | 428 |  |  |  | $08 /$ | 3/2001 | 1 09:15 |


| Methylene Chloride | $<11.8$ | ug/kg dw | 08/07/2001 | 1450 | $<11.8$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Methyl t-butyl ether (MTBE) | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | $<5.9$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | <58.8 | ug/kg dw | 08/07/2001 | 1450 | $<58.8$ | jxc | SW | 8260A |
| n-Propylbenzene | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | $<5.9$ | jxc | SW | 8260A |
| Styrene | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | <5.9 | jxc | SW | 8260A |
| Naphthalene | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | $<5.9$ | jxc | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | <5.9 | jxc | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | $<5.9$ | jxc | SW | B260A |
| Tetrachloroethene | <5.9 | ug/kg dw | 08/07/2001 | 1450 | $<5.9$ | jxc | SW | 8260A |
| Toluene | 21.7 | ug/kg dw | 08/07/2001 | 1450 | $<5.9$ | jxc | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | $<5.9$ | jxc | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | $<5.9$ | jxe | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | $<5.9$ | jxc | SW | 8260A |
| Trichloroethene | $<5.9$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<5.9$ | jxc | SW | 8260A |
| Trichlorofluoromethane | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | $<5.9$ | jxc | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.9$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.9$ | jxc | SW | 8260A |
| 1,2,4-Trimethylbenzene | 11 | ug/kg dw | 08/07/2001 | 1450 | $<5.9$ | jxc | SW | 8260A |
| 1,3,5-Trimethylbenzene | 7.9 | ug/kg dw | 08/07/2001 | 1450 | <5.9 | jxc | SW | 8260A |
| Vinyl Acetate | $<5.9$ | ug/kg dw | 08/07/2001 | 1450 | <5.9 | jxc | SW | 8260A |
| Vinyl Chloride | $<2.4$ | ug/kg dw | 08/07/2001 | 1450 | $<2.4$ | jxc | SW | 8260A |
| Xylenes, Total | 7.3 | ug/kg dw | 08/07/2001 | 1450 | $<5.9$ | jxc | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 93 | 8 | 08/07/2001 | 1450 |  | jxc | SW | 8260A |
| Dibromofluoromethane (surr) | 91 | \% | 08/07/2001 | 1450 |  | jxc | SW | 8260A |
| d8-Toluene (surr) | 96 | 8 | 08/07/2001 | 1450 |  | jxc | SW | 8260A |
| Bromofluorobenzene (surr) | 121 | \% | 08/07/2001 | 1450 |  | jxc | SW | 8260A |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin) 08/23/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002

|  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE NO. | SAMPLE DE | CRI | TIO1 |  |  |  |  | DAT | TIME | TAKEN |
| 697716 | SBI002:SBI | 1:S1 | 0115 | 28 |  |  |  | $08 /$ | 3/2001 | 1 09:15 |


| BASE NEUT. COMPS.-8270 Non-aq |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthene | $<388$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| Acenaphthylene | $<388$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| Anthracene | $<388$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| Benzo (a) anthracene | $<388$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| Benzo (b) fluoranthene | $<388$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| Benzo (k) fluoranthene | $<388$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| Benzo(a) pyrene | $<194$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<194$ | dmg | SW 8270C |
| Benzyl alcohol | $<388$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| Benzyl butyl phthalate | $<388$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| Bis (2-chloroethyl) ether | $<388$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| Bis (2-chloroethoxy) methane | $<388$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| Bis (2-ethylhexyl) phthalate | $<388$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<388$ | dimg | SW 8270C |
| 2,2'-oxybis (1-ChIoropropane) | $<388$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| 4-Bromophenyl phenyl ether | $<388$ | $u g / \mathrm{kg}$ dw | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| 4-Chloroaniline | $<388$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| 2-Chloronaphthalene | $<388$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| Chrysene | <388 | ug/kg dw | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<194$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<194$ | dmg | SW 8270C |
| Dibenzofuran | $<388$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| 1,2-Dichlorobenzene | $<388$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| 1,3-Dichlorobenzene | $<388$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<388$ | dmg, | SW 8270C |
| 1,4-Dichlorobenzene | $<388$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| 3,3'-Dichlorobenzidine | $<776$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<776$ | dmg | SW 8270 C |
| Diethyl phthalate | $<388$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 697716

SBI002:SBI:S100115:428

DATE/TIME TAKEN 08/03/2001 09:15


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/23/2001

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method R | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 697716 |  | SBI002:SB1 | 1:S1 | 0115 | 28 |  |  |  | $08 /$ | 3/2001 | 1 09:15 |


| 2-Chlorophenol | $<388$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dichlorophenol | $<388$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| 2,4-Dimethylphenol | $<388$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| 2-Methyi-4,6-dinitrophenol | $<388$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<388$ | ding | SW 8270C |
| 2-Methylphenol | $<388$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| meta \& para-Methylphenol | $<388$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<388$ | dimg | SW 8270C |
| 2-Nitrophenol | $<388$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| Pentachlorophenol | $<388$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| Phenol | $<388$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<388$ | dmig | SW 8270C |
| 2,4,5-Trichlorophenol | $<388$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| 2,4,6-Trichlorophenol | $<388$ |  | $u g / \mathrm{kg}$ dw | 08/20/2001 | 949 | 1465 | $<388$ | dmg | SW 8270C |
| Surrogate: d6-Phenol | 91 |  | \% | 08/20/2001 | 949 | 1465 |  | dimg | SW 8270C |
| Surrogate: 2-Fluorophenol | 85 |  | 8 | 08/20/2001 | 949 | 1465 |  | dimg | SW 8270C |
| Surrogate: Tribromophenol | 124 | Note | \% | 08/20/2001 | 949 | 1465 |  | dmg | SW 8270C |
| PCB's M 8082, Non-Aq |  |  |  |  |  |  |  |  |  |
| Aroclor 1016 | $<1.2$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 100 | 185 | $<1.2$ | mrb | SW 8082 |
| Aroclor 1221 | <1.2 |  | $\mathrm{mg} / \mathrm{kg}$ dw | 08/16/2001 | 100 | 185 | <1.2 | $m \mathrm{mb}$ | SW 8082 |
| Aroclor 1232 | <1.2 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 100 | 185 | <1.2 | mrb | SW 8082 |
| Aroclor 1242 | 5.31 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 100 | 185 | <1.2 | marb | SW 8082 |
| Aroclor 1248 | <1.2 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 100 | 185 | <1.2 | mrb | SW 8082 |
| Aroclor 1254 | <1.2 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 100 | 185 | <1.2 | mrb | SW 8082 |
| Aroclor 1260 | <1.2 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 100 | 185 | <1.2 | mrb | SW 8082 |
| Surrogate:TCX/DCB | DL/DL | Note | $\%$ | 08/16/2001 | 100 | 185 |  | mrb | SW 8082 |
| TPH - FTIR Non-aq | 8,100 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/15/2001 | 591 | 623 | $<50.0$ | 260 | 418.1 |

## ANALYTICAL REPORT

Kevin Wildman
HULI. \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION 697717 <br> SBI002:SB3:S000020:428

DATE/TIME TAKEN 08/02/2001 13:00


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
08/23/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 697717

SAMPLE DESCRIPTION
SBIO 02 : SB3: S000020:428

DATE/TIME TAKEN 08/02/2001 13:00

| Dibromomethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dichlorodifluoromethane | $<5.7$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1،2-Dichlorobenzene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,1-Dichloroethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,2-Dichloroethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,1-Dichloroethene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | <5.7 | jxc | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.7$ | ug/ kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,2-Dichloropropane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | < 5.7 | jxc | SW | 8260A |
| 1,3-Dichloropropane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 2,2-Dichloropropane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,1-Dichloropropene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.7$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Ethylbenzene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Hexachlorobutadiene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| n -Hexane | $<22.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<22.6$ | jxc | SW | 8260A |
| 2-Hexanone | $<56.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<56.6$ | jxe | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| p-Isopropyltoluene | $<5.7$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Bromomethane | $<11.3$ | ug/kg dw | 08/07/2001 | 1450 | $<11.3$ | jxc | SW | 8260A |
| Methylene Chloride | <11.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<11.3$ | jxc | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13924

Client Project ID: South Bend Indiana SBI002



## SAMPLE NO. 697717

SAMPLE DESCRIPTION
SBI002:SB3:S000020:428

DATE/TIME TAKEN 08/02/2001 13:00

| Methyl t-butyl ether (MTBE) | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Methyl-2-pentanone (MIBK) | $<56.6$ | ug/kg dw | 08/07/2001 | 1450 | <56.6 | jxc | SW | 8260A |
| n-Propylbenzene | $<5.7$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Styrene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Naphthalene | <5.7 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Tetrachloroethene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | <5.7 | jxc | SW | 8260A |
| Toluene | 27.6 | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | <5.7 | jxc | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.7$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Trichloroethene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Trichlorofluoromethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.7 | jxe | SW | 8260A |
| Vinyl Acetate | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Vinyl Chloride | $<2.3$ | ug/kg dw | 08/07/2001 | 1450 | $<2.3$ | jxc | SW | 8260A |
| Xylenes, Total | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | <5.7 | jxc | SW | 8260A |
| d4-1,2-Dichloroethane (eurr) | 99 | 4 | 08/07/2001 | 1450 |  | jxc | SW | 8260A |
| Dibromofluoromethane (surr) | 96 | 8 | 08/07/2001 | 1450 |  | jxc | SW | 8260A |
| di-Toluene (surr) | 97 | \% | 08/07/2001 | 1450 |  | jxc | SW | 8260A |
| Bromofluorobenzene (surr) | 93 | \% | 08/07/2001 | 1450 |  | jxe | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 697717 SBI002:SB3:S000020:428

DATE/TIME TAKEN
08/02/2001 13:00

BASE NEUT. COMPS.-8270 Non-aq

| Acenaphthene | $<373$ |
| :--- | :--- |
| Acenaphthylene | $<373$ |
| Anthracene | $<373$ |
| Benzo(a) anthracene | $<373$ |
| Benzo(b) fluoranthene | 415 |
| Benzo(k) fluoranthene | $<373$ |
| Benzo(a)pyrene | 208 |
| Benzyl alconol | $<373$ |
| Benzyl butyl phthalate | $<373$ |
| Bis(2-chloroethyl)ether | $<373$ |
| Bis(2-chloroethoxy)methane | $<373$ |
| Bis(2-ethylhexyl)phthalate | $<373$ |
| 2,2'-oxybis(1-Chloropropane) | $<373$ |
| 4-Bromophenyl phenyl ether | $<373$ |
| 4-Chloroaniline | $<373$ |
| 2-Chloronaphthalene | $<373$ |
| Chrysene | $<373$ |
| Dibenzo(a,h)anthracene | $<187$ |
| Dibenzofuran | $<373$ |
| 1,2-Dichlorobenzene | $<373$ |
| 1,3-Dichlorobenzene | $<373$ |
| 1,4-Dichlorobenzene | $<373$ |
| 3,3'-Dichlorobenzidine | $<747$ |
| Diethyl phthalate | $<373$ |


| ug/kg dw | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW | 8270 C |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<373$ | jrw | Sw | 8270 C |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW | 82700 |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW | 82700 |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW | 82700 |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<187$ | jrw | SW | 82700 |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<373$ | jiw | SW | 8270 C |
| $u g / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW | 82700 |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW | 8270 C |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW | 8270 C |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<373$ | jrw | sw | 82700 |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW | 8270 C |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW | 82700 |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW | 82700 |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW | 82700 |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW | 82700 |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<187$ | jrw | SW | 8270 C |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW | 8270 C |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW | 8270 C |
| $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW | 8270 C |
| $u g / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW | 82700 |
| $u g / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | $<747$ | jrw | SW | 8270 C |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW | 8270 C |

# ANALYTICAL REPORT 

Kevin Wildman
HULLL \& ASSOC. (Dublin)

## 6130 Wilcox Rd.

Dublin, OH 43016

08/23/2001

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION DATE/TIME TAKEN 697717 SBI002:SB3:S000020:428

DATE/TIME TAKEN 08/02/2001 13:00

| Dimethyl phthalate | $<373$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dinitrotoluene | $<373$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <373 | jxw | SW 8270C |
| 2,6-Dinitrotoluene | $<373$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW 8270C |
| Di-n-octylphthalate | <373 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW 8270C |
| Fluoranthene | $<373$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <373 | jrw | SW 8270C |
| Fluorene | <373 | ug/kg dw | 08/09/2001 | 944 | 1455 | <373 | jıw | SW 8270C |
| Hexachlorobenzene | $<373$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <373 | jrw | SW 8270C |
| Hexachloro-1,3-butadiene | $<373$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW 8270C |
| Hexachlorocyclopentadiene | $<747$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<747$ | jrw | SW 8270C |
| Hexachloroethane | <373 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW 8270C |
| Indeno (1.2,3-cd) pyrene | $<373$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <373 | jrw | SW B270C |
| Isophorone | $<373$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW 8270C |
| Naphthalene | $<373$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | <373 | jrw | SW 8270C |
| Nitrobenzene | $<373$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW 8270C |
| N-Nitrosodi-n-propylamine | $<373$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<373$ | jxw | SW 8270C |
| Phenanthrene | $<373$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW 8270C |
| Pyrene | 388 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<373$ | jrw | SW 8270C |
| 1,2,4-Trichlorobenzene | <373 | ug/kg dw | 08/09/2001 | 944 | 1455 | <373 | jrw | SW 8270C |
| Surrogate: d5-Nitrobenzene | 72 | $\%$ | 08/09/2001 | 944 | 1455 |  | jrw | SW 8270C |
| Surrogate: 2-Fluorobiphenyl | 76 | \% | 08/09/2001 | 944 | 1455 |  | jrw | SW 8270C |
| Surrogate: di4-Terphenyl | 78 | 4 | 08/09/2001 | 944 | 1455 |  | jrw | SW 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,870$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<1.870$ | jrw | SW 82700 |
| 4-Chloro-3-methylphenol | <373 | ug/kg dw | 08/09/2001 | 944 | 1455 | <373 | jrw | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/23/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 697717

SBI002: SB3:S000020:428

DATE/TIME TAKEN 08/02/2001 13:00



# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 697718

SAMPLE DESCRIPTION
SBI002:HMW13S:S140150:428

DATE/TIME TAKEN 08/02/2001 14:45

## Prep, TPH DRO Nonaq

VOLATILE COMPOUNDS-8260 NOR-Aq

| 日260 - SW846 (Non-aq) | Complete |
| :--- | :--- |
| Acetone | 140 |
| Benzene | $<6.1$ |
| tert-Butylbenzene | $<6.1$ |
| sec-Butylbenzene | $<6.1$ |
| n-Butylbenzene | $<6.1$ |
| Bromochloromethane | $<6.1$ |
| Bromodichloromethane | $<6.1$ |
| Bromoform | $<6.1$ |
| Bromobenzene | $<61$ |
| 2-Butanone (MEK) | $<6.1$ |
| Carbon disulfide | $<6.1$ |
| Carbon tetrachloride | $<6.1$ |
| Chlorobenzene | $<12.3$ |
| Chloroethane | $<6.1$ |
| 2-Chlorotoluene | $<6.1$ |
| 4-Chlorotoluene | $<12.3$ |
| Chloroform | $<6.1$ |
| Chloromethane | $<6.1$ |
| Dibromochloromethane | $<6.1$ |
| Dibromomethane |  |


|  | 08/07/2001 | 1450 | Complete | jxe |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ug/kg dw | 08/07/2001 | 1450 | $<123$ | jxc | SW 8260A |
| ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW 8260A |
| ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW 8260A |
| ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW 8260A |
| ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW 8260A |
| ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW 8260A |
| ug/kg dw | 08/07/2001 | 1450 | $<6.1$ | jxc | SW 8260A |
| ug/kg dw | 08/07/2001 | 1450 | $<6.1$ | jxc | SW 8260A |
| ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW 8260A |
| ug/kg dw | 08/07/2001 | 1450 | $<61$ | jxc | SW 8260A |
| ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW 8260A |
| ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW 8260A |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <6.1 | jxc | SW 8260A |
| ug/kg dw | 08/07/2001 | 1450 | $<12.3$ | jxc | SW 8260A |
| ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW 8260A |
| ug/kg dw | 08/07/2001 | 1450 | $<6.1$ | jxc | SW 8260A |
| ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW 8260A |
| ug/kg dw | 08/07/2001 | 1450 | $<12.3$ | jxc | SW 8260A |
| ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW 8260A |
| ug/kg dw | 08/07/2001 | 1450 | $<6.1$ | jxc | SW 8260A |
| ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002

|  | Prep Run |
| :--- | :--- | :--- |
| Date | Batch Batch Reporting Analyst |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 697718 | SBIOO2:HMW13S:S140150:428 | $08 / 02 / 2001$ 14:45 |

1

| 1,2-Dibromo-3-chloropropane | $<6.1$ | ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxe | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichlorobenzene | $<6.1$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<6.1$ | jxc | SW | 8260A |
| 1,3-Dichlorobenzene | $<6.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <6.1 | jxc | SW | 8260A |
| 1,4-Dichlorobenzene | <6.1 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <6.1 | jxc | SW | 8260A |
| 1,1-Dichloroethane | <6.1 | ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW | 8260A |
| 1,2-Dichloroethane | $<6.1$ | ug/kg dw | 08/07/2001 | 1450 | $<6.1$ | jxc | SW | B260A |
| 1,1-Dichloroethene | $<6.1$ | ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW | 8260A |
| cis-1,2-Dichloroethene | $<6.1$ | ug/kg dw | 08/07/2001 | 1450 | $<6.1$ | jxc | SW | 8260A |
| trans-1,2-Dichloroethene | $<6.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<6.1$ | jxc | SW | 8260A |
| 1,2-Dichloropropane | $<6.1$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | <6.1 | jxc | SW | 8260A |
| 1,3-Dichloropropane | $<6.1$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 145,0 | <6.1 | jxe | sw | 8260A |
| 2,2-Dichloropropane | $<6.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<6.1$ | jxc | SW | 8260A |
| 1,1-Dichloropropene | <6.1 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<6.1$ | jxc | SW | 8260A |
| cis-1,3-Dichloropropene | <6.1 | ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxC | SW | 8250A |
| trans-1,3-Dichloropropene | $<6.1$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <6. 1 | jxc | SW | 8260A |
| Ethylbenzene | <6.1 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<6.1$ | jxc | SW | 8260A |
| Hexachlorobutadiene | <6.1 | ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW | 8260A |
| n-Hexane | $<24.5$ | ug/kg dw | 08/07/2001 | 1450 | $<24.5$ | jxe | SW | 8260A |
| 2-Hexanone | $<61.3$ | ug/kg dw | 08/07/2001 | 1450 | <61.3 | jxc | SW | 8260A |
| Isopropylbenzene (Cumene) | $<6.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<6.1$ | jxc | SW | 8260A |
| p-Isopropyltoluene | <6.1 | ug/kg dw | 08/07/2001 | 1450 | $<6.1$ | jxe | SW | 8260A |
| Bromomethane | $<12.3$ | ug/kg dw | 08/07/2001 | 1450 | $<12.3$ | jxc | SW | 8260A |
| Methylene Chloride | $<12.3$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<12.3$ | jxc | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<6.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<6.1$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | <61.3 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<61.3$ | jxc | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) 08/23/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13924

## Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION
697718 SBI002:HMW13S:SI40150:428

DATE/TIME TAKEN 08/02/2001 14:45

| n-Propylbenzene | $<6.1$ | ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Styrene | <6.1 | ug/kg dw | 08/07/2001 | 1450 | $<6.1$ | jxc | SW | 8260A |
| Naphthalene | $<6.1$ | ug/kg dw | 08/07/2001 | 1450 | $<6.1$ | jxc | Sw | 8260A |
| 1,1,1,2-Tetrachloroethane | $<6.1$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<6.1$ | jxc | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<6.1$ | ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW | 8260A |
| Tetrachloroethene | $<6.1$ | ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW | 8260A |
| Toluene | 8.9 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<6.1$ | jxc | SW | 8260A |
| 1,2,4-Trichlorobenzene | <6.1 | ug/kg dw | 08/07/2001 | 1450 | $<6.1$ | jxc | SW | 8260A |
| 1,1,1-Trichloroethane | $<6.1$ | ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW | 8260A |
| 1,1,2-Trichloroethane | $<6.1$ | ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW | 8260A |
| Trichloroethene | <6.1 | ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW | 8260A |
| Trichlorofluoromethane | $<6.1$ | ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW | B260A |
| 1,2,3-Trichloropropane | $<6.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <6.1 | jxc | SW | 8260A |
| 1,2,4-Trimethylbenzene | <6.1 | ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<6.1$ | ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW | 8260A |
| Vinyl Acetate | $<6.1$ | ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW | 8260A |
| Vinyl Chloride | <2.5 | ug/kg dw | 08/07/2001 | 1450 | $<2.5$ | jxc | SW | 8260A |
| Xylenes, Total | <6.1 | ug/kg dw | 08/07/2001 | 1450 | <6.1 | jxc | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 95 | \% | 08/07/2001 | 1450 |  | jxc | SW | 8260A |
| Dibromofluoromethane (surr) | 95 | \% | 08/07/2001 | 1450 |  | jxc | SW | 8260A |
| ds-Toluene (surr) | 93 | 8 | 08/07/2001 | 1450 |  | jxc | SW | 8260A |
| Bromofluorobenzene (surr) | 93 | 8 | 08/07/2001 | 1450 |  | jxc | SW | 8260A |
| BASE NEUT. COMPS.-8270 Non-aq Acenaphthene | <404 | ug/kg dw | 08/08/2001 | 1449 | $<404$ | jrw | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/23/2001

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batch Reporting Analyst |  |
| Analyzed | Number Number Limit | Initials Method Reference |  |

SAMPLE NO. 697718

SAMPLE DESCRIPTION
SBI002:HMW13S:S140150:428

| Acenaphthylene | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Anthracene | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 8270 C |
| Benzo (a) anthracene | $<404$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 8270 C |
| Benzo (b) fluoranthene | $<404$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 82700 |
| Benzo(k)fluoranthene | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | <404 | jrw | SW | 82700 |
| Benzo(a) pyrene | $<202$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | <202 | jrw | SW | 8270 C |
| Benzyl alcohol | <404 | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 8270 C |
| Benzyl butyl phthalate | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 8270C |
| Bis (2-chloroethyl) ether | <404 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | <404 | jrw | SW | 8270 C |
| Bis (2-chloroethoxy) methane | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 8270 C |
| Bis (2-ethylhexyl) phthalate | $<404$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | $<404$ | $u g / \mathrm{kg}$ dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 82700 |
| 4-Bromophenyl phenyl ether | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | $8270 C^{\text {c }}$ |
| 4-Chloroaniline | $<404$ | $u g / \mathrm{kg}$ dw | 08/08/2001 | 944 | 2449 | $<404$ | jrw | SW | 82700 |
| 2-Chloronaphthalene | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 8270C |
| Chrysene | $<404$ | $u g / \mathrm{kg}$ dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<202$ | ug/kg dw | 08/08/2001 | 944 | 1449 | <202 | jrw | SW | 82700 |
| Dibenzofuran | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 82700 |
| 1,2-Dichlorobenzene | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 8270 C |
| 1,3-Dichlorobenzene | $<404$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | <404 | jrw | SW | 8270 C |
| 1,4-Dichlorobenzene | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<809$ | ug/kg dw | 08/08/2001 | 944 | 1449 | <809 | jrw | SW | 8270 C |
| Diethyl phthalate | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 8270 C |
| Dimethyl phthalate | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 82700 |
| 2,4-Dinitrotoluene | <404 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/23/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 697718 |  | SBIO02: H | N13S | S14 | 0:428 |  |  |  | 08/ | 2/2001 | 14:45 |


| 2,6-Dinitrotoluene | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Di-n-octylphthalate | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jxw | SW | 8270C |
| Fluoranthene | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 8270C |
| Fluorene | <404 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | <404 | jrw | Sw | 8270 C |
| Hexachlorobenzene | $<404$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 8270 C |
| Hexachlorocyclopentadiene | $<809$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<809$ | jrw | SW | 8270 C |
| Hexachloroethane | $<404$ | $u g / \mathrm{kg}$ dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Indeno (1, 2, 3-cd) pyrene | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | <404 | jrw | SW | 8270C |
| Isophorone | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 8270C |
| Naphthalene | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | <404 | jrw | SW | 8270C |
| Nitrobenzene | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 8270 C |
| N-Nitrosodi-n-propylamine | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Phenanthrene | <404 | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 8270 C |
| Pyrene | $<404$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<404$ | ug/kg dw | 08/08/2002 | 944 | 1449 | $<404$ | jrw | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 79 | \% | 08/08/2001 | 944 | 1449 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 83 | \% | 08/08/2001 | 944 | 1449 |  | jrw | SW | 8270C |
| Surrogate: di4-Terphenyl | 92 | \% | 08/08/2001 | 944 | 1449 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acia | <2,020 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | <2,020 | jrw | SW | 82700 |
| 4-Chloro-3-methylphenol | $<404$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 8270 C |
| 2-Chlorophenol | $<404$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | <404 | jrw | SW | 82700 |
| 2,4-Dichlorophenol | $<404$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman HULI \& ASSOC. (Dublin)<br>08/23/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTTON
697718 SBIO02:HMW13S:S140150:428

DATE/TIME TAKEN 08/02/2001 14:45

| 2,4-Dimethylphenol | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Methyl-4,6-dinitrophenol | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW 8270C |
| 2-Methylphenol | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW 8270C |
| meta \& para-Methylphenol | $<404$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW 8270C |
| 2-Nitrophenol | $<404$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW 8270C |
| Pentachiorophenol | $<404$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | <404 | jrw | SW 8270C |
| Phenol | $<404$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW 8270C |
| 2,4,5-Trichlorophenol | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<404$ | jrw | SW 8270C |
| 2,4,6-Trichlorophenol | $<404$ | ug/kg dw | 08/08/2001 | 944 | 1449 | <404 | jrw | SW 8270C |
| Surrogate: d6-Phenol | 77 | 8 | 08/08/2001 | 944 | 1449 |  | jrw | SW 8270C |
| Surrogate: 2-Fluorophenol | 77 | 8 | 08/08/2001 | 944 | 1449 |  | jrw | SW 8270C |
| Surrogate: Tribromophenol | 70 | 4 | 08/08/2001 | 944 | 1449 |  | jrw | SW 8270C |
| TPH - DRO Non-Aqueous | $<12$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 194 | 279 | $<12$ | meb | SW 8015M |
| TPH - FTIR Non-aq | $<50$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/15/2001 | 591 | 623 | <50 | 260 | 418.1 |

SAMPLE NO. SAMPLE DESCRIPTION
697719 SBI002:HMW13S:S060070:428

DATE/TIME TAKEN 08/02/2001 14:30

| Dry Weight | 96.9 | \% | 08/14/2001 |  | 1476 |  | mhg | SM 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prep, BNA Non-Aq | Complete |  | 08/07/2001 | 944 |  | Complete | mir | EPA 625; SW 3540C; SW 3545 |
| Prep, TPH 418.1 Nonaq | Complete |  | 08/14/2001 | 591 |  | Complete | 260 | SW 9071 |
| Prep, TPH DRO Nonaq | Complete |  | 08/10/2001 | 195 |  | Complete | 1 me |  |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION 697719 <br> SBIO02:HMW13S:S060070:428

DATE/TIME TAKEN
08/02/2001 14:30

VOLATILE COMPOUNDS-8260 NOR-Aq

| 8260 - SW846 (Non-aq) | Complete |
| :--- | :--- |
| Acetone | $<103$ |
| Benzene | $<5.2$ |
| tert-Butylbenzene | $<5.2$ |
| sec-Butylbenzene | $<5.2$ |
| n-Butylbenzene | $<5.2$ |
| Bromochloromethane | $<5.2$ |
| Bromodichloromethane | $<5.2$ |
| Bromoform | $<5.2$ |
| Bromobenzene | $<52$ |
| 2-Butanone (MEK) | $<5.2$ |
| Carbon dibulfide | $<5.2$ |
| Carbon tetrachloride | $<10.3$ |
| Chlorobenzene | $<5.2$ |
| Chloroethane | $<5.2$ |
| 2-Chlorotoluene | $<5.2$ |
| 4-Chlorotoluene | $<10.3$ |
| Chloroform | $<5.2$ |
| Chloromethane | $<5.2$ |
| Dibromochloromethane | $<5.2$ |
| Dibromomethane | $<5.2$ |
| Dichlorodifluoromethane | $<5.2$ |
| 1,2-Dibromo-3-chloropropane |  |


|  | 08/07/2001 | 1450 | Complete | jxc |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<103$ | jxc | SW | 8260A |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| ug/kg dw | 08/07/2001 | 1450 | $<52$ | jxc | SW | 8260A |
| ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| ug/kg dw | 08/07/2001 | 1450 | $<10.3$ | jxc | SW | 8260A |
| ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| ug/ kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| ug/kg dw | 08/07/2001 | 1450 | $<10.3$ | jxc | SW | 8260A |
| ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/23/2001

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 697719

SAMPLE DESCRIPTION
SBIO02:HMW13S:S060070:428

DATE/TIME TAKEN 08/02/2001 14:30

| 1,3-Dichlorobenzene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,4-Dichlorobenzene | <5.2 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | < 5.2 | jxc | SW | 8260A |
| 1,1-Dichloroethane | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| 1,2-Dichloroethane | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| 1,1-Dichloroethene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.2$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,2-Dichloropropane | < 5.2 | ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| 1,3-Dichloropropane | $<5.2$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 2,2-Dichloropropane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,1-Dichloropropene | <5.2 | ug/kg dw | 08/07/2001 | 1450 | 65.2 | jxc | SW | 8260A |
| Cis-1,3-Dichloropropene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| Ethylbenzene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| Hexachlorobutadiene | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| n -Hexane | $<20.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<20.6$ | jxc | SW | 8260A |
| 2-Hexanone | $<51.6$ | ug/kg dw | 08/07/2001 | 1450 | $<51.6$ | jxc | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| p -Isopropyltoluene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| Bromomethane | $<10.3$ | ug/kg dw | 08/07/2001 | 1450 | $<10.3$ | jxc | SW | 8260A |
| Methylene Chloride | $<10.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<10.3$ | jxc | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | <5.2 | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<51.6$ | ug/kg dw | 08/07/2001 | 1450 | $<51.6$ | jxc | SW | 8260A |
| n-Propylbenzene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| Styrene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |

## ANALYTICAL REPORT

## Kevin Wildman

HULI \& ASSOC. (Dublin)
6130 Wilcox Rd
Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION 697719 <br> SBI002:HMW13S:S060070:428

DATE/TIME TAKEN 08/02/2001 14:30

| Naphthalene | $<5.2$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.2$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | < 5.2 | jxc | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | <5.2 | $u g / \mathrm{kg}$ dw | 08/07/2001 |  | 1450 | <5.2 | jxc | SW | 8260A |
| Tetrachloroethene | <5.2 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<5.2$ | jxc | SW | B260A |
| Toluene | 39.0 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <5.2 | jxc | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<5.2$. | jxc | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.2$ | ug/kg dw | 08/07/2001 |  | 1450 | <5.2 | jxc | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.2$ | ug/kg dw | 08/07/2001 |  | 1450 | <5.2 | jxc | SW | 8260A |
| Trichloroethene | <5.2 | ug/kg dw | 08/07/2001 |  | 1450 | $<5.2$ | jxc | SW | 8260A |
| Trichlorofluoromethane | $<5.2$ | ug/kg dw | 08/07/2001 |  | 1450 | <5.2 | jxc | SW | 8260A |
| 1,2,3-Trichloropropane | <5.2 | ug/kg dw | 08/07/2001 |  | 1450 | <5.2 | jxc | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.2$ | ug/kg dw | 08/07/2001 |  | 1450 | <5.2 | jxc | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.2$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.2$ | jxc | SW | 8260A |
| Vinyl Acetate | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<5.2$ | jxc | SW | 8260A |
| Vinyl Chloride | $<2.1$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<2.1$ | jxc | SW | 8260A |
| Xylenes, Total | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <5.2 | jxc | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 96 | $\%$ | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| Dibromofluoromethane (surr) | 96 | \% | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| ds-Toluene (surr) | 93 | 8 | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| Bromofluorobenzene (surr) | 93 | 8 | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| BASE NEUT. COMPS.-8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<341$ | ug/kg dw | 08/08/2001 | 944 | 1449 | <341 | jrw | SW | 8270 C |
| Acenaphthylene | $<341$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | <341 | jrw | SW | 8270 C |
| Anthracene | $<341$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | <341 | jrw | SW | 8270 C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>08/23/2001

Dublin, OH 43016

Job Number: 01.13924

## Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | SCRI | TIO |  |  |  |  | DA | /TIME | TAKEN |
| 697719 |  | SBIO02: HM | N13S | S06 | 70:428 |  |  |  | 08/ | 2/2001 | 1 14:30 |

1

| Benzo(a)anthracene | <341 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | <341 | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benzo (b) fluoranthene | $<341$ | $u g / \mathrm{kg} d w$ | 08/08/2001 | 944 | 1449 | $<341$ | jrw | SW 8270C |
| Benzo (k) fluoranthene | $<341$ | $u g / \mathrm{kg}$ dw | 08/08/2001 | 944 | 1449 | $<341$ | jrw | SW 8270C |
| Benzo(a) pyrene | $<170$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/08/2002 | 944 | 1449 | $<170$ | jrw | SW 8270C |
| Benzyl alcohol | $<341$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<341$ | jrw | SW 8270C |
| Benzyl butyl phthalate | <341 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | <341 | jrw | SW 8270C |
| Bis (2-chloroethyl)ether | $<341$ | $u g / \mathrm{kg} \mathrm{d} w$ | 08/08/2001 | 944 | 1449 | $<341$ | jrw | SW 8270C |
| Bis (2-chloroethoxy) methane | $<341$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | <341 | jxw | SW 8270C |
| Bis (2-ethylhexyl) phthalate | $<341$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<341$ | jrw | SW 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<341$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<341$ | jrw | SW 8270C |
| 4-Bromophenyl phenyl ether | $<341$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<341$ | jrw | SW 8270C |
| 4-Chloroaniline | $<341$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<341$ | jrw | SW 8270C |
| 2-Chloronaphthalene | $<341$ | ug/kg dw | 08/08/2001 | 944 | 1449 | <341 | jrw | SW 8270C |
| Chrybene | $<341$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<341$ | jrw | SW 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<170$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<170$ | jrw | SW 8270C |
| Dibenzofuran | $<341$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<341$ | j5w | SW . 8270 C |
| , 1,2-Dichlorobenzene | $<341$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<341$ | jrw | SW 8270C |
| 1,3-Dichlorobenzene | $<341$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<341$ | jrw | SW 8270C |
| 1,4-Dichlorobenzene | $<341$ | ug/kg dw | 08/08/2001 | 944 | 1449 | <341 | jrw | SW 8270C |
| 3,3'-Dichlorobenzidine | $<681$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<681$ | jrw | SW 8270C |
| Diethyl phthalate | <341 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<341$ | jrw | SW 8270C |
| Dimethyl phthalate | <341 | ug/kg dw | 08/08/2001 | 944 | 1449 | $<341$ | jrw | SW 8270C |
| 2.4-Dinitrotoluene | $<341$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | <341 | jrw | SW 8270C |
| 2,6-Dinitrotoluene | <341 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<341$ | jrw | SW 8270C |
| Di-n-octylphthalate | <341 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<341$ | jrw | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.13924<br>Client Project ID: South Bend Indiana SBI002

$08 / 23 / 2001$

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 697719 |  | SBIO02 : HM | N13S | S06 | 70:428 |  |  |  | 08/ | $2 / 2001$ | 1 14:30 |


| Fluoranthene | $<341$ | ug/kg dw | 08/08/2001 | 944 | 1449 | <341 | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fluorene | $<341$ | $u g / \mathrm{kg}$ dw | 08/08/2001 | 944 | 1449 | <341 | jrw | SW | 8270C |
| Hexachlorobenzene | $<341$ | $u g / \mathrm{kg} d w$ | 08/08/2001 | 944 | 1449 | $<341$ | jrw | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<341$ | ug/kg dw | 08/08/2001 | 944 | 1449 | <341 | jrw | SW | 8270 C |
| Hexachlorocyclopentadiene | $<681$ | ug/kg dw | 08/08/2001 | 944 | 1449 | <681 | jrw | SW | 8270 C |
| Hexachloroethane | $<341$ | ug/kg dw | 08/08/2001 | 944 | 1449 | <341 | jrw | SW | 82700 |
| Indeno (1,2,3-cd) pyrene | <341 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/08/2001 | 944 | 1449 | $<341$ | jrw | SW | 82700 |
| Isophorone | <341 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/08/2001 | 944 | 1449 | <341 | jrw | SW | 82700 |
| Naphthalene | <341 | ug/kg dw | 08/08/2001 | 944 | 1449 | <341 | jrw | SW | 8270 C |
| Nitrobenzene | <341 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | <341 | jıw | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<341$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<341$ | jxw | SW | 8270 C |
| Phenanthrene | $<341$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<341$ | jrw | SW | 8270C |
| Pyrene | $<341$ | ug/kg dw | 08/08/2001 | 944 | 1449 | <341 | jrw | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<341$ | ug/kg dw | 08/08/2001 | 944 | 1449 | <341 | jrw | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 68 | $\%$ | 08/08/2001 | 944 | 1449 |  | jrw | SW | 82700 |
| Surrogate: 2-Fluorobiphenyl | 73 | 8 | 08/08/2001 | 944 | 1449 |  | jrw | SW | 82700 |
| Surrogate: di4-Terphenyl | 71 | \% | 08/08/2001 | 944 | 1449 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,700$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<1,700$ | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<341$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<341$ | jrw | SW | 8270 C |
| 2-Chlorophenol | $<341$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<341$ | jrw | SW | 8270C |
| 2,4-Dichlorophenol | $<341$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<341$ | jrw | SW | 8270 C |
| 2,4-Dimethylphenol | $<341$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<341$ | jrw | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<341$ | ug/kg dw | 08/08/2001 | 944 | 1449 | <341 | jrw | SW | 8270 C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin) 08/23/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 697719 |  | SBI002 : HM | 135 | S060 | 70:428 |  |  |  | 08/ | 2 /2001 | 14:30 |


| .-Methylphenol | $<341$ |  | ug/kg dw | 08/08/2001 | '944 | 1449 | <341 | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| meta \& para-Methylphenol | $<341$ |  | ug/kg dw | 08/08/2001 | 944 | 1449 | <341 | jrw | SW | 8270C |
| 2-Nitrophenol | $<341$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | <341 | jrw | SW | 8270C |
| Pentachlorophenol | $<341$ |  | ug/kg dw | 08/08/2001 | 944 | 1449 | <341 | jrw | SW | 82700 |
| Phenol | $<341$ |  | ug/kg dw | 08/08/2001 | 944 | 1449 | <341 | jrw | SW | 8270C |
| 2,4,5-Trichlorophenol | $<341$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | <341 | jrw | SW | 8270C |
| 2,4,6-Trichlorophenol | $<341$ |  | ug/kg dw | 08/08/2001 | 944 | 1449 | <341 | jrw | SW | 8270 C |
| Surrogate: d6-Phenol | 66 |  | \% | 08/08/2001 | 944 | 1449 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorophenol | 67 |  | 8 | 08/08/2001 | 944 | 1449 |  | jrw | SW | 8270C |
| Surrogate: Tribromophenol | 53 |  | \% | 08/08/2001 | 944 | 1449 |  | jrw | SW | 8270C |
| TPH - DRO Non-Aqueous | $<10$ | msdr | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 195 | 280 | $<10$ | meb | SW | 8015M |
| TPH - FTIR Non-aq | $<50$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/15/2001 | 591 | 623 | $<50$ | 260 |  |  |

## SAMPLE NO. <br> SAMPLE DESCRIPTION <br> SBIO02:HMW2S:S020020:428

| Dry Weight | 73.6 | \% | 08/14/2001 |  | 1476 |  | mhg | SM | 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/16/2001 |  | 1229 | Complete | emd | SW | 6010B |
| Arsenic, ICP | 25.0 | $\mathrm{mg} / \mathrm{kg} \mathrm{d} w$ | 08/16/2001 | 900 | 2956 | <4.3 | emd | SW | 6010B |
| Barium, ICP | 58.6 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2887 | $<0.88$ | emd | SW | 6010B |
| Cadmium, ICP | <1.3 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2869 | $<1.3$ | ema | SW | 6010B |
| Chromium, ICP | 5.3 | $\mathrm{mg} / \mathrm{kg}$ dw | 08/16/2001 | 900 | 2857 | <1.8 | emd | sw | 6010B |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>\section*{Job Number: 01.13924}<br>Client Project ID: South Bend Indiana SBIO02

08/23/2001

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting | Analyst |  |
| Number | Limit | Initials Method Reference |  |  |  |  |  |

SAMPLE DESCRIPTION
SBI002:HMW2S:S020020:428

SAMPLE NO. 697720

DATE/TIME TAKEN 08/02/2001 09:40

| Lead, ICP | 38.5 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2858 | $<3.5$ | emd | SW | 6010B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mercury, CVAA | 0.270 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 604 | 616 | $<0.01$ | epk | SW | 7471A |
| Selenium, ICP | $<4.3$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2936 | <4.3 | emd | Sw | 6010B |
| Silver, ICP | <1.8 | $m \mathrm{~m} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2889 | $<1.8$ | emd | SW | 60108 |
| ICP Digestion, Nonaqueous | Complete |  | 08/13/2001 | 900 |  | Complete | mrt | Sw | 30508 |
| Mercury Digestion, Non-Aq | Complete |  | 08/11/2001 | 604 |  | Complete | epk | Sw | 7471A |
| Prep, TPH 418.1 Nonaq | Complete |  | 08/14/2001 | 591 |  | Complete | 260 | SW | 9071 |
| VOLATILE COMPOUNDS-8260 Non-Aq |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/07/2001 |  | 1450 | Complete | jxc |  |  |
| Acetone | $<136$ | ug/kg dw | 08/07/2001 |  | 1450 | $<136$ | jxc | SW | 8260A |
| Benzene | <6.8 | ug/kg dw | 08/07/2001 |  | 1450 | <6.8 | jxc | SW | 8260A |
| tert-Butylbenzene | <6.8 | ug/kg dw | 08/07/2001 |  | 1450 | <6.8 | jxc | SW | 8260A |
| sec-Butylbenzene | $<6.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <6.8 | jxc | Sw | 8260A |
| n -Butylbenzene | $<6.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<6.8$ | jxc | SW | 8260A |
| Bromochloromethane | $<6.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<6.8$ | jxc | SW | 8260A |
| Bromodichloromethane | $<6.8$ | ug/kg dw | 08/07/2001 |  | 1450 | $<6.8$ | jxc | SW | 8260A |
| Bromoform | <6.8 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <6.8 | jxc | SW | 8260A |
| Bromobenzene | $<6.8$ | ug/kg dw | 08/07/2001 |  | 1450 | $<6.8$ | jxc | SW | 8260A |
| 2-Butanone (MEK) | $<68$ | ug/kg dw | 08/07/2001 |  | 1450 | $<68$ | jxc | SW | 8260A |
| Carbon disulfide | <6.8 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <6.8 | jxc | SW | 8260A |
| Carbon tetrachloride | $<6.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <6.8 | jxc | SW | 8260A |
| Chlorobenzene | $<6.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<6.8$ | jxc | SW | 8260A |
| Chloroethane | $<13.6$ | $u g / \mathrm{kg}$ dw | 08/07/2001 |  | 1450 | $<13.6$ | jxc | SW | 8260A |
| 2-Chlorotoluene | <6.8 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <6.8 | jxc | SW | 8260A |

# ANALYTICAL REPORT 

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016

08/23/2001

Job Number: 01.13924
Client Project ID: South Bend Indiana SBIO02


## SAMPLE NO. SAMPLE DESCRIPTION 697720 SBI002:HMW2S:S020020:428

DATE/TIME TAKEN 08/02/2001 09:40

| --Chlorotoluene | $<6.8$ | ug/kg dw | 08/07/2001 |  | 1450 | $<6.8$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| chloroform | $<6.8$ | ug/kg dw | 08/07/2001 |  | 1450 | <6.8 | jxc | SW | 8260A |
| Chloromethane | $<13.6$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<13.6$ | jxc | SW | 8260A |
| Dibromochloromethane | $<6.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/07/2001 |  | 1450 | $<6.8$ | jxc | SW | 8260A |
| Dibromomethane | $<6.8$ | $u g / \mathrm{kg}$ dw | 08/07/2001 |  | 1450 | $<6.8$ | jxc | SW | 8260A |
| Dichlorodifluoromethane | $<6.8$ | ug/kg dw | 08/07/2001 |  | 1450 | $<6.8$ | jxc | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<6.8$ | $u g / \mathrm{kg}$ dw | 08/07/2001 |  | 1450 | $<6.8$ | jxc | SW | 8260A |
| 1,2-Dichlorobenzene | $<6.8$ | $u g / \mathrm{kg}$ dw | 08/07/2001 |  | 1450 | <6.8 | jxc | SW | 8260A |
| 1,3-Dichlorobenzene | $<6.8$ | ug/kg dw | 08/07/2001 | 1 | 1450 | <6.8 | jxc | SW | 8260A |
| 1,4-Dichlorobenzene | <6.8 | ug/kg dw | 08/07/2001 |  | 1450 | <6.8 | jxc | SW | 8260A |
| 1,1-Dichloroethane | $<6.8$ | ug/kg dw | 08/07/2001 |  | 1450 | <6.8 | jxc | SW | 8260A |
| 1,2-Dichloroethane | $<6.8$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <6.8 | jxc | SW | 8260A |
| 1,1-Dichloroethene | $<6.8$ | ug/kg dw | 08/07/2001 |  | 1450 | <6.8 | jxc | SW | 8260A |
| cis-1,2-Dichloroethene | $<6.8$ | ug/kg dw | 08/07/2001 |  | 1450 | $<6.8$ | jxc | SW | 8260A |
| trans-1,2-Dichloroethene | $<6.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <6.8 | jxe | SW | 8260A |
| 1,2-Dichloropropane | $<6.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <6.8 | jxc | SW | 8260A |
| 1.3-Dichloropropane | $<6.8$ | ug/kg dw | 08/07/2001 |  | 1450 | $<6.8$ | jxc | SW | 8260A |
| 2,2-Dichloropropane | $<6.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<6.8$ | jxc | SW | 8260A |
| 1,1-Dichloropropene | $<6.8$ | ug/kg dw | 08/07/2001 |  | 1450 | <6.8 | jxc | Sw | 8260A |
| cis-1,3-Dichloropropene | $<6.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <6.8 | jxc | SW | B260A |
| trans-1,3-Dichloropropene | $<6.8$ | ug/kg dw | 08/07/2001 |  | 1450 | $<6.8$ | jxc | SW | 8260A |
| Ethylbenzene | $<6.8$ | ug/kg dw | 08/07/2001 |  | 1450 | $<6.8$ | jxc | SW | 8260A |
| Hexachlorobutadiene | $<6.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <6.8 | jxc | SW | 8260A |
| n -Hexane | $<27.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<27.2$ | jxc | SW | 8260A |
| 2 -Hexanone | $<67.9$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<67.9$ | jxc | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd. Dublin, OH 43016

08/23/2001

Job Number: 01.13924

## Client Project ID: South Bend Indiana SBI002



DATE/TIME TAKEN 08/02/2001 09:40

| Isopropylbenzene (Cumene) | $<6.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2002 | 1450 | <6.8 | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| p-Isopropyltoluene | $<6.8$ | ug/kg dw | 08/07/2001 | 1450 | <6.8 | jxc | SW | 8260A |
| Bromomethane | $<13.6$ | ug/kg dw | 08/07/2001 | 1450 | $<13.6$ | jxc | SW | 8260A |
| Methylene Chloride | $<13.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<13.6$ | jxc | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<6.8$ | ug/kg dw | 08/07/2001 | 1450 | <6.8 | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<67.9$ | ug/kg dw | 08/07/2001 | 1450 | $<67.9$ | jxc | SW | 8260A |
| n-Propylbenzene | <6.8 | ug/kg dw | 08/07/2001 | 1450 | <6.8 | jxc | SW | 8260A |
| Styrene | $<6.8$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<6.8$ | jxc | SW | 8260A |
| Naphthalene | $<6.8$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | <6.8 | jxc | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<6.8$ | ug/kg dw | 08/07/2001 | 1450 | $<6.8$ | jxc | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<6.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<6.8$ | jxc | SW | 8260A |
| Tetrachloroethene | $<6.8$ | ug/kg dw | 08/07/2001 | 1450 | $<6.8$ | jxc | SW | 8260A |
| Toluene | 30.2 | ug/kg dw | 08/07/2001 | 1450 | $<6.8$ | jxc | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<6.8$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<6.8$ | jxc | SW | 8260A |
| 1,1,1-Trichloroethane | <6.8 | ug/kg dw | 08/07/2001 | 1450 | $<6.8$ | jxc | SW | 8260A |
| 1,1,2-Trichloroethane | $<6.8$ | ug/kg dw | 08/07/2001 | 1450 | $<6.8$ | jxc | SW | 8260A |
| Trichloroethene | <6.8 | ug/kg dw | 08/07/2001 | 1450 | $<6.8$ | jxc | SW | 8260A |
| Trichlorofluoromethane | $<6.8$ | ug/kg dw | 08/07/2001 | 1450 | $<6.8$ | jxc | Sw | 8260A |
| 1,2,3-Trichloropropane | $<6.8$ | ug/kg dw | 08/07/2001 | 1450 | $<6.8$ | jxc | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<6.8$ | ug/kg dw | 08/07/2001 | 1450 | $<6.8$ | jxc | SW | 8260A |
| 1,3,5-Trimethylbenzene | <6.8 | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | <6.8 | jxc | SW | 8260A |
| Vinyl Acetate | $<6.8$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <6.8 | jxc | SW | 8260A |
| Vinyl Chloride | $<2.7$ | ug/kg dw | 08/07/2001 | 1450 | $<2.7$ | jxc | SW | 8260A |
| Xylenes, Total | $<6.8$ | ug/kg dw | 08/07/2001 | 1450 | <6.8 | jxc | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 95 | * | 08/07/2001 | 1450 |  | jxc | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002

08/23/2001


SAMPLE NO. SAMPLE DESCRIPTION 697720

SBI002:HMW2S : S020020:428

DATE/TIME TAKEN 08/02/2001 09:40

| Dibromofluoromethane (surr) | 94 | 8 | 08/07/2001 |  | 1450 |  | jxc | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ds-Toluene (surr) | 95 | 8 | 08/07/2001 |  | 1450 |  | jxc | SW 8260A |
| Bromofluorobenzene (surr) | 94 | 8 | 08/07/2001 |  | 1450 |  | jxc | SW 8260A |
| TPH - GRO (Non-Aqueous) | $<7$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 245 | $<7$ | meb | SW 8015M |
| TPH - FTIR Non-aq | $<50$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/15/2001 | 591 | 623 | <50 | 260 | 418.1 |

SAMPLE NO. SAMPLE DESCRIPTION
DATE/TIME TAKEN
697721
SBIO02:SB1:S160170:428

| Dry Weight | 87.4 | 4 | 08/14/2001 |  | 1476 |  | ming | SM 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prep, PCBs Non-Aq 8082 | Complete |  | 08/09/2001 | 100 |  | Complete | mlr | SW 3540C; SW 3545 |
| Prep, BNA Non-Aq | Complete |  | 08/07/2001 | 944 |  | Complete | mlr | ERA 625; SW 3540C; SW 3545 |
| Prep. TPH 418.1 Nonaq | Complete |  | 08/14/2001 | 591 |  | Complete | 260 | SW 9071 |
| VOLATILE COMPOUNDS-8260 Non-Aq |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/07/2001 |  | 1450 | Complete | jxc |  |
| Acetone | $<114$ | ug/kg dw | 08/07/2001 |  | 1450 | $<114$ | jxc | SW 8260A |
| Benzene | $<5.7$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.7$ | jxc | SW 8260A |
| tert-Butylbenzene | $<5.7$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.7$ | jxc | SW 8260A |
| sec-Butylbenzene | $<5.7$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.7$ | jxc | SW 8260A |
| n-Butylbenzene | $<5.7$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.7$ | jxc | SW 8260A |
| Bromochloromethane | <5.7 | ug/kg dw | 08/07/2001 |  | 1450 | <5.7 | jxc | SW 8260A |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
08/23/2001

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION
697721 SBI002:SB1:S160170:428
DATE/TIME TAKEN 08/03/2001 09:30

| Bromodichloromethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bromoform | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | sw | 8260A |
| Bromobenzene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 2-Butanone (MEK) | $<57$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<57$ | jxc | SW | 8260A |
| Carbon disulfide | $<5.7$ | $u g / \mathrm{kg} d w$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Carbon tetrachloride | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Chlorobenzene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Chloroethane | $<11.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<11.4$ | jxc | SW | 8260A |
| 2-Chlorotoluene | <5.7 | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 4-Chlorotoluene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | <5.7 | jxe | Sw | 8260A |
| Chloroform | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Chloromethane | $<11.4$ | ug/kg dw | 08/07/2001 | 1450 | $<11.4$ | jxc | SW | 8260A |
| Dibromochloromethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Dibromomethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | <5.7 | jxc | SW | 8260A |
| Dichlorodifluoromethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | <5.7 | jxc | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.7$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxe | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,1-Dichloroethane | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,2-Dichloroethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,1-Dichloroethene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW. | 8260A |
| cis-1,2-Dichloroethene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| trans-1,2-Dichloroethene | <5.7 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,2-Dichloropropane | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) 08/23/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 697721

DATE/TIME TAKEN 08/03/2001 09:30

| -, 3-Dichloropropane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,2-Dichloropropane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,1-Dichloropropene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Cis-1,3-Dichloropropene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Ethylbenzene | $<5.7$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Hexachlorobutadiene | $<5.7$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.7 | jxc | SW | 8260A |
| n -Hexane | $<22.9$ | ug/kg dw | 08/07/2001 | 1450 | $<22.9$ | jxc | SW | 8260A |
| 2-Hexanone | $<57.2$ | ug/kg dw | 08/07/2001 | 1450 | $<57.2$ | jxc | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| p-Isopropyltoluene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Bromomethane | $<11.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<11.4$ | jxc | SW | 8260A |
| Methylene Chloride | $<11.4$ | ug/kg dw | 08/07/2001. | 1450 | $<11.4$ | jxc | SW | 8260A |
| Methyl t-butyl ether (MIBE) | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.7 | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<57.2$ | ug/kg dw | 08/07/2001 | 1450 | $<57.2$ | jxc | SW | 8260A |
| n-Propylbenzene | $<5.7$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Styrene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Naphthalene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Tetrachloroethene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | <5.7 | jxc | SW | 8260A |
| Toluene | 21.6 | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8250A |
| 1,2,4-Trichlorobenzene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | <5.7 | jxc | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.13924<br>\section*{Client Project ID: South Bend Indiana SBI002}

|  | Prep Run |
| :--- | :--- |
| Date | Batch Batch Reporting Analyst |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 697721 | SBI002:SBI:S160170:428 | $08 / 03 / 2001$ 09:30 |


| Trichloroethene | $<5.7$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.7$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Trichlorofluoromethane | <5.7 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/07/2001 |  | 1450 | <5.7 | jxc | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <5.7 | jxc | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.7$ | ug/ kg dw | 08/07/2001 |  | 1450 | <5.7 | jxc | SW | 8260A |
| 1,3,5-Trimethylbenzene | <5.7 | ug/kg dw | 08/07/2001 |  | 1450 | $<5.7$ | jxc | SW | 8260A |
| Vinyl Acetate | $<5.7$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<5.7$ | jxc | SW | 8260A |
| Vinyl Chloride | $<2.3$ | ug/kg dw | 08/07/2001 |  | 1450 | $<2.3$ | jxc | SW | 8260A |
| Xylenes, Total | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<5.7$ | jxc | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 94 | $\%$ | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| Dibromofluoromethane (surr) | 92 | 8 | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| d8-Toluene (surr) | 92 | 8 | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| Bromofluorobenzene (surr) | 92 | 8 | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| BASE NEUT. COMPS.-8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | 8270 C |
| Acenaphthylene | $<378$ | ug/kg dw | 08/08/2001 | 944 | 1449 | <378 | jTw | SW | 8270C |
| Anthracene | $<378$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | 8270 C |
| Benzo (a)anthracene | <378 | ug/kg dw | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | 8270 C |
| Benzo (b) fluoranthene | $<378$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | 8270 C |
| Benzo(k) fluoranthene | <378 | ug/kg dw | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | 8270 C |
| Benzo(a) pyrene | $<189$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<189$ | jrw | SW | 8270C |
| Benzyl alcohol | $<378$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | 8270C |
| Benzyl butyl phthalate | $<378$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<378$ | jrw | sw | 8270C |
| Eis (2-chloroethyl) ether | <378 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | 8270c |
| Bis (2-chloroethoxy) methane | <378 | ug/kg dw | 08/08/2001 | 944 | 1449 | <378 | jrw | SW | 8270C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

## Job Number: 01.13924

Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 697721

SAMPLE DESCRIPTION
SBI002:SB1:S160170:428

DATE/TIME TAKEN 08/03/2001 09:30

| Bis (2-ethylhexyl) phthalate | $<378$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,2'-oxybis (1-Chloropropane) | $<378$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<378$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | 8270C |
| 4-Chloroaniline | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | <378 | jrw | SW | 82700 |
| 2-Chloronaphthalene | $<378$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | 8270 C |
| Chrysene | $<378$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | <378 | jrw | SW | 82700 |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<189$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<189$ | jrw | SW | 8270 C |
| Dibenzofuran | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | 8270 C |
| 1,2-Dichlorobenzene | $<378$ | ug/kg dw | 08/08/2001 | 944 | 1449 | <378 | jrw | SW | 8270 C |
| 1,3-Dichlorobenzene | $<378$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | 8270C |
| 1,4-Dichlorobenzene | $<378$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<755$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<755$ | jrw | SW | 8270 C |
| Diethyl phthalate | $<378$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | 8270C |
| Dimethyl phthalate | $<378$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | 82700 |
| 2,4-Dinitrotoluene | $<378$ | $u \mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | $8270{ }^{\circ}$ |
| 2,6-Dinitrotoluene | $<378$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | 8270 C |
| Di-n-octylphthalate | $<378$ | ug/kg dw | 08/08/2001 | 944 | 1449 | <378 | jrw | SW | 8270C |
| Fluoranthene | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | 8270 C |
| Fluorene | $<378$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | 8270 C |
| Hexachlorobenzene | $<378$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<378$ | jıw | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<378$ | ug/kg dw | 08/08/2001 | 944 | 1449 | <378 | JTW | SW | 82700 |
| Hexachlorocyclopentadiene | $<755$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<755$ | jrw | SW | $8270{ }^{\circ}$ |
| Hexachloroethane | $<378$ | ug/kg dw | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | 8270 C |
| Indeno (1, 2,3-cd) pyrene | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | 8270 C |
| Isophorone | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 944 | 1449 | $<378$ | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/23/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13924

## Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst <br> Initials | Method R | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | SRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 697721 |  | SBI002:SB | : S1 | 0170 | 28 |  |  |  | 08/ | $3 / 2001$ | 1 09:30 |



## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/23/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 697721

SBI002:SB1:S160170:428

DATE/TIME TAKEN 08/03/2001 09:30

| surrogate: 2-Eluorophenol | 80 | $\%$ | 08/08/2001 | 944 | 1449 |  | jrw | SW 8270C |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: Tribromophenol | 71 | \% | 08/08/2001 | 944 | 1449 |  | jrw | SW 8270C |  |
| PCB's M 8082, Non-Aq |  |  |  |  |  |  |  |  |  |
| Aroclor 1016 | $<0.57$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 100 | 184 | $<0.57$ | mrb | SW 8082 |  |
| Aroclor 1221 | $<0.57$ | $\mathrm{mg} / \mathrm{kg} \mathrm{d} w$ | 08/16/2001 | 100 | 184 | $<0.57$ | mrb | SW 8082 |  |
| Aroclor 1232 | $<0.57$ | $m g / \mathrm{kg}$ dw | 08/16/2001 | 100 | 184 | $<0.57$ | mrb | SW 8082 |  |
| Aroclor 1242 | $<0.57$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 100 | 184 | $<0.57$ | mrb | SW 8082 |  |
| Aroclor 1248 | $<0.57$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 100 | 184 | $<0.57$ | mrb | SW 8082 |  |
| Aroclor 1254 | $<0.57$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 100 | 184 | $<0.57$ | mrb | SW 8082 |  |
| Aroclor 1260 | $<0.57$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 100 | 184 | $<0.57$ | mrb | SW 8082 | . |
| Surrogate:TCX/DCB | 70/82 | 8 | 08/16/2001 | 100 | 184 |  | mrb | SW 8082 |  |
| TPH - FTIR Non-aq | $<50$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/15/2001 | 591 | 623 | $<50$ | 260 | 418.1 |  |
| SAMPLE NO. | SAMPLE DESCRIPTION |  |  |  |  |  | DATE/TIME TAKEN |  |  |
| 697722 | SBI002 : HMW6S : S040060:505 |  |  |  |  |  | 08/02/2001 15:45 |  |  |


| Dry Weight | 90.6 | \% | 08/14/2001 |  | 1476 |  | mhg | SM | 2540 G |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/16/2001 |  | 1229 | Complete | emd | SW | 6010B |
| Arsenic, ICP | <3.4 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 898 | 2956 | $<3.4$ | emd | SW | 6010B |
| Barium, ICP | 141 | mg/kg dw | 08/16/2001 | 898 | 2887 | $<0.70$ | emd | SW | 6010B |
| Cadmium, ICP | $<1.0$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 898 | 2869 | $<1.0$ | emd | SW | 6010B |
| Chromium, ICP | 57.8 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 898 | 2857 | <1.4 | emd | SW | 6010B |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 697722

SBI002:HMW6S:S040060:505

08/23/2001

Limit

Initials Method Reference
DATE/TIME TAKEN 08/02/2001 15:45

| Lead, ICP | 77.6 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 898 | 2858 | <2.8 | emd | SW 6010B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mercury, CVAA | 0.036 | mg/kg dw | 08/13/2001 | 604 | 616 | $<0.009$ | epk | SW 7471A |
| Selenium, ICP | $<3.4$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 898 | 2936 | <3.4 | emd | SW 6010b |
| Silver, ICP | $<1.4$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 898 | 2889 | <1. 4 | emd | SW 6010B |
| ICP Digestion, Nonaqueous | Complete |  | 08/08/2001 | 898 |  | Complete | mrt | SW 3050B |
| Mercury Digestion, Non-Aq | Complete |  | 08/11/2001 | 604 |  | Complete | epk | SW 7471A |
| Prep, PCBs Non-Aq 8082 | Complete |  | 08/09/2001 | 100 |  | Complete | mlr | SW 3540C; SW 3545 |
| Prep, BNA Non-Aq | Complete |  | 08/07/2001 | 944 |  | Complete | mlr | EPA 625; SW 3540C; SW 3545 |
| VOLATILE COMPOUNDS-8260 Non-Aq |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/07/2001 |  | 1450 | Complete | jxc |  |
| Acetone | 205 | ug/kg dw | 08/07/2001 |  | 1450 | $<110$ | jxc | SW 8260A |
| Benzene | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<5.5$ | jxc | SW 8260A |
| tert-Butylbenzene | <5.5 | ug/kg dw | 08/07/2001 |  | 1450 | <5.5 | jxc | SW 8260A |
| sec-Butylbenzene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<5.5$ | jxc | SW 8260A |
| n-Butylbenzene | <5.5 | ug/kg dw | 08/07/2001 |  | 1450 | <5.5 | jxc | SW 8260A |
| Bromochloromethane | < 5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <5.5 | jxc | SW 8260A |
| Bromodichloromethane | $<5.5$ | ug/kg dw | 08/07/2001 |  | 1450 | <5.5 | jxc | SW 8260A |
| Bromoform | $<5.5$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.5$ | jxc | SW 8260A |
| Bromobenzene | $<5.5$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.5$ | jxc | SW 8260A |
| 2-Butanone (MEK) | $<55$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <55 | jxc | SW 8260A |
| Carbon disulfide | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <5.5 | jxc | SW 8260A |
| Carbon tetrachloride | <5.5 | ug/kg dw | 08/07/2001 |  | 1450 | <5.5 | jxc | SW 8260A |
| Chlorobenzene | <5.5 | ug/kg dw | 08/07/2001 |  | 1450 | $<5.5$ | jxe | SW 8260A |
| Chloroethane | $<11.0$ | ug/kg dw | 08/07/2001 |  | 1450 | <11.0 | jxc | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |

SAMPLE DESCRTPTTON 697722

SBI002:HMW6S:S040060:505

| - Ethlorotoluene | $<5.5$ | ug/kg dw | 08/07/2001 | 1450 | < 5.5 | jxc | Sw | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Chlorotoluene | $<5.5$ | ug/kg dw | 08/07/2001 | 1450 | <5.5 | jxc | SW | 8260A |
| Chloroform | <5.5 | ug/kg dw | 08/07/2001 | 1450 | $<5.5$ | jxc | SW | 8260A |
| Chloromethane | <11.0 | ug/kg dw | 08/07/2001 | 1450 | $<11.0$ | jxc | SW | 8260A |
| Dibromochloromethane | $<5.5$ | ug/kg dw | 08/07/2001 | 1450 | <5.5 | jxc | SW | 8260A |
| Dibromomethane | $<5.5$ | ug/kg dw | 08/07/2001 | 1450 | < 5.5 | jxc | SW | 8260A |
| Dichlorodifluoromethane | $<5.5$ | ug/kg dw | 08/07/2001 | 1450 | $<5.5$ | jxc | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | < 5.5 | ug/kg dw | 08/07/2001 | 1450 | <5.5 | jxc | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.5$ | ug/kg dw | 08/07/2001 | 1450 | $<5.5$ | jxc | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.5$ | ug/kg dw | 08/07/2001 | 1450 | $<5.5$ | jxc | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.5$ | ug/kg dw | 08/07/2001 | 1450 | <5.5 | jxc | SW | 8260A |
| 1,1-Dichloroethane | $<5.5$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/07/2001 | 1450 | <5.5 | jxc | SW | 8260A |
| 1,2-Dichloroethane | $<5.5$ | ug/kg dw | 08/07/2001 | 1450 | <5.5 | jxc | SW | 8260A |
| 1,1-Dichloroethene | $<5.5$ | ug/kg dw | 08/07/2001 | 1450 | <5.5 | jxc | SW | 8260A |
| Cis-1,2-Dichloroethene | $<5.5$ | ug/kg dw | 08/07/2001 | 1450 | $<5.5$ | jxe | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.5$ | jxc | SW | 8260A |
| 1,2-Dichloropropane | $<5.5$ | ug/kg dw | 08/07/2001 | 1450 | $<5.5$ | jxc | Sw | 8260A |
| 1,3-Dichloropropane | <5.5 | ug/kg dw | 08/07/2001 | 1450 | $<5.5$ | jxc | SW | 8260A |
| 2,2-Dichloropropane | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.5 | jxc | SW | 8260A |
| 1,1-Dichloropropene | <5.5 | ug/kg dw | 08/07/2001 | 1450 | $<5.5$ | jxc | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.5$ | jxc | SW | 8260A |
| trans-1,3-Dichloropropene | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.5$ | jxc | SW | 8260A |
| Ethylbenzene | 5.6 | ug/kg dw | 08/07/2001 | 1450 | $<5.5$ | jxc | Sw | 8260A |
| Hexachlorobutadiene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.5 | jxc | SW | 8260A |
| $n$-Hexane | $<22.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<22.1$ | jxc | sw | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/23/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
697722

DATE/TIME TAKEN 08/02/2001 15:45

| 2-Hexanone | $<55.2$ | $u g / \mathrm{kg} \mathrm{d} w$ | 08/07/2001 | 1450 | $<55.2$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Isopropylbenzene (Cumene) | $<5.5$ | ug/kg dw | 08/07/2001 | 1450 | $<5.5$ | jxc | SW | 8260A |
| p-Isopropyltoluene | 13.1 | ug/kg dw | 08/07/2001 | 1450 | <5.5 | jxc | SW | 8260A |
| Bromomethane | $<11.0$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<11.0$ | jxc | SW | 8260A |
| Methylene Chloride | $<11.0$ | ug/kg dw | 08/07/2001 | 1450 | $<11.0$ | jxc | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.5$ | ug/kg dw | 08/07/2001 | 1450 | <5.5 | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<55.2$ | ug/kg dw | 08/07/2001 | 1450 | $<55.2$ | jxc | SW | 8260A |
| $n$-Propylbenzene | 6.2 | ug/kg dw | 08/07/2001 | 1450 | < 5.5 | jxc | SW | 8260A |
| Styrene | $<5.5$ | ug/kg dw | 08/07/2001 | 1450 | < 5.5 | jxc | SW | 8260A |
| Naphthalene | 16.1 | ug/kg dw | 08/07/2001 | 1450 | < 5.5 | jxc | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.5$ | ug/kg dw | 08/07/2001 | 1450 | $<5.5$ | jxc | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | <5.5 | ug/kg dw | 08/07/2001 | 1450 | < 5.5 | jxc | SW | 8260A |
| Tetrachloroethene | <5.5 | ug/kg dw | 08/07/2001 | 1450 | $<5.5$ | jxe | SW | 8260A |
| Toluene | 12.7 | ug/kg dw | 08/07/2001 | 1450 | $<5.5$ | jxc | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.5$ | jxc | SW | 8260A |
| 1,1,1-Trichloroethane | <5.5 | ug/kg dw | 08/07/2001 | 1450 | $<5.5$ | jxc | SW | 8260A |
| 1,1,2-Trichloroethane | < 5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | < 5.5 | jxc | SW | 8260A |
| Trichloroethene | <5.5 | ug/kg dw | 08/07/2001 | 1450 | <5.5 | jxc | SW | 8260A |
| Trichlorofluoromethane | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.5 | jxc | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.5$ | ug/kg dw | 08/07/2001 | 1450 | $<5.5$ | jxc | SW | 8260A |
| 1,2,4-Trimethylbenzene | 51.7 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.5$ | jxc | SW | 8260A |
| 1,3,5-Trimethylbenzene | 28.0 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.5 | jxc | SW | 8260A |
| Vinyl Acetate | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.5$ | jxc | SW | 8260A |
| Vinyl Chloride | <2.2 | ug/kg dw | 08/07/2001 | 1450 | <2.2 | jxc | SW | 8260A |
| Xylenes, Total | 39.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.5$ | jxc | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/23/2001

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting | Analyst |  |
| Rumber | Number | Limit | Initials Method Reference |  |  |  |  |

## SAMPLE NO. 697722

SAMPLE DESCRIPTION
SBIOO2:HMW6S:S040060:505

DATE/TIME TAKEN 08/02/2001 15:45
d4-1,2-Dichloroethane (surr)
Dibromofluoromethane (surr)
d8-Toluene (surr)
Bromofluorobenzene (surr)
BASE NEUT. COMPS. -8270 Non-aq


| $<7,280$ | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $<7,280$ | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW 8270C |
| $<7,280$ | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW 8270C |
| <7,280 | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7.280$ | jrw | SW 8270C |
| <7,280 | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | Sw 8270C |
| $<7,280$ | ug/kg dw | 08/10/2001 | 944 | 1454 | <7,280 | jrw | SW 8270C |
| $<3,640$ | ug/kg dw | 08/10/2001 | 944 | 1454 | <3,640 | jrw | SW 8270C |
| <7,280 | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7.280$ | jrw | SW 8270C |
| $<7,280$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 944 | 1454 | $<7.280$ | jrw | SW 8270C |
| <7,280 | $u g / \mathrm{kg}$ dw | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW 8270C |
| <7,280 | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7.280$ | jrw | SW 8270C |
| $<7.280$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 944 | 1454 | $<7.280$ | jrw | SW 8270C |
| $<7.280$ | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7.280$ | jrw | SW 8270C |
| <7,280 | ug/kg dw | 08/10/2001 | 944 | 1454 | <7,280 | jrw | SW 8270C |
| <7,280 | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW 8270C |
| <7,280 | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW 8270C |
| <7,280 | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW 8270C |
| $<3,640$ | ug/kg dw | 08/10/2001 | 944 | 1454 | $<3,640$ | jrw | SW 8270C |
| <7,280 | ug/kg dw | 08/10/2001 | 944 | 1454 | <7,280 | jrw | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016

$08 / 23 / 2001$

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION 697722 <br> SBI002:HMW6S:S040060:505

DATE/TIME TAKEN 08/02/2001 15:45

| 1,2-Dichlorobenzene | <7,280 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 944 | 1454. | $<7,280$ | jrw | Sw | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,3-Dichlorobenzene | $<7,280$ | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7,280$ | jxw | SW | 8270C |
| 1,4-Dichlorobenzene | $<7.280$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/10/2001 | 944 | 1454 | <7,280 | jrw | sw | 8270C |
| 3,3'-Dichlorobenzidine | <14,600 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 944 | 1454 | $<14.600$ | jrw | SW | 8270C |
| Diethyl phthalate | $<7.280$ | ug/kg dw | 08/10/2001 | 944 | 1454 | <7,280 | jrw | SW | 8270C |
| Dimethyl phthalate | <7,280 | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW | 8270C |
| 2,4-Dinitrotoluene | <7,280 | ug/kg dw | 08/10/2001 | 944 | 1454 | <7,280 | jrw | SW | 8270C |
| 2,6-Dinitrotoluene | $<7,280$ | ug/kg dw | 08/10/2001 | 944 | 1454 | <7,280 | jrw | SW | 8270C |
| Di-n-octylphthalate | $<7,280$ | $u g / \mathrm{kg}$ dw | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW | 8270C |
| Fluoranthene | <7,280 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW | 8270C |
| Fluorene | $<7.280$ | ug/kg dw | 08/10/2001 | 944 | 1454 | <7,280 | jrw | Sw | 8270C |
| Hexachlorobenzene | $<7.280$ | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7.280$ | jrw | SW | 8270C |
| Hexachloro-1,3-butadiene | $<7,280$ | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW | $8270{ }^{\circ}$ |
| Hexachlorocyclopentadiene | <14,600 | ug/kg dw | 08/10/2001 | 944 | 1454 | <14,600 | jrw | SW | 8270C |
| Hexachloroethane | <7,280 | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7.280$ | jrw | SW | 8270C |
| Indeno (1, 2, 3-cd) pyrene | <7,280 | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW | 8270C |
| Isophorone | $<7,280$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW | 8270C |
| Naphthalene | $<7,280$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW | 8270C |
| Nitrobenzene | <7,280 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 944 | 1454 | <7,280 | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<7,280$ | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7,290$ | jrw | SW | 8270c |
| Phenanthrene | <7,280 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW | 8270 C |
| Pyrene | $<7.280$ | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<7,280$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 944 | 1454 | <7,280 | jrw | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | DL | \% | 08/10/2001 | 944 | 1454 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | DL | \% | 08/10/2001 | 944 | 1454 |  | jrw | SW | 8270 C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
08/23/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBIOO2

|  |  | Regult | Flag | -Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst <br> Initials | Method R | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | PTIO |  |  |  |  | DAT | /TIME | TAKEN |
| 697722 |  | SBI002:HM | N6S | S040 | : 505 |  |  |  | 08/ | 2/2001 | 1 15:45 |


| Surrogate: d14-Terphenyl | DL |  | 4 | 08/10/2001 | 944 | 1454 |  | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <36,400 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 944 | 1454 | <36.400 | jrw | SW 8270C |
| 4-Chloro-3-methylphenol | <7,280 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW 8270C |
| 2-Chlorophenol | <7,280 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW 8270C |
| 2.4-Dichlorophenol | $<7,280$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 944 | 1454 | <7,280 | jrw | SW 8270C |
| 2,4-Dimethylphenol | <7,280 |  | ug/kg dw | 08/10/2001 | 944 | 1454 | <7,280 | jrw | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<7,280$ |  | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW 8270C |
| 2-Methylphenol | <7,280 |  | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW 8270C |
| meta \& para-Methylphenol | $<7,280$ |  | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW 8270C |
| 2-Nitrophenol | $<7,280$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW 8270C |
| Pentachlorophenol | $<7,280$ |  | ug/kg dw | 08/10/2001 | 944 | 1454 | <7,280 | jrw | SW 8270C |
| Phenol | $<7,280$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 944 | 1454 | <7,280 | jrw | SW 8270C |
| 2,4,5-Trichlorophenol | $<7.280$ |  | ug/kg dw | 08/10/2001 | 944 | 1454 | <7,280 | jxw | SW 8270C |
| 2,4,6-Trichlorophenol | $<7,280$ |  | ug/kg dw | 08/10/2001 | 944 | 1454 | $<7,280$ | jrw | SW 8270C |
| Surrogate: d6-Phenol | DL |  | \% | 08/10/2001 | 944 | 1454 |  | jrw | SW 8270C |
| Surrogate: 2-Fluorophenol | DL |  | \% | 08/10/2001 | 944 | 1454 |  | jrw | SW 8270C |
| Surrogate: Tribromophenol | 220 | note | $\%$ | 08/10/2001 | 944 | 1454 |  | jrw | SW 8270C |
| PCB's M 8082, Non-Aq |  |  |  |  |  |  |  |  |  |
| Aroclor 1016 | $<0.55$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{d} w$ | 08/10/2001 | 100 | 181 | $<0.55$ | mrb | SW 8082 |
| Aroclor 1221 | $<0.55$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 100 | 1.81 | $<0.55$ | mrb | SW 8082 |
| Aroclor 1232 | $<0.55$ |  | $\mathrm{mg} / \mathrm{kg}$ dw | 08/10/2001 | 100 | 181 | $<0.55$ | mrb | SW 8082 |
| Aroclor 1242 | $<0.55$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 100 | 181 | $<0.55$ | mrb | SW 8082 |
| Aroclor 1248 | $<0.55$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 100 | 181 | <0.55 | mrb | SW 8082 |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
08/23/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
697722 SBI002:HMW6S:S040060:505

DATE/TIME TAKEN 08/02/2001 15:45

| Aroclor 1254 | $<0.55$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 100 | 181 | $<0.55$ | mrb | SW 8082 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aroclor 1260 | $<0.55$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 100 | 181 | $<0.55$ | mrb | SW 8082 |
| Surrogate:TCX/DCB | 69/62 | * | 08/10/2001 | 100 | 181 |  | mrb | SW 8082 |
| TPH - GRO (Non-Aqueous) | <6 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 245 | <6 | meb | Sw 8015M |

SAMPIE DESCRIPTION
SBI002:HMW6S:S180200:505

DATE/TIME TAKEN 08/02/2001 16:46

| Dry Weight | 95.0 | 8 | 08/14/2001 |  | 1476 |  | mhg |  | 2540 G. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/15/2001 |  | 1219 | Complete | emd |  | 6010B |  |
| Arsenic, ICP | <6.9 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/15/2001 | 898 | 2945 | <6.9 | emd | SW | 6010 B |  |
| Barium, ICP | 10 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/15/2001 | 898 | 2876 | $<1.4$ | emd | SW | 6010B |  |
| Cadmium, ICP | <2.1 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/15/2001 | 898 | 2858 | <2.1 | emd | SW | 6010B |  |
| Chromium, ICP | 6.2 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/15/2001 | 898 | 2846 | $<2.7$ | emd | SW | 6010B |  |
| Lead, ICP | 5.9 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/15/2001 | 898 | 2847 | $<5.6$ | emd | S | 6010B |  |
| Mercury, CVAA | $<0.008$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 604 | 616 | $<0.008$ | epk | SW | 7471A |  |
| Selenium, ICP | <6.9 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/15/2001 | 898 | 2925 | <6.9 | emd | SW | 6010B |  |
| Silver, ICP | $<2.7$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/15/2001 | 898 | 2878 | $<2.7$ | emd | SW | 6010B |  |
| ICP Digestion, Nonaqueous | Complete |  | 08/08/2001 | 898 |  | Complete | mrt | SW | 3050B |  |
| Mercury Digestion, Non-Aq | Complete |  | 08/11/2001 | 604 |  | Complete | epk | SW | 7471A |  |
| Prep, PCBg Non-Aq 8082 | Complete |  | 08/09/2001 | 100 |  | Complete | mlr |  | 3540C; SW 3545 |  |
| Prep, BNA Non-Aq | Complete |  | 08/09/2001 | 945 |  | Complete | mlr |  | A 625; SW 3540C; | W 3545 |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/23/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002

|  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { SAMPLE NO. } \\ & 697723 \end{aligned}$ | SAMPLE DE SBIOO2: HM | SCRI | $\begin{aligned} & \text { PTION } \\ & \text { SIB } \end{aligned}$ | $0: 505$ |  |  |  | $\begin{aligned} & \text { DAT } \\ & 08 \end{aligned}$ | $\begin{aligned} & \text { /TIME } \\ & 12 / 2001 \end{aligned}$ | $\begin{aligned} & \text { TAKEN } \\ & 16: 46 \end{aligned}$ |

.ULATILE COMPOUNDS-8260 NON-Aq

| 8260 - SW846 (Non-aq) | Complete |  | 08/07/2001 | 1450 | Complete | jxc |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | <105 | ug/ kg dw | 08/07/2001 | 1450 | $<105$ | jxc | SW | 8260A |
| Benzene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | < 5.3 | jxc | Sw | 8260A |
| tert-Butylbenzene | $<5.3$ | ug/kg dw | 08/07/2001 | 1450 | $<5.3$ | jxc | Sw | 8260A |
| sec-Butylbenzene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | < 5.3 | jxc | SW | 8260A |
| n-Butylbenzene | $<5.3$ | ug/ kg dw | 08/07/2001 | 1450 | $<5.3$ | jxc | SW | 8260A |
| Bromochloromethane | $<5.3$ | ug/kg dw | 08/07/2001 | 1450 | $<5.3$ | jxc | SW | 8260A |
| Bromodichloromethane | $<5.3$ | ug/ kg dw | 08/07/2001 | 1450 | <5.3 | jxc |  | 8260A |
| Bromoform | <5.3 | ug/kg dw | 08/07/2001 | 1450 | <5.3 | jxc | SW | 8260A |
| Bromobenzene | $<5.3$ | ug/kg dw | 08/07/2001 | 1450 | $<5.3$ | jxc | SW | 8260A |
| 2-Butanone (MEK) | $<53$ | ug/kg dw | 08/07/2001 | 1450 | $<53$ | jxc | SW | 8260A |
| Carbon disulfide | $<5.3$ | ug/kg dw | 08/07/2001 | 1450 | <5.3 | jxc | SW | 8260A |
| Carbon tetrachloride | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.3$ | jxc | SW | 8260A |
| Chlorobenzene | $<5.3$ | ug/kg dw | 08/07/2001 | 1450 | $<5.3$ | jxc | SW | 8260A |
| Chloroethane | $<10.5$ | ug/kg dw | 08/07/2001 | 1450 | $<10.5$ | jxc | SW | 8260A |
| 2-Chlorotoluene | <5.3 | ug/kg dw | 08/07/2001 | 1450 | $<5.3$ | jxc | SW | 8260A |
| 4-Chlorotoluene | $<5.3$ | ug/kg dw | 08/07/2001 | 1450 | <5.3 | jxc | SW | 8260A |
| Chloroform | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.3$ | jxc | SW | 8260A |
| Chloromethane | $<10.5$ | ug/kg dw | 08/07/2001 | 1450 | $<10.5$ | jxc | SW | 8260A |
| Dibromochloromethane | $<5.3$ | ug/ kg dw | 08/07/2001 | 1450 | $<5.3$ | jxc | SW | 8260A |
| Dibromomethane | $<5.3$ | ug/kg dw | 08/07/2001 | 1450 | $<5.3$ | jxc | SW | 8260A |
| Dichlorodifluoromethane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.3 | jxc | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.3$ | jxc | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.3$ | jxc | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/23/2001

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy |  | Number | Number | Limit | Initials Method Reference |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 697723 | SBI002:HMW6S:SI80200:505 | $08 / 02 / 2001$ 16:46 |


| 1,3-Dichlorobenzene | $<5.3$ | ug/kg dw | 08/07/2001 | 1450 | $<5.3$ | jxc | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,4-Dichlorobenzene | <5.3 | ug $/ \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.3$ | jxc | SW 8260A |
| 1,1-Dichloroethane | <5.3 | ug/kg dw | 08/07/2001 | 1450 | <5.3 | jxc | SW 8260A |
| 1,2-Dichloroethane | $<5.3$ | ug/kg dw | 08/07/2001 | 1450 | <5.3 | jxc | SW 8260A |
| 1,1-Dichloroethene | $<5.3$ | ug/kg dw | 08/07/2001 | 1450 | <5.3 | jxc | SW 8260A |
| Cis-1,2-Dichloroethene | $<5.3$ | ug/kg dw | 08/07/2001 | 1450 | <5.3 | jxc | SW 8260A |
| trans-1,2-Dichloroethene | $<5.3$ | ug/kg dw | 08/07/2001 | 1450 | $<5.3$ | jxc | SW 8260A |
| 1.2-Dichloropropane | $<5.3$ | ug/kg dw | 08/07/2001 | 1450 | $<5.3$ | jxc | SW 8260A |
| 1,3-Dichloropropane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.3$ | jxc | SW 8260A |
| 2,2-Dichloropropane | $<5.3$ | ug/kg dw | 08/07/2001 | 1450 | $<5.3$ | jxc | SW 8260A |
| 1,1-Dichloropropene | $<5.3$ | ug/kg dw | 08/07/2001 | 1450 | $<5.3$ | jxc | SW 8260A |
| cis-1,3-Dichloropropene | $<5.3$ | ug/kg dw | 08/07/2001 | 1450 | <5.3 | jxc | SW 8260A |
| trans-1,3-Dichloropropene | $<5.3$ | ug/kg dw | 08/07/2001 | 1450 | $<5.3$ | jxc | SW 8260A |
| Ethylbenzene | $<5.3$ | ug/kg dw | 08/07/2001 | 1450 | $<5.3$ | jxc | SW 8260A |
| Hexachlorobutadiene | $<5.3$ | ug/kg dw | 08/07/2001 | 1450 | <5.3 | jxc | SW 8260A |
| $n$-Hexane | $<21.1$ | ug/kg dw | 08/07/2001 | 1450 | $<21.1$ | jxc | SW 8260A |
| 2-Hexanone | $<52.6$ | ug/kg dw | 08/07/2001 | 1450 | $<52.6$ | jxc | SW 8260A |
| Isopropylbenzene (Cumene) | <5.3 | ug/kg dw | 08/07/2001 | 1450 | $<5.3$ | jxc | SW 8260A |
| p-Isopropyltoluene | $<5.3$ | ug/kg dw | 08/07/2001 | 1450 | <5.3 | jxc | SW 8260A |
| Bromomethane | $<10.5$ | ug/kg dw | 08/07/2001 | 1450 | $<10.5$ | jxc | SW 8260A |
| Methylene Chloride | $<10.5$ | ug/kg dw | 08/07/2001 | 1450 | $<10.5$ | jxc | SW 8260A |
| Methyl t-butyl ether (MTBE) | $<5.3$ | ug/kg dw | 08/07/2001 | 1450 | <5.3 | bmh | SW 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<52.6$ | ug/kg dw | 08/07/2001 | 1450 | $<52.6$ | jxe | SW 8260A |
| n -Propylbenzene | $<5.3$ | ug/kg dw | 08/07/2001 | 1450 | $<5.3$ | jxc | SW 8260A |
| Styrene | <5.3 | ug/kg dw | 08/07/2001 | 1450 | <5.3 | jxc | SW 8260A |

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
$08 / 23 / 2001$
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 697723

SAMPLE DESCRIPTION SBI002:HMW6S:S180200:505

DATE/TIME TAKEN 08/02/2001 16:46

| unthalene | <5.3 | ug/kg dw | 08/07/2001 |  | 1450 | <5.3 | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | <5.3 | ug/kg dw | 08/07/2001 |  | 1450 | <5.3 | jxc | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | <5.3 | ug/kg dw | 08/07/2001 |  | 1450 | <5.3 | jxc | SW | 8260A |
| Tetrachloroethene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <5.3 | jxc | SW | 8260A |
| Toluene | 6.9 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <5.3 | jxc | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.3$ | ug/kg dw | 08/07/2001 |  | 1450 | <5.3 | jxc | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.3$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <5.3 | jxc | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.3$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.3$ | jxc | SW | 8260A |
| Trichloroethene | $<5.3$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.3$ | jxc | SW | 8260A |
| Trichlorofluoromethane | <5.3 | ug/kg dw | 08/07/2001 |  | 1450 | <5.3 | jxc | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.3$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.3$ | jxc | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.3$ | ug/kg dw. | 08/07/2001 |  | 1450 | <5.3 | jxc | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.3$ | ug/kg dw | 08/07/2001 |  | 1450 | <5.3 | jxc | SW | 8260A |
| Vinyl Acetate | $<5.3$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.3$ | jxc | SW | 8260A |
| Vinyl Chloride | $<2.1$ | ug/kg dw | 08/07/2001 |  | 1450 | <2.1 | jxc | SW | 8260A |
| Xylenes, Total | $<5.3$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.3$ | jxc | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 96 | \% | 08/07/2001 |  | 1450 |  | jxc | Sh | 8260A |
| Dibromofluoromethane (surr) | 90 | \% | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| ds-Toluene (surr) | 92 | $\%$ | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| Bromofluorobenzene (surr) | 93 | $\%$ | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| BASE NEUT. COMPS.-8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | - $<347$ | jrw | SW | 8270C |
| Acenaphthylene | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270 C |
| Anthracene | <347 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | <347 | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13924

## Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CR | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 697723 |  | SBIO02: HM | N6S | 1802 | : 505 |  |  |  | 08/ | $2 / 2001$ | 16:46 |


| Benzo (a) anthracene | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benzo (b) fluoranthene | <347 | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270 C |
| Benzo (k) fluoranthene | $<347$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | <347 | jrw | SW | 82700 |
| Benzo (a) pyrene | $<174$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<174$ | jTw | SW | 8270 C |
| Benzyl alcohol | $<347$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 82700 |
| Benzyl butyl phthalate | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw, | SW | 8270 C |
| Bis (2-chloroethyl)ether | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270 C |
| Bis (2-chloroethoxy) methane | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270C |
| Bis (2-ethylhexyl) phthalate | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270 C |
| 4-Chloroaniline | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270C |
| 2-Chloronaphthalene | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jxw | SW | 8270 C |
| Chrysene | $<347$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<174$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<174$ | jrw | SW | 8270C |
| Dibenzofuran | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270 C |
| 1,2-Dichlorobenzene | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270C |
| 1,3-Dichlorobenzene | $<347$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270C |
| 1,4-Dichlorobenzene | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<695$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<695$ | jrw | SW | 8270 C |
| Diethyl phthalate | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270 C |
| Dimethyl phthalate | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270 C |
| 2,4-Dinitrotoluene | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270 C |
| 2,6-Dinitrotoluene | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270 C |
| Di-n-octylphthalate | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | <347 | jrw | SW | 8270C |

## ANALYTICAL REPORT

## Kevin Wildman

HULI \& ASSOC. (Dublin) 08/23/2001 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run : |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analyzed | Number | Number Limit | Initials Method Reference |  |  |

## SAMPLE NO. 697723

SAMPLE DESCRIPTION
SBI002:HMW6S:S180200:505

DATE/TIME TAKEN 08/02/2001 16:46

| Fluoranthene | $<347$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fluorene | $<347$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270 C |
| Hexachlorobenzene | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270C |
| Hexachloro-1, 3-butadiene | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270 C |
| Hexachlorocyclopentadiene | $<695$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<695$ | jrw | SW | 8270 C |
| Hexachloroethane | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270 C |
| Indeno (1, 2,3-cd) pyrene | $<347$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270 C |
| Isophorone | $<347$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270C |
| Naphthalene | $<347$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270 C |
| Nitrobenzene | $<347$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<347$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270C |
| Phenanthrene | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270C |
| Pyrene | $<347$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<347$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<347$ | jrw | Sw | 8270C |
| Surrogate: d5-Nitrobenzene | 92 | 8 | 08/14/2001 | 945 | 1457 |  | jrw | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 98 | $\%$ | 08/14/2001 | 945 | 1457 |  | jrw | SW | 8270 C |
| Surrogate: d14-Terphenyl | 95 | $\%$ | 08/14/2001 | 945 | 1457 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1.740$ | ug/kg dw | 08/14/2001 | 945 | 1457 | <1,740 | jrw | SW | 8270C |
| 4-Chloro-3-methylphenol | $<347$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270 C |
| 2-Chlorophenol | $<347$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270C |
| 2,4-Dichlorophenol | $<347$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270 C |
| 2,4-Dimethylphenol | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | $8270{ }^{\text {c }}$ |
| 2-Methyl-4,6-dinitrophenol | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
$08 / 23 / 2001$
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13924
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 697723 | SBIOO2:HMW6S:S180200:505 | $08 / 02 / 2001$ 16:46 |


| 2-Methylphenol | $<347$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 945 | 1457 | $<347$ | jrw | Sw | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| meta \& para-Methylphenol | $<347$ | $u g / \mathrm{kg}$ dw | 08/14/2001 | 945 | 1457 | <347 | jrw | sw | 8270C |
| 2-Nitrophenol | <347 | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270 C |
| Pentachlorophenol | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270 C |
| Phenol | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | $<347$ | jrw | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<347$ | ug/kg dw | 08/14/2001 | 945 | 1457 | <347 | jrw | SW | $8270{ }^{\text {c }}$ |
| Surrogate: d6-Phenol | 90 | \% | 08/14/2001 | 945 | 1457 |  | jrw | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 92 | \% | 08/14/2001 | 945 | 1457 |  | jrw | SW | 8270C |
| Surrogate: Tribromophenol | 95 | $\%$ | 08/14/2001 | 945 | 1457 |  | jrw | SW | 8270C |
| PCB' E M 8082, Non-Aq |  |  |  |  |  |  |  |  |  |
| Aroclor 1016 | $<0.53$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 100 | 181 | $<0.53$ | $m \times b$ | SW | 8082 |
| Aroclor 1221 | $<0.53$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 100 | 181 | $<0.53$ | mrb | SW | 8082 |
| Aroclor 1232 | $<0.53$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 100 | 181 | $<0.53$ | mrb | SW | 8082 |
| Aroclor 1242 | $<0.53$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 100 | 181 | $<0.53$ | mrb | Sw | 8082 |
| Aroclor 1248 | $<0.53$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 100 | 181 | $<0.53$ | mrb | SW | 8082 |
| Aroclor 1254 | $<0.53$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 100 | 181 | $<0.53$ | mrb | SW | 8082 |
| Aroclor 1260 | $<0.53$ | $\mathrm{mg} / \mathrm{kg} \mathrm{d} w$ | 08/10/2001 | 100 | 181 | $<0.53$ | mrb | SW | 8082 |
| Surrogate:TCX/DCB | 91/83 | \% | 08/10/2001 | 100 | 181 |  | mrb | SW | 8082 |
| TPH - GRO (Non-Aqueous) | <5 | $\mathrm{mg} / \mathrm{kg}$ dw | 08/07/2001 |  | 245 | <5 | meb | SW | 8015M |

## QUALITY CONTROL FLAG DEFINITIONS ${ }^{\text {PAGE } 55 \text { of } 56}$

Job Number: 01.13924
(*) Indicates an out-of-control QC. The analytical data was reported based on other supporting quality control information.
(Note) Indicates to review the notes and comments section of the analytical report as there is additional information concerning this analytical result.
(MS) Indicates that the Matrix Spike (MS) was out of statistical advisory limits.
(MSD) Indicates that the Matrix Spike Duplicate (MSD) was out of statistical advisory limits.
(RPD) Indicates that the Relative Percent Difference (RPD) for the MS/MSD pair was outside of statistical advisory limits.
(SS) Indicates that the MS and MSD were out of statistical advisory limits.
(SSR) Indicates that the MS, MSD and RPD were out of statistical advisory limits.
(MSR) Indicates that the MS and RPD were out of statistical advisory limits.
(MSDR) Indicates that the MSD and RPD were out of statistical advisory limits.
(DL) Indicates that the MS and MSD were diluted out and the percent recoveries of the spikes could not be calculated.
(LS) Indicates that statistical accuracy and precision data is not available for spike concentrations which are $<1 / 4$ of the sample amount. Care should be used in interpreting this data.
(J) Indicates estimated concentration due to internal standard areas or surrogate recoveries outside of control limits. A sample matrix effect is usually indicated.
(DW) Indicates Dry Weight.
Analytical Reporting Limits
The reporting limits listed for non-aqueous samples in the analytical report section are Practical Quantitation Limits (PQLs). These PQLs are based upon a typical standard weight used for a non-aqueous sample. The reporting limit for a sample may be different from the PQL listed depending upon the actual weight of sample used, the samples moisture content and any dilutions used during the analysis.

NOTES AND COMMENTS
TestAmerica Job Number: 1.13924
Sample Number: 697722
Analysis: 8260 Soil
Recovery of surrogate bromofluorobenzene was above the recommended 74-121\% range for this sample.
Sample Number: 697722
Analysis: 8270 BNA
The sample extract would not concentrate below 1 mL . The extractwas diluted to bring internal standard response within compliancelimits. The apparent recovery of 2,4,6-tribromophenol was abovethe recommended level.
Sample Number: ..... 697716
Analysis: PCB's 8082
Surrogates designated "DL" were diluted below the reporting limit.
Sample Number: ..... 697716
Analysis: ..... 8270 Soils
Due to the nature of the sample matrix, recovery of internalstandard di0-Phenanthrene exceeded the recommended 50-200\% rangeand recovery of dl2-Perylene was below the recommended range.Recovery of surrogate 2,4,6-Tribromophenol exceeded therecommended $19-122 \%$ range. No detections were noted above thereporting limit for any țarget analytes.

Client: $\begin{aligned} & \text { SoCTH BEUD } \\ & \text { SDEIA }\end{aligned}$
Site: $\frac{\triangle D E 1 A}{S B 1002}$
Samplers: RJM

 SAMPLE
TYPE
$\begin{array}{lll}S B 1002: S B 4 & : S 010020 \\ S B 1002 & : S B 1 & : 5100115 \\ S B 1002 & : S B 3 & : S 000020\end{array}$ SB1002: HMW2S:S000020
$5(31202: H M W: 35: 5140150$ $5 B 1002: 4 \pi v 135: 5060070$ $5 B 1022: S B 1: 5 / 60170$



## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting Analyst | Number |
| Limit | Initials Method Reference |  |  |  |  |  |

## SAMPLE NO. 697489

SAMPLE DESCRIPTION
SBI002:HA-1:S000005:412

DATE/TIME TAKEN
07/31/2001 12:50


## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman

HULL \& ASSOC. (Dublin
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001
Job Number: 01.13865

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

Sample
Sample Description
Date Number

Taken
Date Received

697489
697490
697491
697492
697493
697496
697497
697498
697499
697500
697501
697502
697503
697504
697505

SBIO02:HA-1:S000005:412
SBI002:HA-2:S000010:412
SBI 002 :HA-3:S000010:412
SBI002:HA-4:S000010:412
SBIO02:GS-2:S005010:412
SBI002:GS-3:S005010:412
SBI002:FB1:505
SBI002:TBI
SBI002:GS-3D:S005010:412
SBI002:HMW4S:S000020:428
SBI002:HMW5S:S000020:428
SBIO02:HMW3S:S060070:428
SBI002:HMW3S:S060085:428
SBI002:HMW1D:S000020:505
SBI002:HMW6D:S000020:505

07/31/2001 08/02/2001
07/31/2001 08/02/2001
07/31/2001 08/02/2001
07/31/2001 08/02/2001
08/01/2001 08/02/2001
08/01/2001 08/02/2001
08/01/2001 08/02/2001
08/01/2001 08/02/2001
08/01/2001 08/02/2001
08/01/2001 08/02/2001
08/01/2001 08/02/2001
08/01/2001 08/02/2001
08/01/2001 08/02/2001
07/31/2001 08/02/2001
08/01/2001 08/02/2001

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.
Reproduction of this analytical report is permitted entirety.

Enclosure


# ANALYTICAL REPORT 

Kevin Wildman
HULI \& ASSOC. (Dublin) 08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01. 13865
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | PIION |  |  |  |  | DAT | /TIME | TAKEN |
| 697489 |  | SBIOO2:HA | I: S | 00000 | 412 |  |  |  | 07/31 | 1/2001 | 12:50 |


| 2-Butanone (MEK) | $<55$ |  | ug/kg dw | 08/09/2001 | 1455 | $<55$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carbon disulfide | $<5.5$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | < 5.5 | bmh | SW | 8260A |
| Carbon tetrachloride | $<5.5$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| Chlorobenzene | $<5.5$ |  | ug/kg dw | 08/09/2001 | 1455 | <5.5 | bmh | SW | 8260A |
| Chloroethane | $<11.0$ |  | ug/kg dw | 08/09/2001 | 1455 | <11.0 | bmh | SN | 8260A |
| 2-Chlorotoluene | $<5.5$ |  | ug/kg dw | 08/09/2001 | 1455 | <5.5 | bmh | SW | 8260A |
| 4-Chlorotoluene | $<5.5$ |  | ug/kg dw | 08/09/2001 | 1455 | < 5.5 | bmh | SW | 8260A |
| Chloroform | $<5.5$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | < 5.5 | bmh | SW | 8260A |
| Chloromethane | $<11.0$ |  | ug/kg dw | 08/09/2001 | 1455 | <11.0 | bmh | SW | 8260A |
| Dibromochloromethane | $<5.5$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | < 5.5 | bmh | SW | 8260A |
| Dibromomethane | $<5.5$ |  | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<5.5$ |  | ug/kg dw | 08/09/2001 | 1455 | <5.5 | bmh | Sw | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.5$ |  | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.5$ | ; | ug/kg dw | 08/09/2001 | 1455 | <5.5 | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.5$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.5 | bmin | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.5$ |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 1455 | < 5.5 | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<5.5$ |  | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<5.5$ |  | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.5$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.5$ | buh | Sk | 8260A |
| cis-1,2-Dichloroethene | $<5.5$ |  | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.5$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<5.5$ |  | ug/kg dw | 08/09/2001 | 1455 | <5.5 | bmh | SW | 8260A |
| 1,3-Dichloropropane | <5.5 |  | ug/kg dw | 08/09/2001 | 1455 | < 5.5 | bmh | SW | 8260A |
| 2.2-Dichloropropane | $<5.5$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<5.5$ |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  |  |  | Prep | Run |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Date | Batch | Batch | Reporting | Analyst |  |
| Result | Flag | Units | Analyzed | Number | Number | Limit | Initials | Method Reference |



SAMPLE DESCRIPTION
SBI002:HA-1:S000005:412

DATE/TIME TAKEN 07/31/2001 12:50

| cis-1,3-Dichloropropene | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | < 5.5 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans-1,3-Dichloropropene | <5.5 | ug/kg dw | 08/09/2001 | 1455 | <5.5 | bmh | SW | 8260A |
| Ethylbenzene | <5.5 | ug/kg dw | 08/09/2001 | 1455 | < 5.5 | bmh | Sw | 8260A |
| Hexachlorobutadiene | <5.5 | ug/kg dw | 08/09/2001 | 1455 | <5.5 | bmh | SW | 8260A |
| n -Hexane | $<22.0$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <22.0 | bmh | Sw | 8260A |
| 2-Hexanone | $<55.1$ | ug/kg dw | 08/09/2001 | 1455 | $<55.1$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| p-Isopropyltoluene | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | <5.5 | bmh | SW | 8260A |
| Bromomethane | $<11.0$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <11.0 | bmh | SW | 8260A |
| Methylene Chloride | $<11.0$ | ug/kg dw | 08/09/2001 | 1455 | $<11.0$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | < 5.5 | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<55.1$ | ug/kg dw | 08/09/2001 | 1455 | <55.1 | bmh | SW | 8260A |
| n-Propylbenzene | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | <5.5 | bmh | SW | 8260A |
| Styrene | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.5 | bmh | SW | 8260A |
| Naphthalene | <5.5 | ug/kg dw | 08/09/2001 | 1455 | < 5.5 | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | <5.5 | ug/kg dw | 08/09/2001 | 1455 | <5.5 | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | < 5.5 | bmh | SW | 8260A |
| Tetrachloroethene | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| Toluene | < 5.5 | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | < 5.5 | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | <5.5 | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | <5.5 | bmh | SW | 8260A |
| Trichloroethene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| Trichlorofluoromethane | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | <5.5 | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | <5.5 | ug/kg dw | 08/09/2001 | 1455 | <5.5 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 697489

| 1,2,4-Trimethylbenzene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | $<5.5$ | brnh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,3,5-Trimethylbenzene | $<5.5$ | $u g / \mathrm{kg}$ dw | 08/09/2001 |  | 1455 | $<5.5$ | bmh | SW | 8260A |
| Vinyl Acetate | $<5.5$ | $u g / \mathrm{kg}$ dw | 08/09/2001 |  | 1455 | <5.5 | bmh | SW | 8260A |
| Vinyl Chloride | <2.2 | ug/kg dw | 08/09/2001 |  | 1455 | <2.2 | bmh | SW | 8260A |
| Xylenes, Total | <5.5 | ug/kg dw | 08/09/2001 |  | 1455 | <5.5 | bmh | SN | 8260A |
| d4-1.2-Dichloroethane (eurr) | 104 | \% | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 102 | 8 | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| ds-Toluene (surr) | 100 | 8 | 08/05/2001 |  | 1455 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 99 | \% | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| BASE NEUT. COMPS.-8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | <3,630 | ug/kg dw | 08/09/2001 | 944 | 1455 | <3,630 | jrw | SW | 8270 C |
| Acenaphthylene | $<3,630$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | 8270 C |
| Anthracene | <3,630 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | 82700 |
| Benzo (a) anthracene | <3,630. | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | 8270 C |
| Benzo (b) fluoranthene | <3,630 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | 8270 C |
| Benzo(k) fluoranthene | $<3,630$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <3,630 | jrw | SW | 8270C |
| Benzo (a) pyrene | $<1,820$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <1,820 | jrw | SW | 8270C |
| Benzyl alcohol | $<3,630$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SH | 8270 C |
| Benzyl butyl phthalate | $<3,630$ | ug/ kg dw | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | S | 8270C |
| Bis (2-chloroethyl)ether | $<3,630$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | $<3,630$ | jww | SW | 8270C |
| Bis (2-chloroethoxy) methane | $<3,630$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | 8270 C |
| Bis (2-ethylhexyl) phthalate | $<3,630$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | $<3,630$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<3.630$ | jrw | S | 8270 C |
| 4-Bromophenyl phenyl ether | <3,630 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002.

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analyzed | Number | Number | Limit | Initials Method Reference |  |

08/27/2001

DATE/TIME TAKEN 07/31/2001 12:50

SAMPLE DESCRIPTION
SBIO02:HA-1:SOOOOO5:412

| 4-Chloroaniline | <3,630 | ug/kg dw | 08/09/2001 | 944 | 1455 | <3,630 | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Chloronaphthalene | <3,630 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | 8270 C |
| Chrysene | <3,630 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <3,630 | jrw | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | <1,820 | ug/kg dw | 08/09/2001 | 944 | 1455 | <1,820 | jrw | SW | 8270C |
| Dibenzofuran | <3.630 | ug/kg dw | 08/09/2001 | 944 | 1455 | <3,630 | jrw | SW | 8270 C |
| 1,2-Dichlorobenzene | <3,630 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <3,630 | jrw | SW | 8270 C |
| 1,3-Dichlorobenzene | <3,630 | ug/kg dw | 08/09/2001 | 944 | 1455 | <3,630 | jrw | SW | 8270C |
| 1,4-Dichlorobenzene | <3,630 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | 8270 C |
| 3,3'-Dichlorobenzidine | <7,270 | ug/kg dw | 08/09/2001 | 944 | 1455 | <7,270 | jıw | SW | 8270C |
| Diethyl phthalate | <3,630 | ug/kg dw | 08/09/2001 | 944 | 1455 | <3,630 | jrw | SW | 8270C |
| Dimethyl phthalate | $<3,630$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | 8270C |
| 2,4-Dinitrotoluene | $<3,630$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <3,630 | jrw | SW | 8270 C |
| 2,6-Dinitrotoluene | $<3,630$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <3,630 | jrw | SW | 8270C |
| Di-n-octylphthalate | $<3,630$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | 8270 C |
| Fluoranthene | $<3,630$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | 8270 C |
| Fluorene | $<3,630$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<3.630$ | jrw | SW | 8270C |
| Hexachlorobenzene | <3,630 | ug/kg dw | 08/09/2001 | 944 | 1455 | <3,630 | jrw | SW | $8270{ }^{\text {c }}$ |
| Hexachloro-1, 3-butadiene | <3,630 | ug/kg dw | 08/09/2001 | 944 | 1455 | <3,630 | jrw | SW | 8270C |
| Hexachlorocyclopentadiene | $<7,270$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<7.270$ | jxw | Sw | 8270C |
| Hexachloroethane | <3,630 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<3,630$ | jıw | SW | $8270{ }^{\text {c }}$ |
| Indeno (1,2,3-cd) pyrene | <3,630 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | 8270 C |
| Isophorone | $<3,630$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | 8270 C |
| Naphthalene | <3,630 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<3,630$ | jxw | SW | 8270 C |
| Nitrobenzene | $<3,630$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | 8270 C |
| N-Nitrosodi-n-propylamine | $<3,630$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | 8270 C |

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 697489

SBIOO2:HA-1:S000005:412

DATE/TIME TAKEN 07/31/2001 12:50

| Phenanthrene | $<3,630$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<3.630$ | jrw | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pyrene | $<3,630$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | <3,630 |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | $8270{ }^{\circ}$ |
| Surrogate: d5-Nitrobenzene | 110 |  | \% | 08/09/2001 | 944 | 1455 |  | jrw | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 112 |  | $t$ | 08/09/2001 | 944 | 1455 |  | jrw | SW | 8270C |
| Surrogate: di4-Terphenyl | 215 |  | 8 | 08/09/2001 | 944 | 1455 |  | jrw | sw | 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <18,200 |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<18,200$ | jrw | SW | 8270C |
| 4-Chloro-3-methylphenol | $<3,630$ |  | $u g / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | 8270C |
| 2-Chlorophenol | <3,630 |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | 8270 C |
| 2,4-Dichlorophenol | <3,630 |  | ug/kg dw | 08/09/2001 | 944 | 1455 | <3,630 | jrw | SW | 8270C |
| 2,4-Dimethylphenol | <3, 630 |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | $<3,630$ | jxw | SW | 82700 |
| 2-Methyl-4,6-dinitrophenol | $<3,630$ |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | <3,630 | jxw | SW | 8270C |
| 2-Methylphenol | <3,630. |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | 8270C |
| meta \& para-Methylphenol | $<3,630$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <3,630 | jrw | SW | 8270 C |
| 2-Nitrophenol | $<3,630$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <3,630 | jrw | SN | 8270C |
| Pentachlorophenol | <3,630 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <3,630 | jrw | SW | 8270C |
| Phenol | $<3,630$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<3,630$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<3,630$ | jrw | SW | 8270C |
| 2,4,6-Trichlorophenol | $<3,630$ |  | $\mathbf{u g} / \mathrm{kg} \mathrm{d} w$ | 08/09/2001 | 944 | 1455 | <3,630 | jrw | SW | 8270 C |
| Surrogate: d6-Phenol | 102 |  | $\%$ | 08/09/2001 | 944 | 1455 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorophenol | DL |  | 8 | 08/09/2001 | 944 | 1455 |  | jrw | SW | 8270 C |
| Surrogate: Tribromophenol | 152 | note | $\%$ | 08/09/2001 | 944 | 1455 |  | jrw | S* | 8270C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULI \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.13865<br>Client Project ID: South Bend Indiana SBI002

08/27/2001


## SAMPLE NO. 697490

SAMPLE DESCRIPTION
DATE/TIME TAKEN
SBI002:HA-2 : S000010:412


# ANALYTICAL REPORT 

Kevin Wildman<br>HULL \& ASSOC. (Dublin) 08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
697490 SBIOO2:HA-2:S000010:412

DATE/TIME TAKEN
07/31/2001 10:10

| 2-Butanone (MEK) | $<53$ | ug/kg dw | 08/09/2001 | 1455 | $<53$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carbon disulfide | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| Carbon tetrachloride | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Chlorobenzene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | < 5.3 | bmh | Sw | 8260A |
| Chloroethane | $<10.5$ | ug/kg dw | 08/09/2001 | 1455 | $<10.5$ | bmh | SW | 8260A |
| 2-Chlorotoluene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 4-Chlorotoluene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| Chloroform | $<5.3$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| Chloromethane | $<10.5$ | ug/kg dw | 08/09/2001 | 1455 | $<10.5$ | bmh | SW | 8260A |
| Dibromochloromethane | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Dibromomethane | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| 1,2-Dibromo-3-chioropropane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | <5.3 | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 1.3-Dichlorobenzene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | <5.3 | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | brah | SW | 8260A |
| 1,2-Dichloroethane | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| 1,1-Dichloroethene | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Cis-1,2-Dichloroethene | $<5.3$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.3 | brah | SW | 8260A |
| 1,2-Dichloropropane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.3$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | <5.3 | ug/kg dw | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Rumber | Number | Limit | Initials Method Reference |  |  |

## SAMPLE NO. SAMPLE DESCRIPTION 697490 <br> SBIO02:HA-2:S000010:412

DATE/TIME TAKEN
07/31/2001 10:10

| cis-1,3-Dichloropropene | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans-1,3-Dichloropropene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| Ethylbenzene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| n-Hexane | $<21.1$ | ug/kg dw | 08/09/2001 | 1455 | $<21.1$ | bmh | SW | 8260A |
| 2-Hexanone | $<52.6$ | $u g / \mathrm{kg} d w$ | 08/09/2001 | 1455 | $<52.6$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.3$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| p-Isopropyltoluene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| Bromomethane | $<10.5$ | ug/kg dw | 08/09/2001 | 1455 | $<10.5$ | bmh | SW | 8260A |
| Methylene Chloride | $<10.5$ | ug/kg dw | 08/09/2001 | 1455 | $<10.5$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | <5.3 | ug/kg dw | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<52.6$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<52.6$ | bmh | SW | 8260A |
| n-Propylbenzene | $<5.3$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Styrene | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| Naphthalene | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmb | Sw | 8260A |
| 1,1,2,2-Tetrachloroethane | <5.3 | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Tetrachloroethene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Toluene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Trichloroethene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Trichlorofluoromethane | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |

# ANALYTICAL REPORT 

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 697490

SAMPLE DESCRIPTION
SBIOO2:HA-2:SO00010:412

DATE/TIME TAKEN
07/31/2001 10:10

| 1,2,4-Trimethylbenzene | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | < 5.3 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,3,5-Trimethylbenzene | $<5.3$ | $u g / \mathrm{kg}$ dw | 08/09/2001 |  | 1455 | < 5.3 | bmh | SW | 8260A |
| Vinyl Acetate | $<5.3$ | ug/kg dw | 08/09/2001 |  | 1455 | $<5.3$ | bmar | SW | 8260A |
| Vinyl Cnloride | $<2.1$ | $u g / \mathrm{kg}$ dw | 08/09/2001 |  | 1455 | <2.1 | bmh | SW | 8260A |
| Xylenes, Total | <5.3 | ug/kg dw | 08/09/2001 |  | 1455 | $<5.3$ | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 101 | \% | 08/09/2001 |  | 1455 |  | bmh | Sw | 8260A |
| Dibromofluoromethane (surr) | 101 | \% | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| ds-Toluene (surr) | 96 | \% | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 96 | $\%$ | 08/09/2001 |  | 1455 |  | bmh | SW | 8250A |
| BASE NEUT. COMPS.-8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<347$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| Acenaphthylene | $<347$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| Anthracene | $<347$ | $v g / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| Benzo (a) anthracene | 839 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | sw | 8270C |
| Benzo (b) fluoranthene | 1,690 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270 C |
| Benzo (k) fluoranthene | 362 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270 C |
| Benzo (a) Pyrene | 748 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<174$ | jrw | SW | 8270C |
| Benzyl alcohol | $<347$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 82700 |
| Benzyl butyl phthalate | $<347$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270 C |
| Bis(2-chloroethyl) ether | $<347$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| Bis (2-chloroethoxy) methane | $<347$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| Bis (2-ethylhexyl) phthalate | 493 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 82700 |
| 2,2'-oxybis (1-Chloropropane) | $<347$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<347$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270 C |

## ANALYFICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin) 08/27/2001 Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | TIME | TAKEN |
| 697490 |  | SBI002:HA | -2: | 00001 | 412 |  |  |  | 07/ | 1/2001 | 1 10:10 |


| 4-Chloroaniline | $<347$ |
| :--- | :--- |
| 2-Chloronaphthalene | $<347$ |
| Chrysene | 1,580 |
| Dibenzo(a,h) anthracene | $<174$ |
| Dibenzofuran | $<347$ |
| 1,2-Dichlorobenzene | $<347$ |
| 1,3-Dichlorobenzene | $<347$ |
| 1,4-Dichlorobenzene | $<347$ |
| 3,3'-Dichlorobenzidine | $<695$ |
| Diethyl phthalate | $<347$ |
| Dimethyl phthalate | $<347$ |
| 2,4-Dinitrotoluene | $<347$ |
| 2,6-Dinitrotoluene | $<347$ |
| Di-n-octylphthalate | $<347$ |
| Fluoranthene | 644 |
| Fluorene | $<347$ |
| Hexachlorobenzene | $<347$ |
| Hexachloro-1,3-butadiene | $<347$ |
| Hexachlorocyclopentadiene | $<695$ |
| Hexachloroethane | $<347$ |
| Indeno(1,2,3-cd) pyrene | $<347$ |
| Isophorone | $<347$ |
| Naphthalene | 927 |
| Nitrobenzene | $<347$ |
| N-Nitrosodi-n-propylamine | $<347$ |


| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<174$ | jrw | SW | 8270C |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270 C |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | $8270{ }^{\text {C }}$ |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<695$ | jrw | SW | 8270C |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | $8270{ }^{\text {c }}$ |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<347$ | jıw | Sw | 8270C |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270 C |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<695$ | jrw | SW | 8270C |
| ug/ kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | Sw | 8270C |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jxw | SW | 8270C |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
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6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| R | Analy | Number | Number | Limit | Initials Method Reference |

## SAMPLE NO. SAMPLE DESCRIPTION 697490 SBIOO2:HA-2:S000010:412

DATE/TIME TAKEN 07/31/2001 10:10

| Phenanthrene | 1,170 |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pyrene | 1,540 |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SH | 8270 C |
| 1,2,4-Trichlorobenzene | $<347$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | <347 | jrw | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 84 |  | \% | 08/09/2001 | 944 | 1455 |  | jrw | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 127 |  | \% | 08/09/2001 | 944 | 1455 |  | jrw | SW | 82700 |
| Surrogate: di4-Terphenyl | 234 | note | 8 | 08/09/2001 | 944 | 1455 |  | jrw | SW | 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1.740$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<1,740$ | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<347$ |  | $u g / \mathrm{kg} d w$ | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | $8270{ }^{\text {c }}$ |
| 2-Chlorophenol | $<347$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270 C |
| 2,4-Dichlorophenol | $<347$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| 2,4-Dimethylphenol | $<347$ |  | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<347$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270C |
| 2-Methylphenol | $<347$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<347$ | jrw | Sw | 8270C |
| meta \& para-Methylphenol | $<347$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | j5w | Sw | 8270C |
| 2-Nitrophenol | $<347$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | Sw | 8270 C |
| Pentachlorophenol | <347 |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jıw | SW | 8270 C |
| Phenol | $<347$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 82700 |
| 2,4,5-Trichlorophenol | $<347$ |  | ug/kg diw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | $8270{ }^{\text {C }}$ |
| 2,4,6-Trichlorophenol | $<347$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<347$ | jrw | SW | 8270 C |
| Surrogate: d6-Phenol | 105 |  | 8 | 08/09/2001 | 944 | 1455 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorophenol | 101 |  | 4 | 08/09/2001 | 944 | 1455 |  | jrw | Sw | 8270 C |
| Surrogate: Tribromophenol | 91 |  | $\%$ | 08/09/2001 | 944 | 1455 |  | jrw | Sw | $8270{ }^{\text {c }}$ |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002



## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  |  |  | Prep | Run |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reault |  | Unitg | Date | Batch | Batch | Reporting | Analyst |  |
| Result | Flag | Units | Analyzed | Number | Number | Limit | Initials | Method Reference |


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 697491 | SBIOO2:HA-3:S000010:412 |

DATE/TIME TAKEN
07/31/2001 15:30

| Bis (2-chloroethoxy) methane | $<419$ | ug/ kg dw | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bis (2-ethylhexyl) phthalate | $<419$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<419$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<419$ | juw | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<419$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270 C |
| 4-Chloroaniline | $<419$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <419 | jrw | sw | 8270 C |
| 2-Chloronaphthalene | $<419$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | <419 | jıw | Sw | 8270 C |
| Chrysene | 3,190 | ug/kg dw | 08/09/2001 | 944 | 1455 | <419 | jrw | SW | 82700 |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | <210 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<210$ | jrw | SW | 8270 C |
| Dibenzofuran | 914 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270C |
| 1,2-Dichlorobenzene | $<419$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270C |
| 1.3-Dichlorobenzene | $<419$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270C |
| 1,4-Dichlorobenzene | $<419$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270C |
| 3,3'-Dichlorobenzidine | <839 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<839$ | jrw | SW | 8270 C |
| Diethyl phthalate | $<419$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<419$ | j5w | sw | 8270C |
| Dimethyl phthalate | $<419$ | ug/kg. dw | 08/09/2001 | 944 | 1455 | $<419$ | j\%w | SW | 8270C |
| 2,4-Dinitrotoluene | $<419$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270 C |
| 2,6-Dinitrotoluene | $<419$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <419 | jrw | SW | 8270C |
| Di-n-octylphthalate | $<419$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <419 | jrw | SW | 8270 C |
| Fluoranthene | 3,770 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 944 | 1454 | $<3,680$ | jrw | SW | 8270C |
| Fluorene | $<419$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270C |
| Hexachlorobenzene | $<419$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270C |
| Hexachloro-1,3-butadiene | $<419$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270C |
| Hexachlorocyclopentadiene | $<839$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<839$ | jrw | SW | 8270C |
| Hexachloroethane | <419 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270 C |
| Indeno (1, 2,3-cd) pyrene | 584 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


| Isophorone | $<419$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Naphthalene | 1,300 |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270 C |
| Nitrobenzene | $<419$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270 C |
| N-Nitrosodi-n-propylamine | $<419$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270 C |
| Phenanthrene | 5,440 |  | $u g / \mathrm{kg}$ dw | 08/10/2001 | 944 | 1454 | <4,190 | jrw | SW | 8270 C |
| Pyrene | 4,380 |  | $u g / \mathrm{kg} d w$ | 08/10/2001 | 944 | 1454 | <4,190 | jxw | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<419$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | <419 | jrw | SW | 82700 |
| Surrogate: d5-Nitrobenzene | 116 | Note | $t$ | 08/09/2001 | 944 | 1455 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 99 |  | 8 | 08/10/2001 | 944 | 1454 |  | jrw | SW | 8270 C |
| Surrogate: d14-Terphenyl | 92 |  | 8 | 08/10/2001 | 944 | 1454 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<2,100$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<2.100$ | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<419$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270 C |
| 2-Chlorophenol | $<419$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270 C |
| 2,4-Dichlorophenol | $<419$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270 C |
| 2,4-Dimethylphenol | $<419$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<419$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 82700 |
| 2-Methylphenol | $<419$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 82700 |
| meta \& para-Methylphenol | $<419$ |  | $u \mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 82700 |
| 2-Nitrophenol | $<419$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | <419 | jrw | SW | 8270 C |
| Pentachlorophenol | $<419$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270 C |
| Phenol | $<419$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | 8270C |
| 2,4,5-Trichlorophenol | $<419$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<419$ | jxw | SW | 8270C |
| 2,4,6-Trichlorophenol | $<419$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<419$ | jrw | SW | $8270{ }^{\text {c }}$ |

## ANALYTICAL REPORT

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6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002
$08 / 27 / 2001$

|  |  |  |  | Prep | Run |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Date | Batch | Batch | Reporting | Analyst |  |
| Result | Flag | Units | Analyzed | Number | Number | Limit | Initials | Method Reference |

DATE/TIME TAKEN 07/31/2001 15:30

| Surrogate: d6-Phenol | 120 | 7 | 08/09/2001 | 944 | 1455 | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorophenol | 112 | \% | 08/09/2001 | 944 | 1455 | jrw | SW | 8270C |
| Surrogate: Tribromophenol | 110 | $\%$ | 08/09/2001 | 944 | 1455 | jrw | SW | 8270C |

## SAMPLE NO. SAMPLE DESCRIPTION

 697492SBI002:HA-4:S000010:412
DATE/TIME TAKEN
07/31/2001 16:40


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 697492 SBIOO2:HA-4:S000010:412

| Acenaphthene | <394 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <394 | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | 421 | ug/kg dw | 08/09/2001 | 944 | 1455 | <394 | jrw | SW 8270C |
| Anthracene | 410 | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <394 | jrw | SW 8270C |
| Benzo (a) anthracene | 670 | $u \mathrm{f} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <394 | jrw | SW 8270C |
| Benzo (b) fluoranthene | 2,450 | ug/kg dw | 08/09/2001 | 944 | 1455 | <394 | jrw | SW 8270C |
| Benzo(k) fluoranthene | 633 | $u g / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | <394 | jrw | SW 8270C |
| Benzo (a) pyrene | 907 | $u g / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | <197 | jrw | SW 8270C |
| Benzyl alcohol | <394 | ug/kg dw | 08/09/2001 | 944 | 1455 | <394 | jrw | SW 8270C |
| Benzyl butyl phthalate | $<394$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <394 | jrw | SW 8270C |
| Bis (2-chloroethyl) ether | $<394$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <394 | jrw | SW 8270C |
| Bis (2-chloroethoxy) methane | $<394$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | <394 | jrw | SW 8270C |
| Bis (2-ethylhexyl) phthalate | $<394$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <394 | jrw | SW 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<394$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <394 | jrw | SW 8270C |
| 4-Bromophenyl phenyl ether | <394 | ug/kg dw | 08/09/2001 | 944 | 1455 | <394 | jrw | SW 8270C |
| 4-Chloroaniline | $<394$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <394 | jrw | SW 8270C |
| 2-Chloronaphthalene | $<394$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <394 | jrw | SW 8270C |
| Chrysene | 783 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <394 | jrw | SW 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<197$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<197$ | jrw | SW 8270C |
| Dibenzofuran | <394 | ug/kg dw | 08/09/2001 | 944 | 1455 | <394 | jrw | SW 8270C |
| 1,2-Dichlorobenzene | <394 | ug/kg dw | 08/09/2001 | 944 | 1455 | <394 | jrw | SW 8270C |
| 1,3-Dichlorobenzene | $<394$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <394 | jrw | SW 8270C |
| 1,4-Dichlorobenzene | $<394$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <394 | jrw | SW 8270C |
| 3,3'-Dichlorobenzidine | $<789$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<789$ | jrw | SW 8270C |
| Diethyl phthalate | $<394$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <394 | jrw | SW 8270C |
| Dimethyl phthalate | $<394$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <394 | jrw | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 697492

SAMPLE DESCRIPTION
SBIO02:HA-4:S000010:412

DATE/TIME TAKEN
07/31/2001 16:40

| 2,4-Dinitrotoluene | $<394$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<394$ | jrw | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,6-Dinitrotoluene | $<394$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<394$ | jrw | SW | 8270C |
| Di-n-octylphthalate | $<394$ | $u g / \mathrm{kg} d w$ | 08/09/2001 | 944 | 1455 | <394 | jrw | SW | 8270C |
| Fluoranthene | 1,020 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<394$ | jrw | SW | 8270C |
| Fluorene | <394 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <394 | jrw | SW | 8270C |
| Hexachlorobenzene | $<394$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<394$ | jrw | SW | 8270C |
| Hexachloro-1,3-butadiene | $<394$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<394$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Hexachlorocyclopentadiene | $<789$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<789$ | jrw | SW | 8270C |
| Hexachloroethane | $<394$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<394$ | jrw | SW | 82700 |
| Indeno (1,2,3-cd) pyrene | $<394$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | $<394$ | jrw | SW | 8270 C |
| Isophorone | $<394$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | <394 | jrw | SW | 8270 C |
| Naphthalene | $<394$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | $<394$ | jrw | SW | 8270C |
| Nitrobenzene | $<394$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<394$ | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<394$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<394$ | jrw | SW | 8270C |
| Phenanthrene | 4750 | $\mathrm{ug} / \mathrm{Kg}$ | 08/09/2001 | 944 | 1455 | $<394$ | juw | SW | 8270 C |
| Pyrene | 1,820 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | <394 | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<394$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<394$ | jrw | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 38 | 8 | 08/09/2001 | 944 | 1455 |  | jrw | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 43 | \% | 08/09/2001 | 944 | 1455 |  | jrw | SW | 8270 C |
| Surrogate: d14-Terphenyl | 51 | 7 | 08/09/2001 | 944 | 1455 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1$ ، 970 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<1.970$ | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<394$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<394$ | jrw | SW | 8270 C |
| 2-Chlorophenol | $<394$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<394$ | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |

SAMPLE NO.
697492
697492

SAMPLE DESCRIPTION
SBIO02:HA-4:S000010:412

08/27/2001

Limit
Initials Method Reference

| 2,4-Dichlorophenol | $<394$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dimethylphenol | <394 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 |
| 2-Methyl-4,6-dinitrophenol | <394 |  | $u g / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 |
| 2-Methylphenol | <394 |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 |
| meta \& para-Methylphenol | <394 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 |
| 2-Nitrophenol | <394 |  | ug/kg dw | 08/09/2001 | 944 | 1455 |
| Pentachlorophenol | <394 |  | ug/kg dw | 08/09/2001 | 944 | 1455 |
| Phenol | <394 |  | ug/kg dw | 08/09/2001 | 944 | 1455 |
| 2,4,5-Trichlorophenol | <394 |  | ug/kg dw | 08/09/2001 | 944 | 1455 |
| 2,4,6-Trichlorophenol | <394 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944. | 1455 |
| Surrogate: d6-Phenol | 35 |  | 7 | 08/09/2001 | 944 | 1455 |
| Surrogate: 2-Fluorophenol | 32 |  | \% | 08/09/2001 | 944 | 1455 |
| Surrogate: Tribromophenol | 36 | note | $\%$ | 08/09/2001 | 944 | 1455 |

SAMPLE NO. SAMPLE DESCRIPTION
697493

| Dry Weight | 87.8 | * | 08/10/2001 |  | 1474 |  | mhg | SM 2540 G . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/14/2001 |  | 1208 | Complete | emd | SW 6010B |
| Arsenic, ICP | $<11$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 894 | 2932 | $<11$ | emd | SW 6010B |
| Barium, ICP | 32.7 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2860 | $<1.5$ | emd | SW 6010B |
| Cadmium, ICP | <2.3 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2842 | <2.3 | emd | SW 6010B |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | IIO |  |  |  |  | DAT | /TIME | TAKEN |
| 697493 |  | SBI002:GS | -2:S | 0501 | 412 |  |  |  | 08/ | 1/2001 | 1 11:25 |



# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 697493

SBI002:GS-2:S005010:412

DATE/TIME TAKEN 08/01/2001 11:25

| Chloroethane | <11.4 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<11.4$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-chlorotoluene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 4-Chlorotoluene | <5.7 | ug/kg dw | 08/07/2001 | 1450 | <5.7 | jxc | SW | 8260A |
| Chloroform | <5.7 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/07/2001 | 1450 | < 5.7 | jxc | SW | 8260A |
| Chloromethane | $<11.4$ | ug/kg dw | 08/07/2001 | 1450 | $<11.4$ | jxc | SW | 8260A |
| Dibromochloromethane | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Dibromomethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Dichlorodifluoromethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SH | 8260A |
| 1,2-Dichlorobenzene | <5.7 | ug/kg dw | 08/07/2001 | 1450 | <5.7 | jxc | SH | 8260A |
| 1,3-Dichlorobenzene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | Sk | 8260A |
| 1,4-Dichlorobenzene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1.1-Dichloroethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,2-Dichloroethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,1-Dichloroethene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Cis-1,2-Dichloroethene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,2-Dichloropropane | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,3-Dichloropropane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 2,2-Dichloropropane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,1-Dichloropropene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Ethylbenzene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxe | SW | 8260A |
| Hexachlorobutadiene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.7 | jxc | SW | 8260A |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 697493

SAMPLE DESCRIPTION
SBIO02:GS-2:S005010:412

DATE/TIME TAKEN 08/01/2001 11:25

| n-Hexane | $<22.8$ | ug/kg dw | 08/07/2001 | 1450 | $<22.8$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Hexanone | $<56.9$ | ug/kg dw | 08/07/2001 | 1450 | $<56.9$ | jxc | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.7$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001. | 1450 | $<5.7$ | jxc | SW | 8260A |
| p-Isopropyltoluene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Bromomethane | $<11.4$ | ug/kg dw | 08/07/2001 | 1450 | $<11.4$ | jxc | SW | 8260A |
| Methylene Chloride | $<11.4$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<11.4$ | jxc | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | <5.0 | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<56.9$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<56.9$ | jxc | SW | 8260A |
| n-Propylbenzene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Styrene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.7 | jxc | SW | 8260A |
| Naphthalene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | <5.7 | jxc | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Tetrachloroethene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Toluene | $<5.7$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/07/2001 | 1450 | <5.7 | jxc | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxce | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.7$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Trichloroethene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Trichlorofluoromethane | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SN | 8260A |
| 1,2,4-Trimethylbenzene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.7$ | ug/kg dw | 08/07/2001 | 1450 | $<5.7$ | jxc | SW | 8260A |
| Vinyl Acetate | $<5.7$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<5.7$ | jxe | SW | 8260A |
| Vinyl Chloride | $<2.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<2.3$ | jxe | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting | Analyst |  |
| Number | Limit | Initials Method Reference |  |  |  |  |  |

SAMPLE NO. 697493

SAMPLE DESCRIPTION
SBI002:GS-2:S005010:412

DATE/TIME TAKEN 08/01/2001 11:25

| Xylenes, Total | <5.7 |  | ug/kg dw | 08/07/2001 |  | 1450 | <5.7 | jxe | SH | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d4-1,2-Dichloroethane (surr) | 100 |  | \% | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| Dibromofluoromethane (surr) | 97 |  | \% | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| d8-Toluene (surr) | 97 |  | $\%$ | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| Bromofluorobenzene (surr) | 95 |  | $\%$ | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| BASE NEUT. COMPS. -8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<376$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | <376 | jrw | SW | 8270 C |
| Acenaphthylene | <376 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270C |
| Anthracene | 1,250 |  | ug/kg dw | 08/08/2001 | . 943 | 1449 | $<376$ | jıw | SW | 8270C |
| Benzo (a)anthracene | 1,420 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 82700 |
| Benzo(b) fluoranthene | <3,760 |  | ug/kg dw | 08/09/2001 | 943 | 1455 | <2,850 | jrw | SW | 8270C |
| Benzo(k) fluoranthene | 1,060 |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270C |
| Benzo (a) pyrene | 2,820 | Ss | ug/kg dw | 08/08/2001 | 943 | 1449 | $<188$ | jrw | SW | 8270C |
| Benzyl alcohol | $<376$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | <376 | jrw | SW | 8270 C |
| Benzyl butyl phthalate | $<376$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270C |
| Bis (2-chloroethyl) ether | $<376$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<376$ | jxw | SW | 8270C |
| Bis (2-chloroethoxy) methane | $<376$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270C |
| Bis (2-ethylhexyl) phthalate | $<376$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<376$. | jrw | SW | 8270C |
| 2,2'-oxybis(1-Chloropropane) | $<376$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | <376 | jıw | SW | 82700 |
| 4-Bromophenyl phenyl ether | $<376$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270C |
| 4-Chloroaniline | $<376$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | <376 | jrw | SW | 8270C |
| 2-Chloronaphthalene | $<376$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270C |
| Chrysene | 3.310 |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270 C |
| Dibenzo (a, h) anthracene | $<188$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<188$ | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULI \& ASSOC. (Dublin) 08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13865

## Client Project ID: South Bend Indiana SBI002



SAMPLE NO. SAMPLE DESCRIPTION 697493 SBI002:GS-2:S005010:412

| Dibenzofuran | 866 |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichlorobenzene | $<376$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | <376 | jrw | SW | 8270C |
| 1,3-Dichlorobenzene | $<376$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270C |
| 1,4-Dichlorobenzene | <376 |  | ug/kg dw | 08/08/2001 | 943 | 1449 | <376 | jıw | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<752$ | ss | ug/kg dw | 08/08/2001 | 943 | 1449 | $<752$ | jrw | SW | 8270 C |
| Diethyl phthalate | $<376$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | <376 | jrw | SW | 8270 C |
| Dimethyi phthalate | <376 |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270C |
| 2,4-Dinitrotoluene | $<376$ | SS | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270C |
| 2,6-Dinitrotoluene | $<376$ | SS | ug/kg dw | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270 C |
| Di-n-octylphthalate | $<376$ | SS | ug/kg dw | 08/08/2001 | 943 | 1449 | <376 | jrw | SW | 8270C |
| Fluoranthene | $<3,760$ |  | ug/kg dw | 08/09/2001 | 943 | 1455 | $<3,420$ | jrw | SW | 8270C |
| Fluorene | $<376$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270 C |
| Hexachlorobenzene | $<376$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270C |
| Hexachloro-1,3-butadiene | $<376$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<376$ | jrw | . SW | 8270 C |
| Hexachlorocyclopentadiene | $<752$ |  | $u g / \mathrm{kg}$ dw | 08/08/2001 | 943 | 1449 | $<752$ | jrw | SW | B270C |
| Hexachloroethane | $<376$ | SS | ug/kg dw | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270C |
| Indeno (1, 2,3-cd) pyrene | $<376$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | <376 | jrw | SW | 8270 C |
| Isophorone | $<376$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<376$ | jxw | SW | 8270C |
| Naphthalene | 2,640 |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270 C |
| Nitrobenzene | <376 |  | ug/kg dw | 08/08/2001 | 943 | 1449 | <376 | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | - 376 |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | <376 | jrw | SW | 8270 C |
| Phenanthrene | 4,850 |  | ug/kg dw | 08/09/2001 | 943 | 1455 | $<3,760$ | jrw | SW | 8270C |
| Pyrene | 3,190 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270 C |
| 1,2,4-Trichlorobenzene | <376 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 86 |  | \% | 08/08/2001 | 943 | 1449 |  | jrw | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.13865

## Client Project ID: South Bend Indiana SBI002



DATE/TIME TAKEN 08/01/2001 11:25

| Surrogate: 2-Fluorobiphenyl | 95 |  | 7 | 08/08/2001 | 943 | 1449 |  | jrw |  | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: d14-Terpheny1 | 102 |  | \% | 08/08/2001 | 943 | 1449 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,880$ |  | ug/ kg dw | 08/08/2001 | 943 | 1449 | $<1,880$ | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<376$ |  | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<376$ | jıw | SW | 8270C |
| 2-Chlorophenol | $<376$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | $8270{ }^{\text {c }}$ |
| 2,4-Dichlorophenol | $<376$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | <376 | jrw | SW | 8270C |
| 2,4-Dimethylphenol | 662 |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | <376 |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270C |
| 2-Methylphenol | 702 |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<376$ | jixw | SW | 8270 C |
| meta \& para-Methylphenol | $<376$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SN | $8270{ }^{\text {c }}$ |
| 2-Nitrophenol | $<376$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<376$ | jxw | SW | 8270 C |
| Pentachlorophenol | $<376$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270C |
| Phenol | 1,360 |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<376$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<376$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<376$ | jrw | SW | 8270 C |
| Surrogate: d6-Phenol | 81 |  | \% | 08/08/2001 | 943 | 1449 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorophenol | 82 |  | \% | 08/08/2001 | 943 | 1449 |  | jrw | SW | 8270C |
| Surrogate: Tribromophenol | 85 | note | $\%$ | 08/08/2001 | 943 | 1449 |  | jrw | SW | 8270C |
| TPH - FTIR Non-aq | 550 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 585 | 618 | $<50$ | 260 |  |  |

## ANALYTICAL REPORT

Kevin Wildman

| HULL \& ASSOC. (Dublin) | $08 / 27 / 2001$ |
| :--- | :--- |
| 6130 Wilcox Rd. |  |
| Dublin, OH 43016 |  |

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPIE D | CRI | TION |  |  |  |  | DAP | /TIME | TAKEN |
| 697496 |  | SBI002:GS | -3: | 0501 | : 412 |  |  |  | 08/ | 1/2001 | 11:15 |


| Dry Weight | 95.3 | \% | 08/10/2001 |  | 1474 |  | mhg | SM 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/13/2001 |  | 1206 | Complete | emd | SW 6010b |
| Arsenic, ICP | 33.3 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2929 | <6.9 | emd | SW 6010B |
| Barium, ICP | 115 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2860 | <1.4 | emd | SW 6010B |
| Cadmium, ICP | <2.1 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2842 | <2.1 | emd | SW 6010B |
| Chromium, ICP | 15.5 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2830 | <2.7 | emd | Sw 6010B |
| Lead, ICP | 259 | mg/kg dw | 08/13/2001 | 894 | 2831 | $<5.6$ | emd | SW 6010B |
| Mercury, CVAA | 0.058 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 604 | 616 | $<0.008$ | epk | SW 7471A |
| Selenium, ICP | $<6.9$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2909 | $<6.9$ | emd | SW 6010B |
| Silver, ICP | $<2.7$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2862 | <2.7 | emd | SW 6010B |
| ICP Digestion, Nonaqueous | Complete |  | 08/06/2001 | 894 |  | Complete | $m \mathrm{mt}$ | SW 30508 |
| Mercury Digestion, Non-Aq | Complete |  | 08/11/2001 | 604 |  | Complete | epk | SW 7471A |
| Prep, BNA Non-Aq | Complete |  | 08/07/2001 | 943 |  | Complete | mlr | EPA 625; SW 3540C; SW 3545 |
| Prep, TPH 418.1 Nonaq | COMPLETE |  | 08/09/2001 | 585 |  | Complete | 260 | SW 9071 |
| VOLATILE COMPOUNDS-8260 Non-Aq |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/09/2001 |  | 1455 | Complete | bmh |  |
| Acetone | $<105$ | ug/ kg dw | 08/09/2001 |  | 1455 | $<105$ | bmh | SW 8260A |
| Benzene | $<5.2$ | ug/kg dw | 08/09/2001 |  | 1455 | $<5.2$ | bmh | SW 8260A |
| tert-Butylbenzene | $<5.2$ | ug/kg dw | 08/09/2001 |  | 1455 | $<5.2$ | bmh | SW 8260A |
| sec-Butylbenzene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | $<5.2$ | bmh | SW 8260A |
| n-Butylbenzene | $<5.2$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 |  | 1455 | <5.2 | bmh | SW 8260A |
| Bromochloromethane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | $<5.2$ | bmh | SW 8260A |
| Bromodichloromethane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | <5.2 | bmh | SW 8260A |
| Bromoform | $<5.2$ | ug/kg dw | 08/09/2001 |  | 1455 | <5.2 | bmh | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002
$08 / 27 / 2001$


SAMPLE NO.
SAMPLE DESCRIPTION
SBI002:GS-3:S005010:412
DATE/TIME TAKEN
08/01/2001 11:15

| Bromobenzene | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Butanone (MEK) | $<52$ | ug/kg dw | 08/09/2001 | 1455 | $<52$ | bmh | SW | 8260A |
| Carbon disulfide | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8250A |
| Carbon tetrachloride | <5.2 | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | <5.2 | bmh | SW | B260A |
| Chlorobenzene | $<5.2$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.2 | binh | SW | 8260A |
| Chloroethane | $<10.5$ | ug/kg dw | 08/09/2001 | 1455 | $<10.5$ | bmh | SW | 8260A |
| 2-Chlorotoluene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.2$ | brah | SW | 8260A |
| 4-Chlorotoluene | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| Chloroform | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.2 | brh | SW | 8260A |
| Chloromethane | $<10.5$ | ug/kg dw | 08/09/2001 | 1455 | <10.5 | bmh | SW | 8260A |
| Dibromochloromethane | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | < 5.2 | bmh | SW | 8260A |
| Dibromomethane | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | <5.2 | bmh | SW | 8260A |
| Dichlorodifluoromethane | - $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.2$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | <5.2 | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | <5.2 | ug/kg dw | 08/09/2001 | 1455 | <5.2 | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | <5.2 | ug/kg dw | 08/09/2001 | 1455 | <5.2 | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | <5.2 | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | B260A |
| 1,1-Dichloroethene | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | 5W | 8260A |
| cis-1,2-Dichloroethene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | B260A |
| trans-1,2-Dichloroethene | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | Sw | 8260A |
| 1,2-Dichloropropane | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | <5.2 | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | <5.2 | bmh | Sw | 8260A |
| 2,2-Dichloropropane | <5.2 | ug/kg dw | 08/09/2001 | 1455 | <5.2 | bmh | SW | 260 |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC: (Dublin) 08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


| 1,1-Dichloropropene | <5.2 | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cis-1, 3-Dichloropropene | <5.2 | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW 8260A |
| trans-1,3-Dichloropropene | <5.2 | ug/kg dw | 08/09/2001 | 1455 | <5.2 | bmh | SW 8260A |
| Ethylbenzene | <5.2 | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW 8260A |
| Hexachlorobutadiene | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW 8260A |
| n -Hexane | $<21.0$ | ug/kg dw | 08/09/2001 | 1455 | $<21.0$ | bmh | SW 8260A |
| 2-Hexanone | $<52.5$ | ug/kg dw | 08/09/2001 | 1455 | $<52.5$ | brah | SW 8260A |
| Isopropylbenzene (Cumene) | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.2$ | bmh | SW 8260A |
| p-Isopropyltoluene | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW 8260A |
| Bromomethane | $<10.5$ | ug/kg dw | 08/09/2001 | 1455 | $<10.5$ | bmh | SW 8260A |
| Methylene Chloride | $<10.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<10.5$ | brih | SW 8260A |
| Methyl t-butyl ether (MTBE) | <5.2 | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW 8260A |
| 4-Methyi-2-pentanone (MIBK) | $<52.5$ | ug/kg dw | 08/09/2001 | 1455 | $<52.5$ | bmh | SW 8260A |
| n-Propyibenzene | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW 8260A |
| Styrene | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | <5.2 | bmh | SW 8260A |
| Naphthalene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.2$ | bruh | SW 8260A |
| 1,1,1,2-Tetrachloroethane | <5.2 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.2$ | bmh | SW 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW 8260A |
| Tetrachloroethene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.2$ | bmh | SW 8260A |
| Toluene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.2 | bmh | SW 8260A |
| 1,2,4-Trichlorobenzene | <5.2 | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW 8260A |
| 1,1,1-Trichloroethane | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW 8260A |
| 1,1,2-Trichloroethane | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | buh | SW 8260A |
| Trichloroethene | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW 8260 A |
| Trichlorofluoromethane | <5.2 | ug/kg dw | 08/09/2001 | 1455 | < 5.2 | bmin | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting | Analyst |  |  |
| Analyzed | Number | Number | Limit | Initials Method Reference |  |  |  |

SAMPLE NO. SAMPLE DESCRIPTION
697496 SBIOO2:GS-3:S005010:412

| 1,2,3-Trichloropropane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | $<5.2$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,4-Trimethylbenzene | $<5.2$ | ug/kg dw | 08/09/2001 |  | 1455 | <5.2 | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.2$ | $u g / \mathrm{kg}$ dw | 08/09/2001 |  | 1455 | <5.2 | bmh | SW | 8260A |
| Vinyl Acetate | $<5.2$ | ug/kg dw | 08/09/2001 |  | 1455 | $<5.2$ | bmh | SW | 8260A |
| Vinyl Chloride | $<2.1$ | ug/kg dw | 08/09/2001 |  | 1455 | $<2.1$ | bmh | SW | 8260A |
| Xylenes, Total | $<5.2$ | ug/kg dw | 08/09/2001 |  | 1455 | $<5.2$ | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 103 | \% | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 104 | \% | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| d8-Toluene (surr) | 96 | 7 | 08/09/2001 |  | 1455 |  | bmh | Sw | 8260A |
| Eromofluorobenzene (surr) | 95 | $\%$ | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| BASE NEUT. COMPS. -8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | <346 | ug/kg dw | 08/08/2001 | 943 | 1449 | <346 | jrw | SW | 82700 |
| Acenaphthylene | $<346$ | ug/kg dw | 08/08/2001 | 943 | 1449 | <346 | jrw | SW | 8270C |
| Anthracene | $<346$ | ug/kg dw | 08/08/2001 | 943 | 1449 | <346 | jrw | SW | 8270C |
| Benzo (a) anthracene | 379 | ug/kg dw | 08/08/2001 | 943 | 1449 | <346 | jrw | SW | $8270{ }^{\text {C }}$ |
| Benzo (b) Eluoranthene | 562 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | <346 | jrw | SW | 8270 C |
| Benzo(k) fluoranthene | $<346$ | ug/kg dw | 08/08/2001 | 943 | 1449 | <346 | jrw | SW | 8270 C |
| Benzo (a) pyrene | 269 | ug/kg dw | 08/08/2001 | 943 | 1449 | <173 | jrw | SW | 8270 C |
| Benzyl alcohol | <346 | $u g / \mathrm{kg}$ dw | 08/08/2001 | 943 | 1449 | <346 | jrw | Sw | 8270C |
| Benzyl butyl phthalate | <346 | ug/kg dw | 08/08/2001 | 943 | 1449 | <346 | jrw | SW | 8270C |
| Bis (2-chloroethyl) ether | $<346$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | 8270C |
| Bis (2-chloroethoxy) methane | <346 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/08/2001 | 943 | 1449 | <346 | jrw | SW | 8270 C |
| Bis (2-ethylhexyl)phthalate | $<346$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<346$ | jxw | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<346$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
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6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initiala | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | SRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 697496 |  | SBI002:GS | -3: | 050 | 412 |  |  |  | $08 /$ | 1/2001 | 1 11:15 |


| 4-Eromophenyl phenyl ether | <346 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Chloroaniline | $<346$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | B270C |
| 2-Chloronaphthalene | $<346$ | ug/kg dw | 08/08/2001 | 943 | 1449 | <346 | jxw | SW | 8270 C |
| Chrysene | 445 | ug/kg dw | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<173$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<173$ | jrw | SW | 8270C |
| Dibenzofuran | $<346$ | ug/kg dw | 08/08/2001 | 943 | 1449 | <346 | jrw | SW | 8270C |
| 1,2-Dichlorobenzene | $<346$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SN | 8270 C |
| 1,3-Dichlorobenzene | $<346$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | 8270 C |
| 1,4-Dichlorobenzene | $<346$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<693$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/08/2001 | 943 | 1449 | $<693$ | jrw | SW | 82700 |
| Diethyl phthalate | $<346$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | 8270C |
| Dimethyl phthalate | $<346$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<346$ | Jrw | SW | 8270 C |
| 2,4-Dinitrotoluene | $<346$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | 8270C |
| 2,6-Dinitrotoluene | $<346$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<345$ | jrw | SW | 8270C |
| Di-n-octylphthalate | $<346$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | 8270 C |
| Fluoranthene | 598 | $u g / \mathrm{kg} d w$ | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | $8270 C$ |
| Fluorene | $<346$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | 82700 |
| Hexachlorobenzene | $<346$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | 8270 C |
| Hexachloro-1, 3-butadiene | $<346$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<346$ | jxw | SW | 8270C |
| Hexachlorocyclopentadiene | <693 | ug/kg dw | 08/08/2001 | 943 | 1449 | $<693$ | jrw | SW | $8270 C$ |
| Hexachloroethane | $<346$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | 8270 C |
| Indeno (1,2,3-cd) pyrene | $<346$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<346$ | jxw | SW | $8270{ }^{\text {c }}$ |
| Isophorone | <346 | ug/kg dw | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | 8270C |
| Naphthalene | 363 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<346$ | jxw | SN | 8270C |
| Nitrobenzene | <346 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | <346 | jrw | SW | 8270 C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION DATE/TIME TAKEN 697496 SBIO02:GS-3:S005010:412

| N-Nitrosodi-n-propylamine | $<346$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Phenanthrene | 688 |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | 8270C |
| Pyrene | 856 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | 8270 C |
| 1,2,4-Trichlorobenzene | <346 |  | ug/kg dw | 08/08/2001 | 943 | 1449 | <346 | jrw | SW | $8270{ }^{\text {c }}$ |
| Surrogate: d5-Nitrobenzene | 84 |  | 8 | 08/08/2001 | 943 | 1449 |  | jxw | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 95 |  | \% | 08/08/2001 | 943 | 1449 |  | jrw | SW | 8270 C |
| Surrogate: di4-Terphenyl | 135 |  | $\%$ | 08/08/2001 | 943 | 1449 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1.730$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<1.730$ | jrw | SW | 8270C |
| 4-Chloro-3-methylphenol | $<346$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | 8270C |
| 2-Chlorophenol | $<346$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | 8270 C |
| 2,4-Dichiorophenol | $<346$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | <346 | jrw | SW | 82700 |
| 2,4-Dimethylphenol | $<346$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<346$ | jxw | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<346$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<346$ | jıw | SW | 8270 C |
| 2-Methylphenol | $<346$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | 8270 C |
| meta \& para-Methylphenol | $<346$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<346$ | jrw | Sw | 8270C |
| 2-Nitrophenol | $<346$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<346$ | jrw | sw | 8270C |
| Pentachlorophenol | $<346$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | 8270 C |
| Phenol | $<346$ |  | $u g / \mathrm{kg}$ dw | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | 8270C |
| 2,4,5-Trichlorophenol | $<346$ |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/08/2001 | 943 | 1449 | $<346$ | jrw | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<346$ |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/08/2001 | 943 | 1449 | <346 | jrw | SH | 8270 C |
| Surrogate: d6-Phenol | 80 |  | 8 | 08/08/2001 | 943 | 1449 |  | jxw | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 79 |  | \% | 08/08/2001 | 943 | 1449 |  | jrw | SW | 8270 C |
| Surrogate: Tribromophenol | 76 | note | 8 | 08/08/2001 | 943 | 1449 |  | jrw | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULJ \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002



## ANALYTICAL REPORT

Kevin Wildman
$\begin{array}{ll}\text { HULI \& ASSOC. (Dublin) } \\ 6130 \text { Wilcox Rd. } & \end{array}$
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method R | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { SAMPLE } \\ & 697497 \end{aligned}$ | NO. | SAMPLE DE SBI002:FB | $\begin{aligned} & \text { SCRI } \\ & 1: 50 \end{aligned}$ | TION |  |  |  |  | $\begin{aligned} & \text { DAT } \\ & 08 / \end{aligned}$ | $\begin{aligned} & \text { /TIME } \\ & 1 / 2001 \end{aligned}$ | $\begin{gathered} \text { TAKEN } \\ 1 \quad 17: 00 \end{gathered}$ |


| 8260 - SW846 (AQ) | Complete |  | 08/10/2001 | 3472 | Complete | bmh |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | <20.0 | ug/L | 08/10/2001 | 3472 | <20.0 | bmh | SW | 8260A |
| Benzene | <1.0 | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | SW | 8260A |
| tert-Butylbenzene | <1.0 | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | SW | 8260A |
| sec-Butylbenzene | <1.0 | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| $n$-Butylbenzene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| Bromochloromethane | $<1.0$ | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | SW | 8260A |
| Bromodichloromethane | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| Bromoform | $<1.0$ | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | Sk | 8260A |
| Bromobenzene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 08/10/2001 | 3472 | $<12.5$ | bmh | SW | 8260A |
| Carbon disulfide | $<1.0$ | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | SW | 8260A |
| Carbon tetrachloride | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| Chlorobenzene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| Chloroethane | $<5.0$ | ug/L | 08/10/2001 | 3472 | <5.0 | bmh | SW | 8260A |
| 2-Chlorotoluene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 4-Chlorotoluene | $<1.0$ | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | SW | 8260A |
| Chloroform | 1.8 | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| Chloromethane | $<5.0$ | ug/L | 08/10/2001 | 3472 | <5.0 | bmh | SW | 8260A |
| Dibromochloromethane | $<1.0$ | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | SW | 8260A |
| Dibromomethane | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 08/10/2001 | 3472 | $<5.0$ | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | IIO |  |  |  |  | DA | /TIME | TAKEN |
| 697497 |  | SBI002: FB | : 50 |  |  |  |  |  | 08/ | 1/2001 | 17:00 |


| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW 8260A |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | SW 8260A |
| 1,1-Dichloroethene | <1.0 | ug/L | 08/20/2001 | 3472 | $<1.0$ | bmh | SW 8260A |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | SW 8260A |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW 8260A |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW 8260A |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 08/10/2001 | 3472 | <1.0 | brih | SW 8260A |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW 8260A |
| 1,1-Dichloropropene | <1.0 | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | SW 8260A |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW 8260A |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW 8260A |
| Ethylbenzene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW 8260A |
| Hexachlorobutadiene | <5.0 | ug/L | 08/10/2001 | 3472 | $<5.0$ | bmh | SW 8260A |
| n -Hexane | <5.0 | ug/L | 08/10/2001 | 3472 | < 5.0 | bmh | SW 8260A |
| 2-Hexanone | $<12.5$ | ug/L | 08/10/2001 | 3472 | $<12.5$ | bmh | SW 8260A |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | SW 8260A |
| p-Isopropyltoluene | <1.0 | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW 8260A |
| Bromomethane | < 5.0 | ug/L | 08/10/2001 | 3472 | $<5.0$ | bmh | SW 8260A |
| Methylene Chloride | $<5.0$ | ug/L | 08/10/2001 | 3472 | $<5.0$ | bmh | SW 8260A |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 08/10/2001 | 3472 | $<5.0$ | bmh | SW 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 08/10/2001 | 3472 | $<12.5$ | bmh | SW B260A |
| n-Propylbenzene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW 8260A |
| Styrene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW 8260A |
| Naphthalene | < 5.0 | ug/L | 08/10/2001 | 3472 | <5.0 | bmh | SW 8260A |

## ANALYTICAL REPORT

## Kevin Wildman

HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

08/27/2001

|  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Date | Batch | Batch | Reporting | Analyst |  |
| Analyzed | Number | Number | Limit | Initials | Method Reference |

SAMPLE NO. SAMPLE DESCRIPTION 697497

SBI002:FB1:505

DATE/TIME TAKEN 08/01/2001 17:00

| 1,1,1,2-Tetrachloroethane | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,2,2-Tetrachloroethane | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmb | SW | 8260A |
| Tetrachloroethene | <1.0 |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| Toluene | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | <5.0 |  | ug/L | 08/10/2001 |  | 3472 | <5.0 | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| Trichloroethene | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| Trichlorofluoromethane | <1.0 |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | <5.0 |  | ug/L | 08/10/2001 |  | 3472 | $<5.0$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | sw | 8260A |
| 1,3,5-Trimethylbenzene | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| Vinyl Acetate | <5.0 |  | ug/L | 08/10/2001 |  | 3472 | $<5.0$ | bmh | SW | 8260A |
| Vinyl Chloride | <1.0 |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| Xylenes | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | <1.0 | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 97 |  | 8 | 08/10/2001 |  | 3472 |  | brah | SW | 8260A |
| Dibromofluoromethane (surr) | 99 |  | 8 | 08/10/2001 |  | 3472 |  | bmh | SW | 8260A |
| ds-Toluene (surr) | 99 |  | 8 | 08/10/2001 |  | 3472 |  | bmin | SW | 8260A |
| Bromofluorobenzene (surr) | 102 | note | \% | 08/10/2001 |  | 3472 |  | bmh | SW | 8260A |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ |  | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | Sw | 8270C |
| Acenaphthylene | $<10$ |  | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW | 8270C |
| Anthracene | $<10$ |  | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jıw | SW | 8270 C |
| Benzo(a)anthracene | $<10$ |  | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jヶw | Sw | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULI \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>08/27/2001

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | II |  |  |  |  | DAT | /TIME | TAKEN |
| 697497 |  | SBI002: F | 1:50 |  |  |  |  |  | 08 | 1/2001 | 1 17:00 |


| Benzo(b) fluoranthene | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benzo(k) fluoranthene | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| Benzo (a) pyrene | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| Benzyl alcohol | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| bis(2-Chloroethyl) ether | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| 2,2'-oxybis (1-Chioropropane) | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| 4-Bromophenyl phenyl ether | <10 | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| 2-Chloronaphthalene | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jxw | SW 8270C |
| Chrysene | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| Dibenzo (a, h) anthracene | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| Dibenzofuran | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 08/16/2001 | 1251 | 2653 | $<50$ | jxw | SW 8270C |
| Diethyl phthalate | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| 2.4-Dinitrotoluene | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| Fluoranthene | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | <10 | jIw | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


DATE/TIME TAKEN 08/01/2001 17:00

| Fluorene | $<10$ | ug/ $\downarrow$ | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hexachlorobenzene | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW | 8270C |
| Hexachloro-1, 3-butadiene | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 08/16/2001 | 1251 | 2653 | $<20$ | jrw | SW | 82700 |
| Hexachloroethane | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW | 8270C |
| Indeno (1,2,3-cd) pyrene | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW | 8270 C |
| Isophorone | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW | 8270 C |
| Naphthalene | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW | 8270 C |
| Nitrobenzene | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW | 8270C |
| Phenanthrene | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW | 8270C |
| Pyrene | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 82 | $t$ | 08/16/2001 | 1251 | 2653 |  | jrw | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 87 | $\frac{8}{6}$ | 08/16/2001 | 1251 | 2653 |  | jrw | SW | 8270C |
| Surrogate: di4-Terphenyl | 94 | 8 | 08/16/2001 | 1251 | 2653 |  | jxw | SW | 82700 |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 08/16/2001 | 1251 | 2653 | $<50$ | jxw | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW | $8270{ }^{\circ}$ |
| 2-Chlorophenol | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW | $8270{ }^{\text {c }}$ |
| 2,4-Dichlorophenol | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW | $8270{ }^{\text {c }}$ |
| 2,4-Dimethylphenol | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW | $8270{ }^{\circ}$ |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW | 8270C |
| 2-Methylphenol | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW | 8270C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin) 08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 697497 | SBIOO2:FBI:505 | $08 / 01 / 2001 \quad 17: 00$ |


| meta \& para-Methylphenol | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Nitrophenol | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | Sw 8270C |
| Pentachlorophenol | <10 | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jiw | SW 8270C |
| Phenol | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | SW 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 08/16/2001 | 1251 | 2653 | $<10$ | jrw | Sw 8270C |
| Surrogate: d6-Phenol | 75 | $\%$ | 08/16/2001 | 1251 | 2653 |  | jrw | Sw 8270C |
| Surrogate: 2-Fluorophenol | 73 | 8 | 08/16/2001 | 1251 | 2653 |  | jrw | SW 8270C |
| Surrogate: Tribromophenol | 68 | 4 | 08/16/2001 | 1251 | 2653 |  | jrw | SW 8270C |
| TPH - GRO (Aqueous) | $<1$ | mg/L | 08/08/2001 |  | 78 | $<1$ | meb | SW 8015M |
| TPH - Method 418.1 (AQ) | $<0.2$ | mg/L | 08/10/2001 | 592 | 711 | $<0.2$ | 260 | EPA 418.1 |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch Batch Reporting Analyst | Number Number Limit | Initials Method Reference |

SAMPLE NO. SAMPLE DESCRIPTION 697498

SBI002:TBI
DATE/TIME TAKEN 08/01/2001


## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 697498 | SBIOO2:TB1 | $08 / 01 / 2001$ |


| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | brah | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,1-Dichioroethane | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,2-Dichioroethane | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | brah | Sw | 8260A |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | brih | SW | 8260A |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | brnh | SW | 8260A |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | sw | 8260A |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | brah | SW | 8260A |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | Sw | 8260A |
| Ethylbenzene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.0$ | ug/L | 08/10/2001 | 3472 | < 5.0 | bmh | SW | 8260A |
| n -Hexane | $<5.0$ | ug/L | 08/10/2001 | 3472 | $<5.0$ | bmh | SW | 8260A |
| 2-Hexanone | $<12.5$ | ug/L | 08/10/2001 | 3472 | $<12.5$ | brah | SW | 8260A |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| p-I sopropyltoluene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| Bromomethane | $<5.0$ | ug/L | 08/10/2001 | 3472 | $<5.0$ | bmh | SW | 8260A |
| Methylene Chloride | $<5.0$ | ug/L | 08/10/2001 | 3472 | < 5.0 | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.0$ | $\mathrm{ug} / \mathrm{L}$ | 08/10/2001 | 3472 | $<5.0$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 08/10/2001 | 3472 | $<12.5$ | bmh | SW | 8260A |
| n-Propylbenzene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| Styrene | <1.0 | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
697498

DATE/TIME TAKEN 08/01/2001

| Naphthalene | $<5.0$ |  | ug/L | 08/10/2001 | 3472 | <5.0 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | $<1.0$ |  | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<1.0$ |  | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| Tetrachloroethene | $<1.0$ |  | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| Toluene | $<1.0$ |  | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.0$ |  | ug/L | 08/10/2001 | 3472 | $<5.0$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | <1.0 |  | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<1.0$ |  | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | SW | 8260A |
| Trichloroethene | $<1.0$ |  | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | SW | 8260A |
| Trichlorofluoromethane | $<1.0$ |  | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.0$ |  | ug/L | 08/10/2001 | 3472 | $<5.0$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<1.0$ |  | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<1.0$ |  | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| Vinyl Acetate | $<5.0$ |  | ug/L | 08/10/2001 | 3472 | < 5.0 | bmh | SW | 8260A |
| Vinyl Chloride | $<1.0$ |  | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| Xylenes | $<1.0$ |  | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 92 |  | $\%$ | 08/10/2001 | 3472 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 92 |  | \% | 08/10/2001 | 3472 |  | bmh | SW | 8260A |
| d8-Toluene (surr) | 99 |  | \% | 08/10/2001 | 3472 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 102 | note | 8 | 08/10/2001 | 3472 |  | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyat <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | PTION |  |  |  |  | DAT | /TIME | TAKEN |
| 697499 |  | SBI002:GS | -3D | S00501 | : 412 |  |  |  | 08/ | 1/2001 | 11:15 |



## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Unite | Date <br> Analyzed | Prep Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method R | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE $697499$ | NO. | $\begin{aligned} & \text { SAMPLE DE } \\ & \text { SBIOO2:GS } \end{aligned}$ | CRI | $\begin{aligned} & \text { PTIOI } \\ & \text { SOOS } \end{aligned}$ | $\text { : } 412$ |  |  |  | $\begin{aligned} & \text { DAT } \\ & 08 / \end{aligned}$ | /TIME <br> $1 / 2001$ | $\begin{gathered} \text { TAKEN } \\ 1 \quad 11: 15 \end{gathered}$ |


| Bromobenzene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.2 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Butanone (MEK) | $<52$ | ug/kg dw | 08/09/2001 | 1455 | $<52$ | bmh | SW | 8260A |
| Carbon disulfide | <5.2 | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<5.2$ | brin | SW | 8260A |
| Carbon tetrachloride | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| Chlorobenzene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| Chloroethane | $<10.4$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<10.4$ | bmh | SW | B260A |
| 2-Chlorotoluene | $<5.2$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 1455 | < 5.2 | bmh | SW | 8260A |
| 4-Chlorotoluene | <5.2 | ug/kg dw | 08/09/2001 | 1455 | <5.2 | bmh | sw | 8260A |
| Chloroform | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1.455 | $<5.2$ | bmh | SW | 8260A |
| Chloromethane | $<10.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<10.4$ | bmh | SW | 8260A |
| Dibromochloromethane | <5.2 | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| Dibromomethane | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | <5.2 | bmh | SW | 8260A |
| Dichlorodifluoromethane | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | < 5.2 | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.2 | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | <5.2 | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmah | SW | .8260A |
| 1,4-Dichlorobenzene | <5.2 | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmb | SW | 8260A |
| 1,1-Dichloroethane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | <5.2 | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| 1,2-Dichloropropane | <5.2 | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | <5.2 | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmha | SW | 8260A |
| 2,2-Dichloropropane | <5.2 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 1455 | <5.2 | bmh | Sw | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
$\begin{array}{ll}\text { HULI \& ASSOC. (Dublin) } \\ \text { 6130 Wilcox Rd. } & \end{array}$
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
697499

DATE/TIME TAKEN
08/01/2001 11:15

| 1,1-Dichloropropene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| cis-1,3-Dichloropropene | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | <5.2 | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | <5.2 | bmh | SW | 8260A |
| Ethylbenzene | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | <5.2 | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.2$ | bmh | Sw | 8260A |
| n -Hexane | $<20.8$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<20.8$ | bmh | SW | 8260A |
| 2-Hexanone | $<52.1$ | ug/kg dw | 08/09/2001 | 1455 | $<52.1$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| p-Isopropyltoluene | <5.2 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| Bromomethane | $<10.4$ | ug/kg dw | 08/09/2001 | 1455 | $<10.4$ | bmh | SW | 8260A |
| Methylene Chloride | $<10.4$ | ug/kg dw | 08/09/2001 | 1455 | $<10.4$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.2$ | ug/ kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | <52.1 | ug/kg dw | 08/09/2001 | 1455 | $<52.1$ | bmh | SW | 8260A |
| n-Propylbenzene | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| Styrene | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| Naphthalene | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | binh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8250A |
| Tetrachloroethene | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| Toluene | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | <5.2 | ug/kg ${ }_{\text {dw }}$ | 08/09/2001 | 1455 | $\leqslant 5.2$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| Trichloroethene | $<5.2$ | ug/kg dw | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |
| Trichlorofluoromethane | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.2$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION
697499
SBI002:GS-3D:S005010:412

DATE/TIME TAKEN 08/01/2001 11:15

| 1,2,3-Trichloropropane | $<5.2$ | ug/kg dw | 08/09/2001 |  | 1455 | <5.2 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,4-Trimethylbenzene | $<5.2$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 |  | 1455 | <5.2 | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | <5.2 | ug/kg dw | 08/09/2001 |  | 1455 | <5.2 | bmh | SW | 8260A |
| Vinyl Acetate | $<5.2$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | $<5.2$ | bmh | SW | 8260A |
| Vinyl Chloride | $<2.1$ | ug/kg dw | 08/09/2001 |  | 1455 | <2.1 | bmin | SW | 8260A |
| Xylenes, Total | <5.2 | ug/kg dw | 08/09/2001 |  | 1455 | <5.2 | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 99 | 8 | 08/09/2001 |  | 1455 |  | bmin | SW | 8260A |
| Dibromofluoromethane (surr) | 100 | \% | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| d8-Toluene (surr) | 96 | \% | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 95 | \% | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| RASE NEUT. COMPS. -8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | <344 | ug/kg dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270 C |
| Acenaphthylene | <344 | ug/kg dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270 C |
| Anthracene | <344 | ug/kg dw | 08/08/2001 | 943 | 1449 | $<344$ | jrw | SW | 8270C |
| Benzo (a) anthracene | <344 | ug/kg dw | 08/08/2001 | 943 | 1449 | $<344$ | jrw | SW | 82700 |
| Benzo (b) fluoranthene | <344 | ug/kg dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270 C |
| Benzo (k) fluoranthene | $<344$ | ug/kg dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270 C |
| Benzo (a) pyrene | $<172$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<172$ | jrw | SW | 82700 |
| Benzyl alcohol | <344 | ug/kg dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270C |
| Benzyl butyl phthalate | $<344$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<344$ | jxw | SW | $8270{ }^{\text {c }}$ |
| Bis (2-chloroethyl) ether | $<344$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<344$ | jrw | SW | 8270C |
| Bis (2-chloroethoxy) methane | c344 | ug/kg dw | 08/08/2001 | 943 | 1449 | $<344$ | jrw | SW | 8270C |
| Bis(2-ethylhexyl)phthalate | <344 | ug/kg dw | 08/08/2001 | 943 | 1449 | <344 | jxw | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | <344 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270C |

# ANALYTICAL REPORT 

Kevin Wildman
HULI \& ASSOC. (Dublin) 08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 697499

SBI002:GS-3D:S005010:412

DATE/TIME TAKEN 08/01/2001 11:15

| 4-Bromophenyl phenyl ether | $<344$ | ug/kg dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Chloroaniline | <344 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270C |
| 2-Chloronaphthalene | $<344$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<344$ | jrw | Sw | 8270 C |
| Chrysene | $<344$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | <344 | jxw | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<172$ | ug/kg dw | 08/08/2001 | 943 | 1449 | <172 | jrw | SW | 8270C |
| Dibenzofuran | $<344$ | ug/kg dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270C |
| 1,2-Dichlorobenzene | $<344$ | ug/kg dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 82700 |
| 1,3-Dichlorobenzene | $<344$ | ug/kg dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270 C |
| 1,4-Dichlorobenzene | $<344$ | ug/kg dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 82700 |
| 3,3'-Dichlorobenzidine | $<688$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | <688 | jrw | SW | 8270 C |
| Diethyl phthalate | $<344$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<344$ | jrw | SW | 8270 C |
| Dimethyl phthalate | $<344$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<344$ | jrw | SW | 8270 C |
| 2,4-Dinitrotoluene | $<344$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270C |
| 2,6-Dinitrotoluene | $<344$ | ug/kg dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270C |
| Di-n-octylphthalate | $<344$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<344$ | jrw | SW | 8270C |
| Fluoranthene | $<344$ | ug/kg dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 82700 |
| Fluorene | $<344$ | ug/kg dw | 08/08/2001 | 943 | 1449 | <344 | jxw | . $5 W$ | 8270 C |
| Hexachlorobenzene | $<344$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 82700 |
| Hexachloro-1,3-butadiene | $<344$ | ug/kg dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270 C |
| Hexachlorocyclopentadiene | $<688$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | <688 | jrw | SW | 8270 C |
| Hexachloroethane | <344 | ug/kg dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270 C |
| Indeno (1,2,3-cd) pyrene | <344 | ug/kg dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270 C |
| Isophorone | $<344$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<344$ | jrw | SW | 82700 |
| Naphthalene | $<344$ | ug/kg dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270C |
| Nitrobenzene | $<344$ | $u g / \mathrm{kg} d w$ | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 697499

SBI002:GS-3D:S005010:412

DATE/TIME TAKEN 08/01/2001 11:15

| N-Nitrosodi-n-propylamine | <344 |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<344$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Phenanthrene | 409 |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270 C |
| Pyrene | 351 |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<344$ | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | <344 |  | ug/kg dw | 08/08/2001 | 943 | ${ }^{1} 1449$ | <344 | jrw | SW | 82700 |
| Surrogate: d5-Nitrobenzene | 75 |  | 8 | 08/08/2001 | 943 | 1449 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorobipheny1 | 85 |  | 7 | 08/08/2001 | 943 | 1449 |  | jrw | SW | 8270C |
| Surrogate: d14-Terphenyl | 128 |  | \% | 08/08/2001 | 943 | 1449 |  | jrw | SW | 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,720 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<1,720$ | jrw | SW | 82700 |
| 4-Chloro-3-methylphenol | <344 |  | ug/kg dw | 08/08/2001 | 943 | 1449 | <344 | jıw | SW | 8270C |
| 2-Chlorophenol | <344 |  | $u g / \mathrm{kg}$ dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270 C |
| 2,4-Dichlorophenol | $<344$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<344$ | jrw | SW | $8270{ }^{\text {c }}$ |
| 2,4-Dimethylphenol | $<344$ |  | $u g / \mathrm{kg}$ dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | <344 |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<344$ | jrw | SW | 8270C |
| 2-Methylphenol | $<344$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<344$ | jrw | Sw | 82700 |
| meta \& para-Methylphenol | $<344$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270 C |
| 2-Nitrophenol | $<344$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270C |
| Pentachlorophenol | $<344$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SN | 8270C |
| Phenol | $<344$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<344$ | jrw | SW | 82700 |
| 2,4,5-Trichlorophenol | $<344$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<344$ | jrw | SW | 82700 |
| 2,4,6-Trichlorophenol | <344 |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/08/2001 | 943 | 1449 | <344 | jrw | SW | 8270 C |
| Surrogate: d6-Phenol | 73 |  | $\%$ | 08/08/2001 | 943 | 1449 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorophenol | 71 |  | \% | 08/08/2001 | 943 | 1449 |  | jrw | SW | 8270C |
| Surrogate: Tribromophenol | 69 | note | \% | 08/08/2001 | 943 | 1449 |  | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TIO |  |  |  |  | DAI | /TIME | TAKEN |
| 697499 |  | SBI002:GS | 3D: | 005 | : 412 |  |  |  | 08/ | 1/2001 | 1 11:15 |


| TPH - FTIR Non-aq | <50 | mg/kg dw | 08/09/2001 | 585 | 618 | <50 | 260 | 418.1 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE NO. | SAMPLE | TION |  |  |  |  |  | DATE/TIME | TAKEN |
| 697500 | SBI002 | 00002 | : 428 |  |  |  |  | 08/01/2001 | 09:20 |


| Dry Weight | 86.1 | \% | 08/10/2001 |  | 1474 |  | mhg | SM 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/13/2001 |  | 1206 | Complete | emd | SW 6010B |
| Arsenic, ICP | 15.8 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2929 | <11 | emd | SW 6010B |
| Barium, ICP | 215 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2860 | $<2.3$ | emd | SW 6010B |
| Cadmium, ICP | <3.4 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2842 | $<3.4$ | emd | SW 6010B |
| Chromium, ICP | 11 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2830 | <4.5 | emd | SW 6010B |
| Lead, ICP | 426 | $\mathrm{mg} / \mathrm{kg} \mathrm{d} w$ | 08/13/2001 | 894 | 2831 | <9.1 | emd | SW 6010B |
| Mercury, CVAA | 1.10 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 604 | 616 | $<0.038$ | epk | SW 7471A |
| Selenium, ICP | $<11$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2909 | $<11$ | emd | SW 6010B |
| Silver, ICP | <4.5 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2862 | <4.5 | emad | SW 6010B |
| ICP Digestion, Nonaqueous | Complete |  | 08/06/2001 | 894 |  | Complete | mrt | SW 3050日 |
| Mercury Digestion, Non-Aq | Complete |  | 08/11/2001 | 604 |  | Complete | epk | SW 7471A |
| Prep, BNA Non-Aq | Complete |  | 08/07/2001 | 943 |  | Complete | mlr | EPA 625; SW 3540C; SW 3545 |
| VOLATILE COMPOUNDS-8260 Non-Aq |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/09/2001 |  | 1455 | Complete | bmh |  |
| Acetone | <116 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | <116 | brnh | SW 8260A |

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |  |  |

## SAMPLE NO. 697500

## SAMPLE DESCRIPTION

SBIO02:HMW4S:S000020:428

DATE/TIME TAKEN 08/01/2001 09:20

| Benzene | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | $<5.8$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| tert-Butylbenzene | <5.8 | ug/kg dw | 08/09/2001 | 1455 | $<5.8$ | bmh | SW | 8260A |
| sec-Butylbenzene | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | $<5.8$ | bmh | SW | 8260A |
| n-Butylbenzene | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | <5.8 8 | bmh | SW | 8260A |
| Bromochloromethane | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | <5.8 | bmh | SW | 8260A |
| Bromodichloromethane | $<5.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.8$ | bmh | SW | 8260A |
| Bromoform | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | <5.8 | bma | SW | 8260A |
| Bromobenzene | <5.8 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.8 | bmh | SW | 8260A |
| 2-Butanone (MEK) | $<58$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<58$ | bmh | S* | 8260A |
| Carbon disulfide | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | <5.8 | bmh | SW | 8260A |
| Carbon tetrachloride | < 5.8 | ug/kg dw | 08/09/2001 | 1455 | <5.8 | bmh | SW | 8260A |
| Chlorobenzene | <5.8 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.8 | bmh | SW | 8260A |
| Chloroethane | $<11.6$ | ug/kg dw | 08/09/2001 | 1455 | $<11.6$ | bmh | SW | 8260A |
| 2-Chlorotoluene | $<5.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.8$ | bmh | SW | 8260A |
| 4-Chiorotoluene | <5.8 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | < 5.8 | brah | SW | 8260A |
| Chloroform | <5.8 | ug/kg dw | 08/09/2001 | 1455 | <5.8 | bmh | SW | 8260A |
| Chloromethane | $<11.6$ | ug/kg dw | 08/09/2001 | 1455 | $<11.6$ | bmh | SW | 8260A |
| Dibromochloromethane | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | $<5.8$ | bmh | SW | 8260A |
| Dibromomethane | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | $<5.8$ | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | $<5.8$ | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | $<5.8$ | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | $<5.8$ | bmh | Sw | 8260A |
| 1,3-Dichlorobenzene | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | <5.8 | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | $<5.8$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | <5.8 | ug/kg dw | 08/09/2001 | 1455 | <5.8 | bmh | SW | 8260A |

# ANALYTICAL REPORT 

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.13865

## Client Project ID: South Bend Indiana SBIO02



SAMPLE NO. SAMPLE DESCRIPTION
697500 SBIOO2:HMW4S:SOOOO20:428
DATE/TIME TAKEN
08/01/2001 09:20

| 1,2-Dichloroethane | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | < 5.8 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1-Dichloroethene | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | < 5.8 | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.8$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.8$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | $<5.8$ | bmbs | SW | 8260A |
| 1,2-Dichloropropane | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | $<5.8$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | $<5.8$ | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | <5.8 | bmb | SW | 8260A |
| 1,1-Dichloropropene | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | <5.8 | bmh | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | < 5.8 | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | $<5.8$ | bmh | SW | 8260A |
| Ethylbenzene | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | $<5.8$ | bmh | SW | 8260A |
| Hexachlorobutadiene | <5.8 | ug/kg dw | 08/09/2001 | . 1455 | <5.8 | bmh | SW | 8260A |
| n -Hexane | $<23.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<23.2$ | bmh | SW | 8260A |
| 2-Hexanone | $<58.1$ | ug/kg dw | 08/09/2001 | 1455 | $<58.1$ | bmh | Sw | 8260A |
| Isopropylbenzene (Cumene) | $<5.8$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.8 | bmh | SW | 8250A |
| p-Isopropyltoluene | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | $<5.8$ | bmh | SW | 8260A |
| Bromomethane | $<11.6$ | ug/kg dw | 08/09/2001 | 1455 | $<11.6$ | bmh | SW | 8260A |
| Methylene Chloride | $<11.6$ | ug/kg dw | 08/09/2001 | 1455 | $<11.6$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | <5.8 | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<58.1$ | ug/kg dw | 08/09/2001 | 1455 | $<58.1$ | bmh | SW | 8260A |
| n-Propylbenzene | <5.8 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.8$ | bmh | SW | 8260A |
| Styrene | <5.8 | ug/kg dw | 08/09/2001 | 1455 | $<5.8$ | brin | SW | 8260A |
| Naphthalene | $<5.8$ | ug/kg dw | 08/09/2001 | 1455 | $<5.8$ | brh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | <5.8 | ug/kg dw | 08/09/2001 | 1455 | $<5.8$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.8$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 697500

SAMPLE DESCRIPTION
SBIOO2:HMW4S:S000020:428

DATE/TIME TAKEN 08/01/2001 09:20


## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>\section*{Job Number: 01.13865}<br>\section*{Client Project ID: South Bend Indiana SBI002}

08/27/2001

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | $C R I$ | IIO |  |  |  |  | DAT | /TIME | TAKEN |
| 697500 |  | SBIO02: HM | N4S | S0000 | : 428 |  |  |  | $08 /$ | 1/2001 | 1 09:20 |


| Benzo (a) Pyrene | 913 | $u g / \mathrm{kg}$ dw | 08/08/2001 | 943 | 1449 | $<192$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benzyl alcohol | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270 C |
| Benzyl butyl phthalate | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jxw | SW | 8270C |
| Bis (2-chloroethyl) ether | $<383$ | ug/kg dow | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270 C |
| Bis (2-chloroethoxy) methane | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270C |
| Bis (2-ethylhexyl) phthalate | $<383$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<383$ | jnw | SW | 8270 C |
| 2.2'-oxybis(1-Chloropropane) | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270C |
| 4-Bromophenyl phenyl ether | <383 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270C |
| 4-Chloroaniline | $<383$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270 C |
| 2-Chloronaphthalene | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270 C |
| Chrysene | 1.030 | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | j5w | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<192$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449. | $<192$ | jrw | SW | 8270 C |
| Dibenzofuran | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | $8270{ }^{\text {c }}$ |
| 1,2-Dichlorobenzene | $<383$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | $8270{ }^{\text {c }}$ |
| 1,3-Dichlorobenzene | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 82700 |
| 1,4-Dichlorobenzene | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270 C |
| 3.3'-Dichlorobenzidine | $<767$ | ug/ikg dw | 08/08/2001 | 943 | 1449 | $<767$ | jrw | SW | 8270 C |
| Diethyl phthalate | $<383$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270 C |
| Dimethyl phthalate | $<383$ | ug/kg dw | 08/08/2001 | 943 | 144.9 | $<383$ | jrw | SW | 8270C |
| 2,4-Dinitrotoluene | $<383$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270C |
| 2,6-Dinitrotoluene | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jıw | SW | 8270C |
| Di-n-octylphthalate | $<383$ | ug/ kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jTw | SW | $8270{ }^{\text {c }}$ |
| Fluoranthene | 1,850 | $u g / \mathrm{kg}$ dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270 C |
| Fluorene | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270 C |
| Hexachlorobenzene | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.13865<br>Client Project ID: South Bend Indiana SBIOO2

08/27/2001

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { SAMPLE } \\ & 697500 \end{aligned}$ | NO. | SAMPLE D SBIO02: HM | SCRI | $\begin{aligned} & \text { PTIO } \\ & \text { SOOO } \end{aligned}$ | $\text { : } 428$ |  |  |  | DAT | $\begin{aligned} & \text { /TIME } \\ & \text { 1/2001 } \end{aligned}$ | $\begin{gathered} \text { TAKEN } \\ 1 \quad 09: 20 \end{gathered}$ |


| Hexachloro-1, 3-butadiene | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hexachlorocyclopentadiene | $<767$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<767$ | jrw | SW | 8270C |
| Hexachloroethane | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270 C |
| Indeno (1, 2, 3-cd) pyrene | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 82700 |
| Isophorone | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | <383 | jrw | 8w | 8270C |
| Naphthalene | $<383$ | $u g / \mathrm{kg}$ dw | 08/08/2001. | 943 | 1449 | $<383$ | jrw | SW | 8270C |
| Nitrobenzene | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270 C |
| Phenanthrene | 2,230 | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270C |
| Pyrene | 2,620 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | <383 | jxw | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 77 | $\%$ | 08/08/2001 | 943 | 1449 |  | jrw | SW | 8270c |
| Surrogate: 2-Fluorobiphenyl | 87 | 8 | 08/08/2001 | 943 | 1449 |  | jrw | SW | 8270C |
| Surrogate: dl4-Terphenyl | 114 | 8 | 08/08/2001 | 943 | 1449 |  | jrw | SW | $8270{ }^{\text {c }}$ |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,920$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<1,920$ | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270 C |
| 2-Chlorophenol | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270C |
| 2,4-Dichlorophenol | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270 C |
| 2,4-Dimethylphenol | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270C |
| 2-Methyl-4.6-dinitrophenol | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270C |
| 2-Methylphenol | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270C |
| meta \& para-Methylphenol | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 8270C |
| 2-Nitrophenol | $<383$ | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW | 82700 |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |
| Analyed | Number | Number | Limit | Initials Method Reference |  |  |

SAMPLE NO. 697500

SAMPLE DESCRIPTION
SBI 002 : HMW4S: S000020:428

DATE/TIME TAKEN 08/01/2001 09:20

| pentachlorophenol | $<383$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Phenol | $<383$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW 8270C |
| 2,4,5-Trichlorophenol | $<383$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW 8270C |
| 2,4,6-Trichlorophenol | $<383$ |  | ug/kg dw | 08/08/2001 | 943 | 1449 | $<383$ | jrw | SW 8270C |
| Surrogate: d6-Phenol | 65 |  | \% | 08/08/2001 | 943 | 1449 |  | jrw | SW 8270C |
| Surrogate: 2-Fluorophenol | 55 |  | \% | 08/08/2001 | 943 | 1449 |  | jıw | SW 8270C |
| Surrogate: Tribromophenol | 60 | note | 8 | 08/08/2001 | 943 | 1449 |  | jrw | SW 8270C |
| TPH - GRO (Non-Aqueous) | <6 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/06/2001 |  | 245 | <6 | meb | SW 8015M |

SAMPLE NO. SAMPLE DESCRIPTION
697501 SBI002:HMW5S:S000020:428


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 697501

SAMPLE DESCRIPTION
SBI 002 : HMW5S:S000020:428

DATE/TIME TAKEN
08/01/2001 12:45

| n-Butylbenzene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bromochloromethane | <5.4 | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxcc | SW | 8260A |
| Bromodichloromethane | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| Bromoform | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| Bromobenzene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW | 8260A |
| 2-Butanone (MEK) | $<54$ | ug/kg dw | 08/07/2001 | 1450 | <54 | jxc | SW | 8260A |
| Carbon disulfide | $<5.4$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| Carbon tetrachloride | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | < 5.4 | jxc | SW | 8260A |
| Chlorobenzene | <5.4 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.4 | jxc | SW | 8260A |
| Chloroethane | $<10.7$ | ug/kg dw | 08/07/2001 | 1450 | $<10.7$ | jxc | SW | 8260A |
| 2-Chlorotoluene | $<5.4$ | ug/ kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| 4-Chlorotoluene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW | 8260A |
| Chloroform | <5.4 | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| Chloromethane | $<10.7$ | ug/kg dw | 08/07/2001 | 1450 | $<10.7$ | jxc | SW | 8260A |
| Dibromochloromethane | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW | 8260A |
| Dibromomethane | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW | 8260A |
| Dichlorodifluoromethane | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW | B260A |
| 1,4-Dichlorobenzene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| 1,1-Dichloroethane | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxse | SW | 8260A |
| 1,2-Dichioroethane | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | Sw | 8260A |
| 1,1-Dichloroethene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.4 | jxc | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 697501

SAMPLE DESCRIPTION SBIOO2:HMW5S:SOOOO20:428

DATE/TIME TAKEN 08/01/2001 12:45

| trans-1,2-Dichloroethene | $<5.4$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichloropropane | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| 1,3-Dichloropropane | <5.4 | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| 2,2-Dichloropropane | <5.4 | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| 1,1-Dichloropropene | $<5.4$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | < 5.4 | jxc | SW | 8260A |
| Cis-1,3-Dichloropropene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| trans-1, 3-Dichloropropene | $<5.4$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| Ethylbenzene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| Hexachlorobutadiene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| n -Hexane | $<21.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<21.4$ | jxc | SW | 8260A |
| 2-Hexanone | $<53.6$ | ug/kg dw | 08/07/2001 | 1450 | $<53.6$ | jxc | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| p-Isopropyltoluene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| Bromomethane | $<10.7$ | ug/kg dw | 08/07/2001 | 1450 | $<10.7$ | jxc | SW | 8260A |
| Methylene Chloride | $<10.7$ | ug/kg dw | 08/07/2001 | 1450 | $<10.7$ | jxc | SW | 8260A |
| Methyl t-butyl ether (MIBE) | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<53.6$ | ug/kg dw | 08/07/2001 | 1450 | <53.6 | jxc | SW | 8260A |
| n -Propylbenzene | $<5.4$ | ug/kg dw | 08/07/2.001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| Styrene | $<5.4$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| Naphthalene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | Sw | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.4$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| Tetrachloroethene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| Toluene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxe | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| R |  | Number | Number | Limit | Initials Method Reference |

## SAMPLE NO. 697501

SAMPLE DESCRIPTION
SBI002:HMW5S:S000020:428

DATE/TIME TAKEN 08/01/2001 12:45

| 1,1,1-Trichloroethane | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<5.4$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,2-Trichloroethane | $<5.4$ | ug/kg dw | 08/07/2001 |  | 1450 | <5.4 | jxc | SW | 8260A |
| Trichloroethene | $<5.4$ | ug/kg dw | 08/07/2001 |  | 1450 | <5.4 | jxc | SW | 8260A |
| Trichlorofluoromethane | <5.4 | ug/kg dw | 08/07/2001 |  | 1450 | $<5.4$ | jxc | SW | 8260A |
| 1,2,3-Trichloropropane | <5.4 | ug/kg dw | 08/07/2001 |  | 1450 | $<5.4$ | jxc | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.4$ | ug/kg dw | 08/07/2001 |  | 1450 | <5.4 | jxc | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.4$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{d} w$ | 08/07/2001 |  | 1450 | $<5.4$ | jxc | SW | 8260A |
| Vinyl Acetate | $<5.4$ | ug/kg dw | 08/07/2001 |  | 1450 | <5.4 | jxc | SW | 8260A |
| Vinyl Chloride | $<2.1$ | ug/kg dw | 08/07/2001 |  | 1450 | $<2.1$ | jxc | SW | 8260A |
| Xylenes, Total | <5.4 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <5.4 | jxc | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 99 | 8 | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| Dibromofluoromethane (surr) | 95 | \% | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| d8-Toluene (surr) | 97 | * | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| Bromofluorobenzene (surr) | 98 | \% | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| bASE NEUT. COMPS.-8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | Sw | 8270 C |
| Acenaphthylene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270C |
| Anthracene | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | 82700 |
| Benzo (a) anthracene | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270 C |
| Benzo (b) Eluoranthene | $<354$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | 8270C |
| Benzo(k) fluoranthene | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | 8270 C |
| Benzo(a)pyrene | $<177$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<177$ | jrw | SW | 8270C |
| Benzyl alcohol | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | 8270C |
| Benzyl butyl phthalate | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 697501

SBI002:HMW5S:SO00020:428

DATE/TIME TAKEN 08/01/2001 12:45

| Bis (2-chloroethyl)ether | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bis (2-chloroethoxy) methane | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | 8270C |
| Bis(2-ethylhexyl)phthalate | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270 C |
| 4-Chloroaniline | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 82700 |
| 2-Chloronaphthalene | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270 C |
| Chrysene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<177$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<177$ | jrw | SW | 82700 |
| Dibenzofuran | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | 8270 C |
| 1,2-Dichlorobenzene | $<354$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270C |
| 1,3-Dichlorobenzene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 82700 |
| 1,4-Dichlorobenzene | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<707$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<707$ | jrw | SW | 8270C |
| Diethyl phthalate | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270 C |
| Dimethyl phthalate | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | 8270C |
| 2,4-Dinitrotoluene | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270C |
| 2,6-Dinitrotoluene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270C |
| Di-n-octylphthalate | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <354 | jTw | SW | 8270C |
| Fluoranthene | $<354$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270C |
| Fluorene | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270C |
| Hexachlorobenzene | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | 8270C |
| Hexachloro-1,3-butadiene | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | 8270 C |
| Hexachlorocyclopentadiene | $<707$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<707$ | jrw | SW | 8270 C |
| Hexachloroethane | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batch Reporting Analyst | Analyzed | Number | Number Limit | Initials Method Reference |

SAMPLE NO. SAMPLE DESCRIPTION 697501
SBI002:HMW5S:S000020:428

DATE/TIME TAKEN 08/01/2001 12:45

| Indeno(1, 2, 3-cd) pyrene | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Isophorone | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270C |
| Naphthalene | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270C |
| Nitrobenzene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | 8270 C |
| N-Nitrosodi-n-propylamine | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | 82700 |
| Phenanthrene | $<354$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270C |
| Pyrene | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 82 | $\%$ | 08/09/2001 | 944 | 1455 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 88 | \% | 08/09/2001 | 944 | 1455 |  | jrw | SW | 8270 C |
| Surrogate: di4-Terphenyl | 78 | 8 | 08/09/2001 | 944 | 1455 |  | jrw | SW | 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1.770$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <1,770 | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<354$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | 8270 C |
| 2-Chlorophenol | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270 C |
| 2,4-Dichlorophenol | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | 8270C |
| 2,4-Dimethylphenol | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | $8270{ }^{\circ}$ |
| 2-Methyl-4,6-dinitrophenol | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270C |
| 2-Methylphenol | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270 C |
| meta \& para-Methylphenol | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270 C |
| 2-Nitrophenol | $<354$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270 C |
| Pentachlorophenol | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 82700 |
| Phenol | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | $8270{ }^{\circ}$ |
| 2,4,5-Trichlorophenol | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 82700 |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.13865<br>Client Project ID: South Bend Indiana SBI002

08/27/2001


| 2,4,6-Trichlorophenol | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: d6-Phenol | 77 | \% | 08/09/2001 | 944. | 1455 |  | jxw | SW 8270C |
| Surrogate: 2-Fluorophenol | 72 | \% | 08/09/2001 | 944 | 1455 |  | jrw | SW 8270C |
| Surrogate: Tribromophenol | 75 | 4 | 08/09/2001 | 944 | 1455 |  | jrw | SW 8270C |
| TPH - FTIR Non-aq | 160 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 585 | 618 | $<50$ | 260 | 418.1 |

## SAMPLE NO.

SAMPLE DESCRIPTION
SBI002:HMW3S:S060070:428

| Dry Weight | 93.0 | f | 08/10/2001 |  | 1474 |  | mhg | SM | 2540 G |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/13/2001 |  | 1206 | Complete | emd | SW | 6010B |
| Arsenic. ICP | <6.9 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2929 | $<6.9$ | emd | SN | 6010B |
| Barium, ICP | 26.6 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2860 | <1.4 | emd | SW | 6010B |
| Cadmium, ICP | $<2.0$ | $\mathrm{mg} / \mathrm{kg}$ dw | 08/13/2001 | 894 | 2842 | <2.0 | emd |  | 6010B |
| Chromium, ICP | 7.8 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2002 | 894 | 2830 | <2.7 | emd | SW | 6010日 |
| Lead, ICP | 27.8 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2831 | <5.5 | end | SW | 6010B |
| Mercury, CVAA | 0.018 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 604 | 616 | $<0.008$ | epk | SW | 7471A |
| Selenium, ICP | $<6.9$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2909 | $<6.9$ | emd | SW | 6010B |
| Silver. ICP | <2.7 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2862 | $<2.7$ | emd | Sh | 6010B |
| ICP Digestion, Nonaqueous | Complete |  | 08/06/2001 | 894 |  | Complete | mrt | SW | 3050B |
| Mercury Digestion, Non-Ag | Complete |  | 08/11/2001 | 604 |  | Complete | epk | Sk | 7471A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>08/27/2001

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Balyzed | Reporting Analyst | Number Number Limit | Initials Method Reference |

## SAMPLE NO. SAMPLE DESCRIPTION <br> SBI002:HMW3S:S060070:428

DATE/TIME TAKEN 08/01/2001 07:25

| VOLATILE COMPOUNDS-8260 Non-Aq |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8260 - SW846 (Non-aq) | Complete |  | 08/07/2001 | 1450 | Complete | jxc |  |
| Acetone | $<108$ | ug/kg dw | 08/07/2001 | 1450 | <108 | jxc | SW 8260A |
| Benzene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW 8260A |
| tert-Butylbenzene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW 8260A |
| gec-Butylbenzene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW 8260A |
| n-Butylbenzene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW 8260A |
| Bromochloromethane | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW 8260A |
| Bromodichloromethane | $<5.4$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW 8260A |
| Bromoform | $<5.4$ | ug/ kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW 8260A |
| Bromobenzene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW 8260A |
| 2-Butanone (MEK) | $<54$ | ug/kg dw | 08/07/2001 | 1450 | $<54$ | jxc | SW 8260A |
| Carbon disulfide | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxe | SW 8260A |
| Carbon tetrachloride | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW 8260A |
| Chlorobenzene | $<5.4$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW 8260A |
| Chloroethane | $<10.8$ | ug/kg dw | 08/07/2001 | 1450 | $<10.8$ | jxc | SW 8260A |
| 2-Chlorotoluene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW 8260A |
| 4-Chlorotoluene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW 8260A |
| Chloroform | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW 8260A |
| Chloromethane | $<10.8$ | ug/kg dw | 08/07/2001 | 1450 | $<10.8$ | jxc | SW 8260A |
| Dibromochloromethane | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW 8260A |
| Dibromomethane | <5.4 | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW 8260A |
| Dichlorodifluoromethane | <5.4 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.4 | jxc | SW 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.4$ | jxc | SW 8260A |
| 1,2-Dichlorobenzene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) 08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


| 1,3-Dichlorobenzene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,4-Dichlorobenzene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| 1,1-Dichloroethane | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW | 8260A |
| 1,2-Dichloroethane | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW | 8260A |
| 1,1-Dichloroethene | <5.4 | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW | 8260A |
| Cis-1,2-Dichloraethene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.4$ | ug/kg dw | 09/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| 1,2-Dichloropropane | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW | 8260A |
| 1,3-Dichloropropane | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| 2,2-Dichloropropane | <5.4 | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW | 8260A |
| 1,1-Dichloropropene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | sw | 8260A |
| Ethylbenzene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.4 | jxc | SW | 8260A |
| Hexachlorobutadiene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.4 | jxc | SW | 8260A |
| n -Hexane | $<21.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <21.5 | jxc | SW | B260A |
| 2-Hexanone | $<53.8$ | ug/kg dw | 08/07/2001 | 1450 | $<53.8$ | jxc | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| p -Isopropyltoluene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.4$ | jxc | Sw | 8260A |
| Bromomethane | $<10.8$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<10.8$ | jxc | SW | 8260A |
| Methylene Chloride | $<10.8$ | $\underline{\mu} / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<10.8$ | jxc | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | <53.8 | ug/kg dw | 08/07/2001 | 1450 | $<53.8$ | jxc | SW | 8260A |
| n-Propylbenzene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW | 8260A |
| Styrene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>$08 / 27 / 2001$<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


| Naphthalene | <5.4 | ug/kg dw | 08/07/2001 |  | 1450 | $<5.4$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | $<5.4$ | ug/kg dw | 08/07/2001 |  | 1450 | <5.4 | jxc | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.4$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.4$ | jxc | SW | 8260A |
| Tetrachloroethene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<5.4$ | jxe | SW | 8260A |
| 'roluene | <5.4 | ug/kg dw | 08/07/2001 |  | 1450 | $<5.4$ | jxc | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<5.4$ | jxc | SW | 8260A |
| 1,1,1-Trichloroethane | <5.4 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<5.4$ | jxc | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <5.4 | jxx | SW | 8260A |
| Trichloroethene | $<5.4$ | ug/kg dw | 08/07/2001 | - | 1450 | $<5.4$ | jxc | SW | 8260A |
| Trichlorofluoromethane | $<5.4$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.4$ | jxc | SW | 8260A |
| 1,2,3-Trichloropropane | <5.4 | ug/kg dw | 08/07/2001 |  | 1450 | $<5.4$ | jxc | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.4$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.4$ | jxc | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.4$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.4$ | jxc | SW | 8260A |
| Vinyl Acetate | <5.4 | ug/kg dw | 08/07/2001 |  | 1450 | <5.4 | jxc | SW | 8260A |
| Vinyl Chloride | $<2.2$ | ug/kg dw | 08/07/2001 |  | 1450 | <2.2 | jxc | SW | 8260A |
| Xylenes, Total | $<5.4$ | ug/kg dw | 08/07/2001 |  | 1450 | <5.4 | jxc | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 98 | $\%$ | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| Dibromofluoromethane (surr) | 97 | $\%$ | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| de-Toluene (surr) | 97 | \% | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| Bromofluorobenzene (surr) | 93 | $\%$ | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

## SAMPLE NO. 697503

|  | Prep |
| :--- | :--- |
| Date |  |
| Batch Batch Reporting Analyst |  |

Result Flag Units Analyzed Number Number Limit Initials Method Reference


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 697503

SAMPLE DESCRIPTION
SBIOO2:HMW3S:S060085:428

DATE/TIME TAKEN 08/01/2001 07:30

| Carbon disulfide | < 5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carbon tetrachloride | <5.2 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| Chlorobenzene | <5.2 | ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| Chloroethane | $<10.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <10.4 | jxc | SW | 8260A |
| 2-Chlorotoluene | <5.2 | ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| 4-Chlorotoluene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| Chloroform | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | < 5.2 | jxc | Sw | 8260A |
| Chloromethane | $<10.4$ | ug/kg dw | 08/07/2001 | 1450 | $<10.4$ | jxc | SW | 8260A |
| Dibromochloromethane | <5.2 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| Dibromomethane | <5.2 | ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| Dichlorodifluoromethane | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | <5.2 | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,2-Dichlorobenzene | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,1-Dichloroethane | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| 1,2-Dichloroethane | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,1-Dichloroethene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| cis-1,2-Dichloroethene | <5.2 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.2$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,2-Dichloropropane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.2 | jxc | Sw | 8260A |
| 1,3-Dichloropropane | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 2,2-Dichloropropane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,1-Dichloropropene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| Cis-1,3-Dichloropropene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


SAMPLE NO.
697503

SAMPLE DESCRIPTION
SBIOO2:HMW3S:S060085:428

DATE/TIME TAKEN 08/01/2001 07:30

| trans-1,3-Dichloropropene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ethylbenzene | <5.2 | ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | Sw | 8260A |
| Hexachlorobutadiene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| n-Hexane | $<20.7$ | ug/kg dw | 08/07/2001 | 1450 | $<20.7$ | jxc | SW | 8260A |
| 2-Hexanone | $<51.8$ | ug/kg dw | 08/07/2001 | 1450 | $<51.8$ | jxc | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| p-Isopropyltoluene | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| Bromomethane | $<10.4$ | ug/kg dw | 08/07/2001 | 1450 | $<10.4$ | jxc | SW | 8260A |
| Methylene Chloride | $<10.4$ | ug/kg dw | 08/07/2001 | 1450 | $<10.4$ | jxc | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | <5.2 | bmh | SW | B260A |
| 4-Methyl-2-pentanone (MIBK) | $<51.8$ | ug/kg dw | 08/07/2001 | 1450 | $<51.8$ | jxc | SW | 8260A |
| n-Propylbenzene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| Styrene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | Sw | 8260A |
| Naphthalene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | <5.2 | ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| Tetrachloroethene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| Toluene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| Trichloroethene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| Trichlorofluoromethane | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,2,4-Trimethylbenzene | <5.2 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002
$08 / 27 / 2001$
Prep Run
Batch Batch Reporting Analyst
Result Flag Units Analyzed Number Number Limit Initiala Method Reference

SAMPLE NO. SAMPLE DESCRIPTION 697503

SBI002:HMW3S:S060085:428

DATE/TIME TAKEN
08/01/2001 07:30

| 1,3,5-Trimethylbenzene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Acetate | $<5.2$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | <5.2 | jxc | Sw | 8260A |
| Vinyl Chloride | $<2.1$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | <2.1 | jxc | SW | 8260A |
| Xylenes, Total | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxcc | SW | 8260A |
| d4-1,2-Dichioroethane (surr) | 95 | \% | 08/07/2001 | 1450 |  | jxc | SW | 8260A |
| Dibromofluoromethane (surr) | 93 | \% | 08/07/2001 | 1450 |  | jxc | SW | 8260A |
| ds-Toluene (surr) | 97 | 4 | 08/07/2001 | 1450 |  | jxc | SW | 8260A |
| Bromofluorobenzene (surr) | 92 | \% | 08/07/2001 | 1450 |  | jxc | SW | 8260A |


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 697504 | SBIOO2:HMW1D:S000020:505 |

DATE/TIME TAKEN
07/31/2001 08:40

| Dry Weight | 93.2 | \% | 08/10/2001 |  | 1474 |  | mhg |  | 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/13/2001 |  | 1206 | Complete | emd | SH | 60108 |
| Arsenic, ICP | 7.4 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2929 | <7.0 | emd | SW | 6010B |
| Barium, ICP | 194 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2860 | $<1.4$ | end | SW | 6010B |
| Cadmium, ICP | <2.1 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2842 | <2.1 | emd | SW | 6010B |
| Chromium, ICP | 9.0 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2,830 | $<2.8$ | emd | SW | 6010B |
| Lead, ICP | 68.0 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2831 | < 5.6 | ema | SW | 6010B |
| Mercury, CVAA | 0.10 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 604 | 616 | $<0.009$ | epk | SW | 7471A |
| Selenium, ICP | $<7.0$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2909 | $<7.0$ | emd | SW | 6010B |
| Silver, ICP | $<2.8$ | $\mathrm{mg} / \mathrm{kg} \mathrm{d} w$ | 08/13/2001 | 894 | 2862 | $<2.8$ | emd | SW | 6010B |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch Number | Reporting Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DAI | /TIME | TAKEN |
| 697504 | SBIO02: HM | 1D: | S00002 | : 505 |  |  |  | 07/ | 1/2001 | 1 08:40 |

ICP Digestion, Nonaqueous Mercury Digeation, Non-Aq Prep. BNA Non-Aq
Complete
Complete
Complete

VOLATILE COMPOUNDS-8260 NOR-Aq

| B260 - SW846 (Non-aq) | Complete |
| :--- | :--- |
| Acetone | $<107$ |
| Benzene | $<5.4$ |
| tert-Butylbenzene | $<5.4$ |
| sec-Butylbenzene | $<5.4$ |
| n-Butylbenzene | $<5.4$ |
| Bromochloromethane | $<5.4$ |
| Bromodichloromethane | $<5.4$ |
| Bromoform | $<5.4$ |
| Bromobenzene | $<5.4$ |
| 2 -Butanone (MEK) | $<54$ |
| Carbon disulfide | $<5.4$ |
| Carbon tetracbloride | $<5.4$ |
| Chlorobenzene | $<5.4$ |
| Chloroethane | $<10.7$ |
| 2-Chlorotoluene | $<5.4$ |
| 4-Chlorotoluene | $<5.4$ |
| Chloroform | $<5.4$ |
| Chloromethane | $<10.7$ |
| Dibromochloromethane | $<5.4$ |


|  | 08/07/2001 |
| :---: | :---: |
| ug/kg dw | 08/07/2001 |
| ug/kg dw | 08/07/2001 |
| ug/kg dw | 08/07/2001 |
| ug/kg dw | 08/07/2001 |
| ug/kg dw | 08/07/2001 |
| ug/kg dw | 08/07/2001 |
| ug/kg dw | 08/07/2001 |
| ug/kg dw | 08/07/2001 |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |
| ug/kg dw | 08/07/2001 |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |
| $u g / \mathrm{kg}$ dw | 08/07/2001 |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |
| ug/kg dw | 08/07/2001 |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |
| $u g / \mathrm{kg}$ dw | 08/07/2001 |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |
| g/kg dw | 08/07/2001 |


| 1450 | Complete | jxc |  |
| :--- | :--- | :--- | :--- |
| 1450 | $<107$ | jxc | SW 8260A |
| 1450 | $<5.4$ | jxc | SW 8260A |
| 1450 | $<5.4$ | jxc | SW 8260A |
| 1450 | $<5.4$ | jxc | SW 8260A |
| 1450 | $<5.4$ | jxc | SW 8260A |
| 1450 | $<5.4$ | jxc | SW 8260A |
| 1450 | $<5.4$ | jxc | SW 8260A |
| 1450 | $<5.4$ | jxc | SW 8260A |
| 1450 | $<5.4$ | jxc | SW 8260A |
| 1450 | $<54$ | jxc | SW 8260A |
| 1450 | $<5.4$ | jxc | SW 8260A |
| 1450 | $<5.4$ | jxc | SW 8260A |
| 1450 | $<5.4$ | jxc | SW 8260A |
| 1450 | $<10.7$ | jxc | SW 8260A |
| 1450 | $<5.4$ | jxc | SW 8260A |
| 1450 | $<5.4$ | jxc | SW 8260A |
| 1450 | $<5.4$ | jxc | SW 8260A |
| 1450 | $<10.7$ | jxc | SW 8260A |
| 1450 | $<5.4$ | jxc | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865

## Client Project ID: South Bend Indiana SBIO02



## SAMPLE NO. SAMPLE DESCRIPTION 697504 SBI002:HMW1D:S000020:505



## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting Limit | Analyst <br> Initials | Method Re | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 697504 |  | SBI002 : HM | N1D: | 0000 | : 505 |  |  |  | 07/ | 1/2001 | 1 08:40 |


| Methyl t-butyl ether (MTBE) | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.4$ | bmh | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Methyl-2-pentanone (MIBK) | <53.6 | ug/kg dw | 08/07/2001 | 1450 | $<53.6$ | jxc | SW 8260A |
| n -Propylbenzene | < 5.4 | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW 8260A |
| Styrene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW 8260A |
| Naphthalene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.4$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW 8260A |
| Tetrachloroethene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW 8260A |
| Toluene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW 8260A |
| 1,2,4-Trichlorobenzene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW 8260A |
| 1,1,1-Trichloroethane | $<5.4$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | <5.4 | jxc | SW 8260A |
| 1,1,2-Trichloroethane | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.4$ | jxc | SW 8260A |
| Trichloroethene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW 8260A |
| Trichlorofluoromethane | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | SW 8260A |
| 1,2,3-Trichloropropane | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW 8260A |
| 1,2,4-Trimethylbenzene | $<5.4$ | ug/kg dw | 08/07/2001 | 1450 | $<5.4$ | jxc | Sm 8260A |
| 1,3,5-Trimethylbenzene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.4$ | jxc | SW 8260A |
| Vinyl Acetate | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.4$ | jxc | SW 8260A |
| Vinyl Chloride | $<2.1$ | ug/kg dw | 08/07/2001 | 1450 | $<2.1$ | jxc | SW 8260A |
| Xylenes, Total | <5.4 | ug/kg dw | 08/07/2001 | 1450 | <5.4 | jxc | SW 8260A |
| d4-1,2-Dichloroethane (surr) | 99 | \% | 08/07/2001 | 1450 |  | jxc | SW 8260A |
| Dibromofluoromethane (surr) | 95 | \% | 08/07/2001 | 1450 |  | jxc | SW 8260A |
| d8-Toluene (surx) | 97 | $\%$ | 08/07/2001 | 1450 |  | jxc | Sw 8260A |
| Bromofluorobenzene (surr) | 93 | \% | 08/07/2001 | 1450 |  | jxc | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 697504

SAMPIE DESCRIPTION
SBI002 : HMW1D: S000020:505

DATE/TIME TAKEN 07/31/2001 08:40

BASE NEUT. COMPS.-8270 Non-aq

| Acenaphthene | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW 8270C |
| Anthracene | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | Sw 8270C |
| Benzo(a)anthracene | <354 | $u g / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW 8270C |
| Benzo (b) fluoranthene | 563 | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW 8270C |
| Benzo(k) fluoranthene | $<354$ | $u g / \mathrm{kg} \mathrm{d} w$ | 08/09/2001 | 944 | 1455 | <354 | jrw | SW 8270C |
| Benzo(a) pyrene | 277 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<177$ | jrw | SW 8270C |
| Benzyl alcohol | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW 8270C |
| Benzyl butyl phthalate | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW 8270C |
| Bis (2-chloroethyl)ether | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW 8270C |
| Bis (2-chloroethoxy) methane | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW 8270C |
| Bis (2-ethylhexyl) phthalate | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW 8270C |
| 4-Bromophenyl phenyl ether | $<354$ | $u g / \mathrm{kg} \mathrm{dw}^{\text {w }}$ | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW 8270C |
| 4-Chloroaniline | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW 8270C |
| 2-Chloronaphthalene | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jTw | SW 8270C |
| Chrysene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <354 | jrw | SW 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<177$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<177$ | jrw | SW 8270C |
| Dibenzofuran | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW 8270C |
| 1,2-Dichlorobenzene | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW 8270C |
| 1,3-Dichlorobenzene | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW 8270C |
| 1,4-Dichlorobenzene | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW 8270C |
| 3,3'-Dichlorobenzidine | $<708$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | $<708$ | jrw | SW 8270C |
| Diethyl phthalate | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE NO. | SAMPLE DE | SCRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 697504 | SBIOO2 : HM | N1D: | S00002 | : 505 |  |  |  | 07/ | 1/2001 | 1 08:40 |


| Dimethyl phthalate | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dinitrotoluene | <354 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | 8270C |
| 2,6-Dinitrotoluene | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270C |
| Di-n-octylphthalate | $<354$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | 82700 |
| Fluoranthene | 586 | $u g / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270 C |
| Fluorene | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270 C |
| Hexachlorobenzene | <354 | $u g / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270C |
| Hexachloro-1, 3-butadiene | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | 8270C |
| Hexachlorocyclopentadiene | $<708$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<708$ | jrw | SW | 82700 |
| Hexachloroethane | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | 8270C |
| Indeno (1, 2,3-cd) pyrene | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270C |
| Isophorone | $<354$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270 C |
| Naphthalene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270 C |
| Nitrobenzene | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270C |
| N -Nitrosodi-n-propylamine | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270 C |
| Phenanthrene | 357 | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 82700. |
| Pyrene | 544 | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | <354 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | 82700 |
| Surrogate: d5-Nitrobenzene | 84 | $\%$ | 08/09/2001 | 944 | 1455 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 92 | 4 | 08/09/2001 | 944 | 1455 |  | jrw | SW | 8270 C |
| Surrogate: dl4-Terphenyl | 93 | 8 | 08/09/2001 | 944 | 1455 | . | Jrw | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,770$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | $<1,770$ | jrw | SW | 8270C |
| 4-Chloro-3-methylphenol | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270c |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

08/27/2001
Prep Run
Date Batch Batch Reporting Analyst
Result Flag Units Analyzed Number Number Limit Initials Method Reference

SAMPLE NO. 697504

SAMPLE DESCRIPTION
SBI002:HMW1D:S000020:505

DATE/TIME TAKEN
07/31/2001 08:40

| 2-Chlorophenol | <354 |  | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dichlorophenol | <354 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270C |
| 2,4-Dimethylphenol | <354 |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jxw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | <354 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270C |
| 2-Methylphenol | <354 |  | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 82700 |
| meta \& para-Methylphenol | <354 |  | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270C |
| 2-Nitrophenol | <354 |  | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jxw | SW | 8270C |
| Pentachlorophenol | $<354$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270 C |
| Phenol | <354 |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<354$ | jrw | SW | 8270C |
| 2,4,5-Trichlorophenol | <354 |  | ug/kg dw | 08/09/2001 | 944 | 1455 | <354 | jrw | SW | 8270C |
| 2,4,6-Trichlorophenol | <354 |  | ug/kg dw | 08/09/2001 | 944 | 1455 | '<354 | jrw | SW | 8270C |
| Surrogate: d6-Phenol | 79 |  | \% | 08/09/2001 | 944 | 1455 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluoróphenol | 73 |  | \% | 08/09/2001 | 944 | 1455 |  | jxw | SW | 8270C |
| Surrogate: Tribromophenol | 77 |  | \% | 08/09/2001 | 944 | 1455 |  | jrw | SW | 8270C |
| TPH - GRO (Non-Aqueous) | <5 | 8s | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/06/2001 |  | 245 | < 5 | meb | SW | 8015M |

GRO (Non-Aqueous)
SAMPLE DESCRIPTION
SBIO 02 : HMW6D:S000020:505

## DATE/TIME TAKEN 08/01/2001

| Dry Weight | 96.4 | \% | 08/10/2001 |  | 1474 |  | mhg |  | 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/13/2001 |  | 1206 | Complete | emd |  | 6010B |
| Arsenic, ICp | 12.7 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2929 | <6.8 | emd | SW | 6010B |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

1

| Barium, ICP | 299 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2860 | $<1.3$ | emd | SW 6010B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cadmium, ICP | <2.1 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2842 | $<2.1$ | emd | SW 6010B |
| Chromium, ICP | 65.4 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2830 | $<2.7$ | ema | Sw 6010B |
| Lead, ICP | 224 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2831 | $<5.5$ | emd | SW 6010B |
| Mercury, CVAA | 0.151 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 604 | 616 | $<0.008$ | epk | SW 7471A |
| Selenium, ICP | $<6.8$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2909 | $<6.8$ | emd | SW 6010B |
| Silver, ICP | $<2.7$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 894 | 2862 | <2.7 | emd | SW 6010B |
| ICP Digestion, Nonaqueous | Complete |  | 08/06/2001 | 894 |  | Complete | $m \mathrm{mt}$ | SW 3050B |
| Mercury Digestion, Non-Aq | Complete |  | 08/11/2001 | 604 |  | Complete | epk | SW 7471A |
| Prep, bNA Non-Aq | Complete |  | 08/07/2001 | 944 |  | Complete | mlr | EPA 625; SW 3540C; SW 3545 |
| VOLATILE COMPOUNDS-8260 Non-Aq |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/07/2001 |  | 1450 | Complete | jxc |  |
| Acetone | $<104$ | ug/kg dw | 08/07/2001 |  | 1450 | $<104$ | jxc | SW 8260A |
| Benzene | $<5.2$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.2$ | jxc | Sw 8260A |
| tert-Butylbenzene | <5.2 | $u g / \mathrm{kg}$ dw | 08/07/2001 |  | 1450 | $<5.2$ | jxc | SW 8260A |
| sec-Butylbenzene | $<5.2$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.2$ | jxc | SW 8260A |
| n-Butylbenzene | $<5.2$ | $u g / \mathrm{kg}$ dw | 08/07/2001 |  | 1450 | $<5.2$ | jxe | SW 8260A |
| Bromochloromethane | $<5.2$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.2$ | jxc | SW 8260A |
| Bromodichloromethane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <5.2 | jxc | SW B260A |
| Bromoform | <5.2 | ug/kg dw | 08/07/2001 |  | 1450 | $<5.2$ | jxce | SW 8260A |
| Bromobenzene | <5.2 | ug/kg dw | 08/07/2001 |  | 1450 | $<5.2$ | jxc | SW 8260A |
| 2-Butanone (MEK) | $<52$ | ug/kg dw | 08/07/2001 |  | 1450 | $<52$ | jxc | SW 8260A |
| Carbon disulfide | $<5.2$ | ug/kg dw | 08/07/2001 |  | 1450 | $<5.2$ | jxc | SW 8260A |
| Carbon tetrachloride | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | <5.2 | jxc | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.13865<br>Client Project ID: South Bend Indiana SBI002

$08 / 27 / 2001$

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting | Analyst |  |

SAMPLE NO. 697505

SAMPLE DESCRIPTION SBI002:HMW6D:S000020:505

DATE/TIME TAKEN 08/01/2001

| Chlorobenzene | $<5.2$ | ug/ kg dw | 08/07/2001 | 1450 | c5.2 | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chloroethane | $<10.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$. | 08/07/2001 | 1450 | $<10.4$ | jxc | SW | 8260A |
| 2-Chlorotoluene | $<5.2$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/07/2001 | 1450 | < 5.2 | jxc | SW | 8260A |
| 4-Chlorotoluene | <5.2 | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| Chloroform | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| Chloromethane | $<10.4$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<10.4$ | jxc | SW | 8260A |
| Dibromochloromethane | <5.2 | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| Dibromomethane | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| Dichlorodifluoromethane | $<5.2$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| 1,2-Dichlorobenzene | <5.2 | ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.2$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| 1,4-Dichlorobenzene | <5.2 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,1-Dichloroethane | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,2-Dichloroethane | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,1-Dichloroethene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| Cis-1,2-Dichloroethene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| trans-1,2-Dichloroethene | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| 1,2-Dichloropropane | <5.2 | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,3-Dichloropropane | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 2,2-Dichloropropane | <5.2 | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,1-Dichloropropene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.2$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| Ethylbenzene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | Sw | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) 08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting | Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 697505 SBIO02:HMW6D:S000020:505

DATE/TIME TAKEN 08/01/2001

1

| Hexachlorobutadiene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n-Hexane | $<20.7$ | ug/kg dw | 08/07/2001 | 1450 | $<20.7$ | jxc | SW | 8260A |
| 2-Hexanone | $<51.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<51.9$ | jxc | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| p-Isopropyltoluene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| Bromomethane | $<10.4$ | ug/kg dw | 08/07/2001 | 1450 | $<10.4$ | jxc | SW | 8260A |
| Methylene Chloride | $<10.4$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | $<10.4$ | jxc | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | <5.2 | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<51.9$ | ug/kg dw | 08/07/2001 | 1450 | $<51.9$ | jxc | SW | 8260A |
| n-Propylbenzene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.2 | jxc | SH | 8260A |
| Styrene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxe | SW | 8260A |
| Naphthalene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | SH | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | <5.2 | Jxc | SW | 8260A |
| Tetrachloroethene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| Toluene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| Trichloroethene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |
| Trichlorofluoromethane | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | < 5.2 | jxci | SN | 8260A |
| 1,2,3-Trichloropropane | $<5.2$ | ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| 1,2,4-Trimethylbenzene | <5.2 | ug/kg dw | 08/07/2001 | 1450 | <5.2 | jxc | Sh | 8260A |
| 1,3,5-Trimethylbenzene | $<5.2$ | $u g / \mathrm{kg}$ dw | 08/07/2001 | 1450 | <5.2 | jxc | SW | 8260A |
| Vinyl Acetate | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 | 1450 | $<5.2$ | jxc | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.13865

## Client Project ID: South Bend Indiana SBIOO2

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method R | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | IIO |  |  |  |  | DA | TIME | TAKEN |
| 697505 |  | SBI002:HM | 6D | 000 | : 505 |  |  |  | 08/ | 1/200 |  |


| Vinyl Chloride | $<2.1$ | ug/kg dw | 08/07/2001 |  | 1450 | <2.1 | jxc | SW | B260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Xylenes, Total | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/07/2001 |  | 1450 | $<5.2$ | jxc | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 98 | \% | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| Dibromofluoromethane (surr) | 94 | \% | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| d8-Toluene (surr) | 97 | 8 | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| Bromofluorobenzene (surr) | 92 | \% | 08/07/2001 |  | 1450 |  | jxc | SW | 8260A |
| BASE NEUT. COMPS.-8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<342$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <342 | jrw | SW | 82700 |
| Acenaphthyiene | <342 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<342$ | jrw | SW | 8270C |
| Anthracene | $<342$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <342 | jrw | SW | 8270 C |
| Benzo (a) anthracene | $<342$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <342 | jrw | SW | 8270C |
| Benzo(b) fluoranthene | $<342$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <342 | jrw | SW | 8270 C |
| Benzo (k) fluoranthene | $<342$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <342 | jrw | SW | 8270C |
| Benzo (a) pyrene | $<171$ | ug/ kg dw | 08/09/2001 | 944 | 1455 | $<171$ | jrw | SW | 8270 C |
| Benzyl alcohol | $<342$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <342 | j5w | SW | 8270C |
| Benzyl butyl phthalate | $<342$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <342 | jrw | SW | 8270C |
| Bis (2-chloroethyl) ether | $<342$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | <342 | jxw | SW | 8270C |
| Bis (2-chloroethoxy) methane | $<342$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <342 | jrw | SW | 8270C |
| Bis (2-ethylhexyl) phthalate | $<342$ | $u \mathrm{f} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<342$ | jrw | SW | $8270 C^{\text {c }}$ |
| 2.2'-oxybis (1-Chloropropane) | <342 | ug/kg dw | 08/09/2001 | 944 | 1455 | <342 | jrw | SW | 82700 |
| 4-Bromophenyl phenyl ether | $<342$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <342 | jrw | SW | 8270C |
| 4-Chloroaniline | $<342$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<342$ | jrw | SW | 8270C |
| 2-Chloronaphthalene | $<342$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <342 | jxw | SW | 8270C |
| Chrysene | $<342$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <342 | jxw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) 08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run Batch Number | Reporting <br> Limit | Analyst <br> Initials | Method R | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | PITO1 |  |  |  |  | DAT | /TIME | TAKEN |
| 697505 |  | SBI002 : HM | ,6D: | S0000 | : 505 |  |  |  | 08/ | 1/2001 |  |


| Dibenzo (a, h) anthracene | $<171$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<171$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzofuran | $<342$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<342$ | jrw | SW 8270C |
| 1,2-Dichlorobenzene | $<342$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <342 | jrw | S* 8270c |
| 1,3-Dichlorobenzene | $<342$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <342 | jrw | SW 8270C |
| 1,4-Dichlorobenzene | <342 | ug/kg dw | 08/09/2001 | 944 | 1455 | <342 | jrw | SW 8270C |
| 3.3*-Dichlorobenzidine | $<685$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <685 | jxw | SW 8270C |
| Diethyl phthalate | $<342$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | $<342$ | jrw | SW 8270C |
| Dimethyl phthalate | $<342$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<342$ | jrw | SW 8270C |
| 2,4-Dinitrotoluene | $<342$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<342$ | jrw | SW 8270C |
| 2,6-Dinitrotoluene | $<342$ | ug/kg dw | 08/09/2001 | 944 | 1455 | <342 | j2w | SW 8270C |
| Di-n-octylphthalate | $<342$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<342$ | jrw | SW 8270C |
| Fluoranthene | $<342$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <342 | jrw | SW 8270C |
| Fluorene | $<342$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<342$ | jrw | SW 8270C |
| Hexachlorobenzene | <342 | ug/kg dw | 08/09/2001 | 944 | 1455 | <342 | jrw | SW 8270C |
| Hexachloro-1,3-butadiene | <342 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<342$ | jxw | SW 8270C |
| Hexachlorocyclopentadiene | $<685$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<685$ | jrw | SW 8270C |
| Hexachloroethane | <342. | ug/kg dw | 08/09/2001 | 944 | 1455 | <342 | jTw | SW 8270C |
| Indeno (1, 2, 3-cd) pyrene | $<342$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | $<342$ | jrw | SW 8270C |
| Itophorone | <342 | ug/kg dw | 08/09/2001 | 944 | 1455 | <342 | jrw | SW 8270C |
| Naphthalene | $<342$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<342$ | jrw | SW 8270C |
| Nitrobenzene | $<342$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<342$ | jxw | SW 8270C |
| N-Nitrosodi-n-propylamine | $<342$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<342$ | jrw | SW 8270C |
| Phenanthrene | $<342$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | <342 | jrw | SW 8270C |
| Pyrene | $<342$ | ug/kg dw | 08/09/2001 | 944 | 1455 | $<342$ | jıw | SW 8270C |
| 1,2,4-Trichlorobenzene | <342 | ug/kg dw | 08/09/2001 | 944 | 1455 | $<342$ | jrw | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.13865
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION 697505 <br> SBI002:HMW6D:S000020:505

DATE/TIME TAKEN 08/01/2001

| Surrogate: d5-Nitrobenzene | 72 |  | 8 | 08/09/2001 | 944 | 1455 |  | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorobiphenyl | 92 |  | 4 | 08/09/2001 | 944 | 1455 |  | jrw | Sw 8270C |
| Surrogate: dl4-Terphenyl | 103 |  | \% | 08/09/2001 | 944 | 1455 |  | jrw | SW 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,710$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | <1,710 | jrw | SW 8270C |
| 4-Chloro-3-methylphenol | <342 |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<342$ | jxw | SW 8270C |
| 2-Chlorophenol | $<342$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | <342 | jxw | SW 8270C |
| 2,4-Dichlorophenol | $<342$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<342$ | jrw | SW 8270C |
| 2,4-Dimethylphenol | $<342$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<342$ | jrw | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<342$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 944 | 1455 | $<342$ | jrw | SW 8270C |
| 2-Methylphenol | $<342$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | <342 | jrw | SW 8270C |
| meta \& para-Methylphenol | $<342$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | <342 | jxw | SW 8270C |
| 2-Nitrophenol | $<342$ |  | $u g / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | $<342$ | jrw | SW 8270C |
| Pentachlorophenol | $<342$ |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 944 | 1455 | <342 | jrw | SW 8270C |
| Phenol | <342 |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<342$ | jrw | SW 8270C |
| 2,4,5-Trichlorophenol | $<342$ |  | ug/kg dw | 08/09/2001 | 944 | 1455 | $<342$ | jrw | SW 8270C |
| 2,4,6-Trichlorophenol | <342 |  | ug/kg dw | 08/09/2001 | 944 | 1455 | <342 | jxw | SW 8270C |
| Surrogate: d6-Phenol | 74 |  | 4 | 08/09/2001 | 944 | 1455 |  | jrw | SW 8270C |
| Surrogate: 2-Fluorophenol | 72 |  | 8 | 08/09/2001 | 944 | 1455 |  | jxw | SW 8270C |
| Surrogate: Tribromophenol | 73 | note | 8 | 08/09/2001 | 944 | 1455 |  | jxw | SW B270C |
| TPH - GRO (Non-Aqueous) | < 5 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/06/2001 |  | 245 | <5 | meb | SW 8015M |

## QUALITY CONTROL FLAG DEFINITIONS

Job Number: 01. 13865
(*) Indicates an out-of-control QC. The analytical data was reported based on other supporting quality control information.
(Note) Indicates to review the notes and comments section of the analytical report as there is additional information concerning this analytical result.
(MS) Indicates that the Matrix Spike (MS) was out of statistical advisory limits.
(MSD) Indicates that the Matrix Spike Duplicate (MSD) was out of statistical advisory limits.
(RPD) Indicates that the Relative Percent Difference (RPD) for the MS/MSD pair was outside of statistical advisory limits.
(SS) Indicates that the MS and MSD were out of statistical advisory limits.
(SSR) Indicates that the MS, MSD and RPD were out of statistical advisory limits.
(MSR) Indicates that the MS and RPD were out of statistical advisory limits.
(MSDR) Indicates that the MSD and RPD were out of statistical advisory limits.
(DL) Indicates that the MS and MSD were diluted out and the percent recoveries of the spikes could not be calculated.
(LS) Indicates that statistical accuracy and precision data is not available for spike concentrations which are < 1/4 of the sample amount. Care should be used in interpreting this data.
(J) Indicates estimated concentration due to internal standard areas or surrogate recoveries outside of control limits. A sample matrix effect is usually indicated.
(DW) Indicates Dry Weight.
Analytical Reporting Limits
The reporting limits listed for non-aqueous samples in the analytical report section are Practical Quantitation Limits (PQLs). These PQLs are based upon a typical standard weight used for a non-aqueous sample. The reporting limit for a sample may be different from the PQL listed depending upon the actual weight of sample used, the samples moisture content and any dilutions used during the analysis.

NOTES AND COMMENTS

TestAmerica Job Number: 1.13865
Sample Number: 697497, 697498
Analysis: 8260
MB analyzed with samples had hexachlorobutadiene above reporting limit. No hit for this compound was found in these samples.

Sample Number: 697493
Analysis: 8270 BNA
Response for internal standard dl2-perylene was below the recommended level. Results for analytes quantitated from it should be considered estimated. These include benzo(k)fluoranthene and benzo(a) pyrene.

Sample Number: 697496
Analysis: 8270 BNA
Response for internal standard d12-perylene was below the recommended level. Results for analytes quantitated from it should be considered estimated. These include benzo (b) fluoranthene and benzo(a) pyrene.

Sample Number: 697499, 697505
Analysis: 8270 BṄA
Response for internal standard d12-perylene was below the recommended level.

Sample Number: 697500, 697492
Analysis: 8270 BNA
Response for internal standard di2-perylene was below the recommended level. Results for analytes quantitated from it should be considered estimated. These include benzo(b) fluoranthene, benzo( $k$ ) fluoranthene and benzo(a) pyrene.

NOTES AND COMMENTS

TestAmerica Job Number: 1.13865
Sample Number: 697489
Analysis: 8270 BNA
A dilution was performed due to the high viscosity of the sample extract. Recovery of surrogate 2,4,6-tribromophenol was above the recommended level. Surrogates designated "DL" were diluted below the reporting limit. Response for internal standard d12-perylene was below the recommended level.

Sample Number: 697490
Analysis: 8270 BNA
The sample contained large amounts of non-target compounds. The apparent recoveries of surrogates $2-f l u o r o b i p h e n y l$ and di4-p-terphenyl were above the recommended levels. This was confirmed by analysis of a dilution. Response for internal standards di2-chrysene and d12-perylene was below the recommended level. Results for compounds quantitated from them should be considered estimated. These include pyrene, benzo(a) anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene and benzo(a) pyrene.

Sample Number: 697491
Analysis: 8270 BNA
Response for internal standard d12-perylene was below the recommended level. Results for analytes quantitated from it should be considered estimated. These include benzo(k)fluoranthene, benzo(a)pyrene and indeno(1,2,3-c,d)pyrene.
$\square$ Warrensville_Heights
4949 Galaxy Parkway, Suite $S$ 172 $\frac{\text { Associates, Inc. }}{\text { Aull \& }}$
-1 Dublin 6130 Wilcox Road
Dublin. Ohio 43016
Phone: (614)385-8777
FAX: $(614) 385-9070$ REPORT TO: Terry Baehr Client: South Bend
Site: Area A (uRt $\overline{\text { S })}$
Project\#: SBi. 002

Samplers: Phase: Ol,GRB | $\begin{array}{c}\text { PROJECT } \\ \text { NO. }\end{array}$ | $\begin{array}{c}\text { SAMPLE } \\ \text { LOCATION }\end{array}$ | $\begin{array}{c}\text { SAMPLE } \\ \text { TYPE }\end{array}$ |
| :---: | :---: | :---: |
| $5 \overline{5 T O O 2:}$ | $H A-1$ | $: 5000005$ | SBIOO2: HA-2:5000010 SBIOOZ: HA-3:5000010 SBIOOZ: HA-4 : S000010

 SBI002:GS-3:S005010: 412 3.4 ${ }^{12} \mathrm{~N} / \mathrm{A}$ fad 1115 Sefocez: : 412 2.402 $1 / 4818101125$


 $r$ . . Method of Delivery: $-2 \infty 50$ Airbill Number: $82(01039$ PAGE 1 OF



## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman

HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

08/27/2001
Job Number: 01.14219

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

Sample
Number
698520 698521 698522 698523 698524 698525 698526 698527 698528 698529 698530 698531 698532 698533 698534 698535 698536 698537 698539

SBI002:GB-17:S00015:412
Sample Description
SBI002:HMW7S:S000020:428
SBI002:HMWIOS:S040050:428
SBIO02:HMW10S:S100110:428
SBI002:SB6:S100110:428
SBI002:SB6:S140150:428
SBI002: GB2 6 : $5020040: 428$ SBI002:GB27:S020040:428 SBI002:HMW20S:S000020:428 SBI002:GB20: S005020:428 SBI002:GB30: S000020:428 SBI002:GB37:S000020:428 SBI002:GB21:S010030:428 SBI002: GB22 : S005020:428 SBI002:GB24:S005020:428 SBI002:GB23:S005020:428
SBI002:GB-15:S000010:412 SBI002:GB-16:S000005:412 SBI002:GB-17:S000015:412
SBI002:GB-28:S000020:412
SBI002:GB-29:S005015:412

Date
Taken
08/07/2001
08/07/2001
08/07/2001
08/06/2001
08/06/2001
08/07/2001
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08/06/2001
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08/07/2001

Date Received

08/08/2001
08/08/2001
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08/08/2001
08/08/2001

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted only in its entirety.

Enclosure


## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/27/2001 6130 Wilcox Rd. Dublin, OH 43016

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

## Sample

Number
Sample Description

| 698540 | SBIO02:GB-31:S000010:412 |
| :--- | :--- |
| 698541 | SBIO02:GB-33:S000010:412 |
| 698542 | SBIO02:GB-34:S000015:412 |
| 698543 | SBIO02:GB-35:S000015:412 |
| 698544 | SBI002:GB-35D:S000015:412 |
| 698545 | SBIOO2:HMW22D:S000020:505 |
| 698547 | SBIOO2:FB1:W080701:505 |
| 698574 | SBIOO2:TBI:W080701:505 |

SBI002:GB-33:S000010:412
SBI002:GB-34:S000015:412
9854
698545 69857

Date
Taken
08/07/2001 08/07/2001 08/07/2001 08/07/2001 08/07/2001 08/06/2001 08/07/2001 08/08/2001

Date
Received
08/08/2001
08/08/2001
08/08/2001
08/08/2001
08/08/2001
08/08/2001
08/08/2001 08/08/2001

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted entirety.

Enclosure


## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) . 08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag |  | Date | Batch | Batch | Reporting | Analyst |  |
| Analyzed | Number | Number | Limit | Initials Method Reference |  |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 698520

SBI002:HMW7S:S000020:428

DATE/TIME TAKEN 08/07/2001 13:20

| Dry Weight | 77.8 | $\%$ | 08/15/2001 |  | 1477 |  | mhg |  | 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/16/2001 |  | 1229 | Complete | ema | SW | 60108 |
| Arsenic, ICP | <8.6 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2956 | <8.6 | emd | SW | 6010b |
| Barium, ICP | 496 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2887 | $<1.7$ | emd | SW | 6010B |
| Cadmium, ICP | $<2.6$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2869 | $<2.6$ | emd | SW | 60108 |
| Chromium, ICP | 9.6 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2857 | $<3.5$ | emd | SW | 6010B |
| Lead, ICP | 388 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2858 | $<6.8$ | emd | SW | 6010B |
| Mercury, CVAA | 0.158 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/15/2001 | 606 | 620 | $<0.01$ | epk | SW | 7471A |
| Selenium, ICP | $<8.6$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2936 | $<8.6$ | emd | SW | 6010B |
| Silver, ICP | $<3.5$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2889 | $<3.5$ | emd | SW | 6010B |
| ICP Digestion, Nonaqueous | Complete |  | 08/13/2001 | 900 |  | Complete | $m \mathrm{mt}$ | SW | 3050B |
| Mercury Digestion, Non-Aq | Complete |  | 08/14/2001 | 606 |  | Complete | epk | SW | 7471A |
| VOLATILE COMPOUNDS-8260 NOR-Aq |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/09/2001 |  | 1455 | Complete | bmh |  |  |
| Acetone | <129 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | $<129$ | bmh | SW | 8260A |
| Benzene | $<6.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | $<6.4$ | bmh | SW | 8260A |
| tert-Butylbenzene | $<6.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | $<6.4$ | bmh | SW | 8260A |
| sec-Butylbenzene | $<6.4$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | $<6.4$ | brah | SW | 8260A |
| n-Butylbenzene | $<6.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | $<6.4$ | bmh | SW | 8260A |
| Bromochloromethane | <6.4 | ug/kg dw | 08/09/2001 |  | 1455 | <6.4. | bmh | Sw | 8260A |
| Bxomodichloromethane | <6.4 | ug/kg dw | 08/09/2001 |  | 1455 | $<6.4$ | bmh | SN | 8260A |
| Bromoform | <6. 4 | $u g / \mathrm{kg}$ dw | 08/09/2001 |  | 1455 | $<6.4$ | bmh | SW | 8260A |
| Bromobenzene | <6.4 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | <6.4 | bmh | SW | 8260A |
| 2-Butanone (MEK) | <64 | ug/kg dw | 08/09/2001 |  | 1455 | $<64$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBIOO2

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 698520 |  | SBIO02: HM | N7S | 0000 | : 428 |  |  |  | 08/ | 7/2001 | 1 13:20 |


| Carbon disulfide | $<6.4$ |  | ug/kg dw | 08/09/2001 | 1455 | $<6.4$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carbon tetrachloride | $<6.4$ |  | ug/kg dw | 08/09/2001 | 1455 | <6.4 | bmh | SW | 8260A |
| Chlorobenzene | $<6.4$ | Es | ug/kg dw | 08/09/2001 | 1455 | $<6.4$ | bmh | SW | 8260A |
| Chloroethane | $<12.9$ |  | ug/kg dw | 08/09/2001 | 1455 | $<12.9$ | bmh | SW | 8260A |
| 2-Chlorotoluene | <6.4 |  | ug/kg dw | 08/09/2001 | 1455 | $<6.4$ | bmh | SW | 8260A |
| 4-Chloratoluene | $<6.4$ |  | ug/kg dw | 08/09/2001 | 1455 | $<6.4$ | brih | SW | 8260A |
| Chloroform | <6.4 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<6.4$ | bmh | SW | 8260A |
| Chloromethane | $<12.9$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<12.9$ | bmh | SW | 8260A |
| Dibromochloromethane | $<6.4$ |  | ug/kg dw | 08/09/2001 | 1455 | $<6.4$ | bmh | SW | 8260A |
| Dibromomethane | $<6.4$ |  | ug/kg dw | 08/09/2001 | 1455 | $<6.4$ | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<6.4$ |  | ug/kg dw | 08/09/2001 | 1455 | $<6.4$ | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | <6.4 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <6.4 | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $<6.4$ |  | ug/kg dw | 08/09/2001 | 1455 | $<6.4$ | bnh | SW | 8260A |
| 1,3-Dichlorobenzene | $<6.4$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <6.4 | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<6.4$ |  | ug/kg dw | 08/09/2001 | 1455 | $<6.4$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<6.4$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <6.4 | bmh | SW | 8260A |
| 1,2-Dichloroethane | <6.4 |  | ug/kg dw | 08/09/2001 | 1455 | $<6.4$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<6.4$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <6.4 | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | $<6.4$ |  | ug/kg dw | 08/09/2001 | 1455 | $<6.4$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<6.4$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<6.4$ | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<6.4$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <6.4 | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<6.4$ |  | ug/kg dw | 08/09/2001 | 1455 | <6.4 | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<6.4$ |  | ug/kg dw | 08/09/2001 | 1455 | $<6.4$ | bmin | SW | 8260A |
| 1,1-Dichloropropene | <6.4 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<6.4$ | bmh | SW | 8260A |
| cis-1,3-Dichloropropene | <6.4 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <6.4 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$08 / 27 / 2001$

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


SAMPLE NO 698520

SAMPLE DESCRIPTION
SBI002:HMW7S:S000020:428

DATE/TIME TAKEN
08/07/2001 13:20

| trans-1,3-Dichloropropene | <6. 4 |  | ug/kg dw | 08/09/2001 | 1455 | <6.4 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Etbylbenzene | $<6.4$ | 88 | ug/kg dw | 08/09/2001 | 1455 | <6.4 | bmh | Sw | 8260A |
| Hexachlorobutadiene | $<6.4$ |  | ug/kg dw | 08/09/2001 | 1455 | $<6.4$ | bun | SW | 8260A |
| n -Hexane | $<25.7$ |  | ug/kg dw | 08/09/2001 | 1455 | $<25.7$ | brih | SW | 8260A |
| 2-Hexanone | $<64.3$ |  | ug/kg dw | 08/09/2001 | 1455 | $<64.3$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | <6.4 |  | ug/kg dw | 08/09/2001 | 1455 | <6.4 | bmh | SW | 8260A |
| p-Isopropyltoluene | <6.4 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <6.4 | bmh | SW | 8250A |
| Bromomethane | $<12.9$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<12.9$ | bmh | Sw | 8260A |
| Methylene Chloride | $<12.9$ |  | ug/kg dw | 08/09/2001 | 1455 | $<12.9$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | <6.4 |  | ug/kg dw | 08/09/2001 | 1455 | <6.4 | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<64.3$ |  | ug/kg dw | 08/09/2001 | 1455 | $<64.3$ | bmh | Sw | 8260A |
| n-Propyibenzene | $<6.4$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<6.4$ | bmh | sw | 8260A |
| Styrene | $<6.4$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <6.4 | bmh | SW | 8260A |
| Naphthalene | <6. 4 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<6.4$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<6.4$ |  | ug/kg dw | 08/09/2001 | 1455 | $<6.4$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<6.4$ |  | ug/kg dw | 08/09/2001 | 1455 | $<6.4$ | bmh | SW | 8260A |
| Tetrachloroethene | $<6.4$ |  | ug/kg dw | 08/09/2001 | 1455 | $<6.4$ | bmh | Sw | 8260A |
| Toluene | $<6.4$ | ss | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <6.4 | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | <6.4 |  | ug/kg dw | 08/09/2001 | 1455 | $<6.4$ | binh | SW | 8260A |
| 1,1,1-Trichioroethane | $<6.4$ |  | ug/kg dw | 08/09/2001 | 1455 | $<6.4$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<6.4$ |  | ug/kg dw | 08/09/2001 | 1455 | <6.4 | bmh | SW | 8260A |
| Trichloroethene | <6.4 |  | ug/kg dw | 08/09/2001 | 1455 | <6.4 | bmh | SW | 8260A |
| Trichlorofluoromethane | <6.4 |  | ug/kg dw | 08/09/2001 | 1455 | $<6.4$ | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | <6.4 |  | ug/kg dw | 08/09/2001 | 1455 | $<6.4$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | <6. 4 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<6.4$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 698520 |  | SBIO02:HM | 7S | 00002 | : 428 |  |  |  | $08 /$ | 7/2001 | 1 13:20 |


| 1,3,5-Trimethylbenzene | <6.4 | ug/kg dw | 08/09/2001 | 1455 | <6.4 | bmh | Sw 8260A |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| vinyl Acetate | <6.4 | ug/kg dw | 08/09/2001 | 1455 | <6.4 | bmh | sw 8260A |  |
| vinyl Chloride | <2.6 | ug/kg dw | 08/09/2001 | 1455 | <2.6 | bmh | Sw 8260A |  |
| Xylenes, Total | <6.4 | ug/kg dw | 08/09/2001 | 1455 | <6.4 | bmh | SW 8260A |  |
| d4-1,2-Dichloroethane (surr) | 99 | $\%$ | 08/09/2001 | 1455 |  | bmh | SW 8260A |  |
| Dibromofluoromethane(surr) | 92 | \% | 08/09/2001 | 1455 |  | bmh | SW 8260A |  |
| ds-Toluene (surr) | 93 | 7 | 08/09/2001 | 1455 |  | bmh | SW 8260A |  |
| Bromofluorobenzene (surr) | 94 | \% | 08/09/2001 | 1455 |  | bmh | sw 8260A |  |
| $\begin{array}{ll} \text { SAMPLE NO. } \\ 698521 & \text { SE } \end{array}$ | LE | $\begin{aligned} & \text { TION } \\ & \text { SO400! } \end{aligned}$ | $50: 428$ |  |  |  | $\begin{aligned} & \text { E/TIME } \\ & 07 / 2001 \end{aligned}$ | $\begin{aligned} & \text { TAKEN } \\ & 10: 40 \end{aligned}$ |



## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
08/27/2001

## Job Number: 01.14219

Client Project ID: South Bend Indiana SBI002



| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 698521 | SBIOO2:HMWIOS:S040050:428 |

DATE/TIME TAKEN 08/07/2001 10:40

| n-Butylbenzene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | < 5.7 | bmh | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bromochloromethane | <5.7 | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmbz | SW 8260A |
| Bromodichloromethane | <5.7 | ug/kg dw | 08/09/2001 | 1455 | <5.7 | bmh | SW 8260A |
| Bromoform | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | <5.7 | bmh | SW 8260A |
| Bromobenzene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | <5.7 | bmh | SW 8260A |
| 2-Butanone (MEK) | $<57$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<57$ | bmih | SW 8260A |
| Carbon disulfide | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW 8260A |
| Carbon tetrachloride | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | <5.7 | bmh | SW 8260A |
| Chlorobenzene | <5.7 | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/09/2001 | 1455 | $<5.7$ | bmh | Sw 8260A |
| Chloroethane | $<11.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<11.5$ | bmh | SW 8260A |
| 2-Chlorotoluene | <5.7 | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW 8260A |
| 4-Chlorotoluene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW 8260A |
| Chloroform | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bmh | SW 8260A |
| Chloromethane | $<11.5$ | ug/kg dw | 08/09/2001 | 1455 | $<11.5$ | bmh | SW 8260A |
| Dibromochloromethane | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bmh | SW 8260A |
| Dibromomethane | < 5.7 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bmh | SW 8260A |
| Dichlorodifluoromethane | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bmh | SW 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | <5.7 | bmh | SW 8260A |
| 1,2-Dichlorobenzene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW 8260A |
| 1.3-Dichlorobenzene | $<5.7$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bmh | SW 8260A |
| 1,4-Dichlorobenzene | $<5.7$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bmh | SW 8260A |
| 1,1-Dichloroethane | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bmh | SW 8260A |
| 1,2-Dichloroethane | $<5.7$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bmh | SW 8260A |
| 1,1-Dichloroethene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.7 | bmin | SW 8260A |
| cis-1,2-Dichloroethene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.7 | bmh | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 698521 | SBIOO2:HMWIOS:S040050:428 |

DATE/TIME TAKEN 08/07/2001 10:40

| trans-1,2-Dichloroethene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | < 5.7 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichloropropane | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | sw | 8260A |
| cis-1,3-Dichloropropene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | < 5.7 | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| Ethylbenzene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | <5.7 | bmh | SW | 8260A |
| n-Hexane | $<23.0$ | ug/kg dw | 08/09/2001 | 1455 | $<23.0$ | bmh | SW | 8260A |
| 2-Hexanone | $<57.5$ | ug/kg dw | 08/09/2001 | 1455 | $<57.5$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| p-Isopropyltoluene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | < 5.7 | bmh | SW | 8260A |
| Bromomethane | $<11.5$ | ug/kg dw | 08/09/2001 | 1455 | $<11.5$ | bmh | SW | 8260A |
| Methylene Chloride | $<11.5$ | ug/kg dw | 08/09/2001 | 1455 | $<11.5$ | bmh | SW | 8250A |
| Methyl t-butyl ether (MIBE) | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<57.5$ | ug/kg dw | 08/09/2001 | 1455 | $<57.5$ | bmh | SW | 8260A |
| $n$-Propylbenzene | $<5.7$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| Styrene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| Naphthalene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.7$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| Tetrachloroethene | 16.0 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | buh | SW | 8260A |
| Toluene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bonh | SW | 8260A |
| 1,2,4-Trichlorobenzene | <5.7 | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


| 1,1,1-Trichloroethane | $<5.7$ | ug/kg dw | 08/09/2001 |  | 1455 | <5.7 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,2-Trichloroethane | <5.7 | ug/kg dw | 08/09/2001 |  | 1455 | $<5.7$ | bmh | SW | 8260A |
| Trichloroethene | $<5.7$ | ug/kg dw | 08/09/2001 |  | 1455 | $<5.7$ | bmh | Sw | 8260A |
| Trichlorofluoromethane | <5.7 | ug/kg dw | 08/09/2001 |  | 1455 | <5.7 | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.7$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 |  | 1455 | $<5.7$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.7$ | ug/kg dw | 08/09/2001 |  | 1455 | <5.7 | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | <5.7 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | <5.7 | bmh | SW | 8260A |
| Vinyl Acetate | $<5.7$ | $u g / \mathrm{kg} \mathrm{d} w$ | 08/09/2001 |  | 1455 | $<5.7$ | bmh | SW | 8260A |
| Vinyl Chloride | $<2.3$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | $<2.3$ | bmh | SW | 8260A |
| Xylenes. Total | $<5.7$ | $u g / \mathrm{kg}$ dw | 08/09/2001 |  | 1455 | $<5.7$ | bmh | SW | 8260A |
| d4-1, 2-Dichloroethane (surr) | 102 | 8 | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 97 | 8 | 08/09/2001 |  | 1455 |  | bmh | sw | 8260A |
| d8-Toluene (surr) | 95 | * | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 95 | \% | 08/09/2001 |  | 1455 |  | bmh | Sw | 8260A |
| BASE NEUT. COMPS. -8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<379$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270C |
| Acenaphthylene | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | Sw | 8270 C |
| Anthracene | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270 C |
| Benzo (a) anthracene | 524 | ug/kg dw | 08/10/2002 | 945 | 1454 | $<379$ | jrw | SW | 8270C |
| Benzo(b) fluoranthene | 602 | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Benzo(k)fluoranthene | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270C |
| Benzo (a) pyrene | 246 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<190$ | jrw | SW | 8270 C |
| Benzyl alcohol | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270 C |
| Benzyl butyl phthalate | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 82700 |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) 08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


| Bis (2-chloroethyl) ether | $<379$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bis (2-chloroethoxy) methane | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270C |
| Bis (2-ethylhexyl) phthalate | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | <379 | j2w | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | <379 | jrw | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | <379 | jrw | SW | 8270 C |
| 4-Chloroaniline | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | <379 | jrw | SW | 82700 |
| 2-Chloronaphthalene | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | <379, | jrw | SW | 8270 C |
| Chrysene | 720 | ug/kg dw | 08/10/2001 | 945 | 1454 | <379 | jrw | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<190$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<190$ | jrw | SW | 8270 C |
| Dibenzofuran | <379 | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270 C |
| 1,2-Dichlorobenzene | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270 C |
| 1,3-Dichlorobenzene | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | <379 | jrw | SW | 8270C |
| 1,4-Dichlorobenzene | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | <379 | jıw | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<759$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<759$ | jxw | SW | 8270C |
| Diethyl phthalate | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | <379 | jrw | SW | 8270C |
| Dimethyl phthalate | $<379$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270 C |
| 2.4-Dinitrotoluene | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270C |
| 2,6-Dinitrotoluene | $<379$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<379$ | jxw | SW | 8270C |
| Di-n-octylphthalate | $<379$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270C |
| Fluoranthene | 615 | ug/kg dw | 08/10/2001 | 945. | 1454 | $<379$ | jrw | SW | 8270C |
| Fluorene | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270C |
| Hexachlorobenzene | $<379$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270 C |
| Hexachloro-1, 3 -butadiene | $<379$ | $u g / \mathrm{kg}$ dw | 08/10/2001 | 945 | 1454 | <379 | jrw | SW | 8270C |
| Hexachlorocyclopentadiene | $<759$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<759$ | jxw | SW | 8270C |
| Hexachloroethane | <379 | ug/kg dw | 08/10/2001 | 945 | 1454 | <379 | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) 08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Reporting Analyst |  |
| Number | Number Limit | Initials Method Reference |  |  |  |

SAMPLE NO. 698521

SAMPLE DESCRIPTION
SBI002 : HMW10S: S040050:428

DATE/TIME TAKEN 08/07/2001 10:40

| Indeno (1, 2, 3-cd) pyrene | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Isophorone | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jıw | SW | 8270C |
| Naphthalene | 489 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270C |
| Nitrobenzene | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270 C |
| N -Nitrosodi-n-propylamine | $<379$ | $u g / \mathrm{kg}$ dw | 08/20/2002 | 945 | 1454 | $<379$ | jrw | SW | 8270 C |
| Phenanthrene | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270C |
| Pyrene | 600 | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | <379 | juw | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 87 | $\%$ | 08/10/2001 | 945 | 1454 |  | jrw | SW | 82700 |
| Surrogate: 2-Fiuorobiphenyl | 93 | \% | 08/10/2001 | 945 | 1454 |  | jrw | SW | 8270 C |
| Surrogate: di4-Terphenyl | 82 | 8 | 08/10/2001 | 945 | 1454 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,900 | ug/kg dw | 08/10/2001 | 945 | 1454 | $<1,900$ | jrw | SW | 8270C |
| 4-Chloro-3-methylphenol | <379 | ug/kg dw | 08/10/2001 | 945 | 1454 | <379 | jrw | SW | 8270C |
| 2-Chlorophenol | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270 C |
| 2,4-Dichlorophenol | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jıw | SW | 8270 C |
| 2,4-Dimethylphenol | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270 C |
| 2-Methylphenol | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270 C |
| meta \& para-Methylphenol | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | <379 | jrw | SW | 8270C |
| 2-Nitrophenol | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270C |
| Pentachlorophenol | $<379$ | ug/kg dw | c8/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270C |
| Phenol | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270C |
| 2,4,5-Trichlorophenol | <379 | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$08 / 27 / 2001$

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |
| Analyzed | Number | Number | Limit | Initials Method Reference |  |  |

## SAMPLE NO. 698521

SAMPLE DESCRIPTION SBIO02:HMW10S:S040050:428

DATE/TIME TAKEN 08/07/2001 10:40

| 2,4,6-Trichlorophenol | $<379$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<379$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: d6-Phenol | 81 | 4 | 08/10/2001 | 945 | 1454 |  | jrw | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 79 | 4 | 08/10/2001 | 945 | 1454 |  | jrw | SW | 8270C |
| Surrogate: Tribromophenol | 76 | \% | 08/10/2001 | 945 | 1454 |  | jrw | SW | 8270C |
| TPH - DRO Non-Aqueous | 931 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 195 | 280 | <11 | meb | SW | 8015M |

## SAMPLE NO. 698522

SAMPLE DESCRIPTION
SBIO02:HMWIOS:S100110:428
DATE/TIME TAKEN

| Dry Weight | 84.6 | \% | 08/15/2001 |  | 1477 |  | mhg | SM 2540 G . |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prep, BNA Non-Aq | Complete |  | 08/09/2001 | 945 |  | Complete | mir |  | A 625; | SW 3545 |
| Prep, TPH DRO Nonaq | Complete |  | 08/10/2001 | 195 |  | Complete | 1 mc |  |  |  |
| VOLATILE COMPOUNDS-8260 NOR-Aq |  |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/09/2001 |  | 1455 | Complete | bmh |  |  |  |
| Acetone | $<118$ | ug/kg dw | 08/09/2001 |  | 1455 | $<118$ | bmin |  | 8260A |  |
| Benzene | $<5.9$ | ug/kg dw | 08/09/2001 |  | 1455 | $<5.9$ | bmh |  | 82608 |  |
| tert-Butylbenzene | <5.9 | ug/kg dw | 08/09/2001 |  | 1455 | $<5.9$ | bmh |  | 8260A |  |
| sec-Butylbenzene | $<5.9$ | ug/kg dw | 08/09/2001 |  | 1455 | $<5.9$ | bmh |  | 82601 |  |
| n -Butylbenzene | $<5.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | $<5.9$ | bmh |  | 8260A |  |
| Bromochloromethane | $<5.9$ | ug/kg dw | 08/09/2001 |  | 1455 | $<5.9$ | bmh |  | 82602 |  |
| Bromodichloromethane | <5.9 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | $<5.9$ | bmh |  | 82601 |  |

\%

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Aralyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 698522 |  | SBI002:HM | N10S | S100 | 0:428 |  |  |  | 08/ | 7/2001 | 1 10:50 |


| Bromoform | $<5.9$ | ug/kg dw | 08/09/2001 | 1455 | $<5.9$ | bmh | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bromobenzene | $<5.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.9 | bmh | SW 8260A |
| 2-Butanone (MEK) | $<59$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<59$ | bmh | SW 8260A |
| Carbon disulfide | $<5.9$ | ug/kg dw | 08/09/2001 | 1455 | $<5.9$ | bmh | Sw 8260A |
| Carbon tetrachloride | $<5.9$ | ug/kg dw | 08/09/2001 | 1455 | $<5.9$ | bmh | SW 8260A |
| Chlorobenzene | $<5.9$ | ug/kg dw | 08/09/2001 | 1455 | <5.9 | bmh | SW 8260A |
| Chloroethane | $<11.8$ | ug/kg dw | 08/09/2001 | 1455 | <11.8 | buh | SW 8260A |
| 2-Chlorotoluene | $<5.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.9$ | bmh | SW 8260A |
| 4-Chlorotoluene | $<5.9$ | ug/kg dw | 08/09/2001 | 1455 | <5.9 | bmh | SW 8260A |
| Chloroform | $<5.9$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.9$ | bmh | SW 8260A |
| Chloromethane | $<11.8$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<11.8$ | bmh | SW 8260A |
| Dibromochloromethane | $<5.9$ | ug/kg dw | 08/09/2001 | 1455 | <5.9 | bmh | SW่ 8260A |
| Dibromomethane | $<5.9$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | <5.9 | binh | SW 8260A |
| Dichlorodifluoromethane | $<5.9$ | ug/kg dw | 08/09/2001 | 1455 | $<5.9$ | bmin | SW 8260A |
| 1,2-Dibromo-3-chloropropane | <5.9 | ug/kg dw | 08/09/2001 | 1455 | $<5.9$ | brah | SW 8260A |
| 1,2-Dichlorobenzene | <5.9 | ug/kg dw | 08/09/2001 | 1455 | $<5.9$ | bmh | SW 8260A |
| 1,3-Dichlorobenzene | $<5.9$ | ug/kg dw | 08/09/2001 | 1455 | $<5.9$ | bonh | SW 8260A |
| 1,4-Dichlorobenzene | $<5.9$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.9$ | bmh | SW 8260A |
| 1,1-Dichloroethane | < 5.9 | ug/kg dw | 08/09/2001 | 1455 | $<5.9$ | bmh | SW 8260A |
| 1,2-Dichloroethane | <5.9 | ug/kg dw | 08/09/2001 | 1455 | $<5.9$ | bmh | SW 8260A |
| 1,1-Dichloroethene | $<5.9$ | ug/kg dw | 08/09/2001 | 1455 | $<5.9$ | bmi | SW 8260A |
| cis-1, 2-Dichloroethene | <5.9 | ug/kg dw | 08/09/2001 | 1455 | $<5.9$ | bmh | SW b260A |
| trans-1,2-Dichloroethene | <5.9 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.9$ | bmh | SW 8260A |
| 1.2-Dichloropropane | <5.9 | ug/kg dw | 08/09/2001 | 1455 | $<5.9$ | bmh | SW 8260A |
| 1,3-Dichloropropane | <5.9 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.9$ | bmh | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 698522

SBI002:HMW10S:S100110:428

DATE/TIME TAKEN 08/07/2001 10:50

| 2,2-Dichloropropane | $<5.9$ |  | ug/kg dw | 08/09/2001 | 1455 | <5.9 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1-Dichloropropene | <5.9 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.9$ | bmh | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.9$ |  | ug/kg dw | 08/09/2001 | 1455 | $<5.9$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.9$ |  | ug/kg dw | 08/09/2001 | 1455 | $<5.9$ | bmh | SW | 8260A |
| Ethylbenzene | $<5.9$ |  | ug/kg dw | 08/09/2001 | 1455 | <5.9 | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.9$ |  | ug/kg dw | 08/09/2001 | 1455 | $<5.9$ | bmh | SW | 8260A |
| n-Hexane | $<23.6$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<23.6$ | bmh | SW | 8260A |
| 2-Hexanone | <59.1 |  | ug/kg dw | 08/09/2001 | 1455 | $<59.1$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.9$ |  | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<5.9$ | bmh | SW | 8260A |
| p -Isopropyltoluene | $<5.9$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.9$ | bmh | SW | 8260A |
| Eromomethane | $<11.8$ |  | ug/kg dw | 08/09/2001 | 1455 | $<11.8$ | bmh | SW | 8260A |
| Methylene Chloride | $<11.8$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<11.8$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.9$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.9$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIEK) | $<59.1$ |  | ug/kg dw | 08/09/2001 | 1455 | $<59.1$ | bmh | SW | 8260A |
| n-Propylbenzene | <5.9 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.9$ | bmh | SW | 8260A |
| Styrene | $<5.9$ |  | ug/kg dw | 08/09/2001 | 1455 | $<5.9$ | bmh | SW | 8260A |
| Naphthalene | $<5.9$ |  | ug/kg dw | 08/09/2001 | 1455 | $<5.9$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.9$ |  | ug/kg dw | 08/09/2001 | 1455 | $<5.9$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.9$ |  | ug/kg dw | 08/09/2002 | 1455 | $<5.9$ | bmh | SW | 8260A |
| Tetrachloroethene | $<5.9$ | + | ug/kg dw | 08/09/2001 | 1455 | <5.9 | bmh | SW | 8260A |
| Toluene | <5.9 |  | ug/kg dw | 08/09/2001 | 1455 | <5.9 | bmh | SW | 8260A |
| 1.2.4-Trichlorobenzene | $<5.9$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.9$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.9$ |  | ug/kg dw | 08/09/2001 | 1455 | $<5.9$ | bnh | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.9$ |  | ug/kg dw | 08/09/2001 | 1455 | <5.9 | bmh | SW | 8260A |
| Trichloroethene | <5.9 |  | ug/kg dw | 08/09/2001 | 1455 | $<5.9$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |

SAMPLE NO. SAMPLE DESCRIPTION 698522

SBIOO2:HMWIOS:S100110:428

| Trichlorofluoromethane | $<5.9$ | $u g / \mathrm{kg}$ dw | 08/09/2001 |  | 1455 | $<5.9$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,3-Trichloropropane | < 5.9 | ug/kg dw | 08/09/2001 |  | 1455 | $<5.9$ | brin | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | $<5.9$ | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.9$ | ug/kg dw | 08/09/2001 |  | 1455 | $<5.9$ | bmha | SW | 8260A |
| Vinyl Acetate | $<5.9$ | ug/kg dw | 08/09/2001 |  | 1455 | $<5.9$ | bmh | SW | 8260A |
| Vinyl Chloride | <2.4 | ug/kg dw | 08/09/2001 |  | 2455 | $<2.4$ | bmh | SW | 8260A |
| Xylenes, Total | $<5.9$ | ug/kg dw | 08/09/2001 |  | 1455 | $<5.9$ | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 101 | 8 | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 100 | 8 | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| as-Toluene (surr) | 94 | $\%$ | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 94 | \% | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| BASE NEUT, COMPS.-8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<390$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW | 8270C |
| Acenaphthylene | $<390$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW | 8270C |
| Anthracene | <390 | ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW | 8270 C |
| Benzo (a) anthracene | <390 | ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW | 8270 C |
| Benzo(b) fluoranthene | <390 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW | 8270 C |
| Benzo(k)fluoranthene | $<390$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW | 8270C |
| Benzo (a) pyrene | $<195$ | ug/ikg dw | 08/10/2001 | 945 | 1454 | $<195$ | jrw | SW | 8270C |
| Benzyl alcohol | $<390$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW | 8270C |
| Benzyl butyl phthalate | $<390$ | ug/kg dw | 08/10/2001 | 945 | 1454 | <390 | jrw | SW | 8270 C |
| Bis (2-chloroethyl)ether | $<390$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jxw | SW | 8270 C |
| Bis (2-chloroethoxy) methane | $<390$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW | 8270 C |
| Bis (2-ethylhexyl) phthalate | $<390$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<390$ | jxw | SW | 8270 C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$08 / 27 / 2001$

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 698522 SBIO02:HMW10S:S100110:428

DATE/TIME TAKEN 08/07/2001 10:50

| 2,2'-oxybis(1-Chloropropane) | $<390$ |
| :--- | :--- |
| 4-Bromophenyl phenyl ether | $<390$ |
| 4-Chloroaniline | $<390$ |
| 2-Chloronaphthalene | $<390$ |
| Chrysene | $<390$ |
| Dibenzo(a,h) anthracene | $<195$ |
| Dibenzofuran | $<390$ |
| 1,2-Dichlorobenzene | $<390$ |
| 1,3-Dichlorobenzene | $<390$ |
| 1,4-Dichlorobenzene | $<390$ |
| 3,3'-Dichlorobenzidine | $<780$ |
| Diethyl phthalate | $<390$ |
| Dimethyl phthalate | $<390$ |
| 2,4-Dinitrotoluene | $<390$ |
| 2,6-Dinitrotoluene | $<390$ |
| Di-n-octylphthalate | $<390$ |
| Fluoranthene | $<390$ |
| Fluorene | $<390$ |
| Hexachlorobenzene | $<390$ |
| Hexachloro-l,3-butadiene | $<390$ |
| Hexachlorocyclopentadiene | $<780$ |
| Hexachloroethane | $<390$ |
| Indeno(l,2,3-cd)pyrene | $<390$ |
| Isophorone | $<390$ |
| Naphthalene | $<390$ |


| ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW | 8270 C |
| ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW | 8270 C |
| ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | sw | 8270C |
| ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW | 8270 C |
| ug/kg dw | 08/10/2001 | 945 | 1454 | $<195$ | jrw | SW | 8270 C |
| ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jIw | SW | 8270 C |
| ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW | $8270 C^{\circ}$ |
| ug/kg dw | 08/10/2001. | 945 | 1454 | $<390$ | jrw | SW | 8270 C |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW | 8270 C |
| ug/kg dw | 08/10/2001 | 945 | 1454 | $<780$ | jrw | SW | 8270C |
| ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW | 8270 C |
| ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | Sw | 8270 C |
| ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW | 8270 C |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW | 8270 C |
| ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | j5w | SW | 8270C |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW | 8270 C |
| ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | Sw | 8270C |
| ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | sw | 8270 C |
| ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW | 8270 C |
| ug/kg dw | 08/10/2001 | 945 | 1454 | $<780$ | jrw | SW | 8270 C |
| ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW | 8270C |
| ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW | 8270C |
| ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | - jrw | SW | 8270 C |
| ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW | 8270 C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting | Analyst |  |  |
| Rumber | Number | Limit | Initials Method Reference |  |  |  |  |

## SAMPLE NO. SAMPLE DESCRIPTION

698522 SBIO02:HMW10S:S100110:428
DATE/TIME TAKEN 08/07/2001 10:50

| Nitrobenzene | $<390$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | <390 | jrw | SW 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N-Nitrosodi-n-propylamine | $<390$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW 8270C |
| Phenanthrene | $<390$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jıw | SW 8270C |
| Pyrene | $<390$ | ug/kg dw | 08/10/2001 | 945 | 1454 | <390 | jrw | Sw 8270C |
| 1,2,4-Trichlorobenzene | $<390$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW 8270 C |
| Surrogate: d5-Nitrobenzene | 87 | 4 | 08/10/2001 | 945 | 1454 |  | jrw | SW 8270C |
| Surrogate: 2-Fluorobiphenyl | 92 | \% | 08/10/2001 | 945 | 1454 |  | jrw | SW 8270C |
| Surrogate: di4-Terphenyl | 96 | \% | 08/10/2001 | 945 | 1454 |  | jrw | SW 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,950 | ug/kg dw | 08/10/2001 | 945 | 1454 | $<1,950$ | jrw | SW 8270C |
| 4-Chloro-3-methylphenol | $<390$ | ug/kg dw | 08/10/2001 | 945 | 1454 | <390 | jrw | SW B270C |
| 2-Chlorophenol | $<390$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW 8270C |
| 2,4-Dichlorophenol | $<390$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW 8270C |
| 2,4-Dimethylphenol | $<390$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<390$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW 8270C |
| 2-Methylphenol | $<390$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW 8270C |
| meta \& para-Methylphenol | $<390$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW 8270C |
| 2-Nitrophenol | $<390$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW 8270C |
| Pentachlorophenol | $<390$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/10/2001 | 945 | 1454 | $<390$ | jrw | SW 8270C |
| Phenol | $<390$ | ug/kg dw | 08/10/2001 | 945 | 1454 | <390 | jrw | SW 8270C |
| 2,4,5-Trichlorophenol | $<390$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<390$ | jxw | SW 8270C |
| 2,4,6-Trichlorophenol | $<390$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<390$ | jxw | SW 8270C |
| Surrogate: d6-Phenol | 84 | $\%$ | 08/10/2001 | 945 | 1454 |  | jrw | SW 8270C |
| Surrogate: 2-Fluorophenol | 77 | 8 | 08/10/2001 | 945 | 1454 |  | jxw | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002
$08 / 27 / 2001$

|  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Date | Batch | Batch | Reporting | Analyst |  |
| Analyzed | Number | Number | Limit | Initials | Method Reference |

DATE/TIME TAKEN
08/07/2001 10:50



VOLATILE COMPOUNDS-8260 NOR-Aq

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 698523

SBI002:SB6:S100110:428


## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. 6130 Wilcox Rd. Dublin, OH 43016

08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBIO02

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| R Analyed | Number | Number | Limit | Initials Method Reference |  |

SAMPLE NO. SAMPLE DESCRIPTION
698523 SBI002:SB6:S100110:428

DATE/TIME TAKEN 08/06/2001 12:40

| 1,4-Dichlorobenzene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | < 5.3 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1-Dichloroethane | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | buh | SW | 8260A |
| 1,2-Dichloroethane | $<5.3$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.3$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.3$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | <5.3 | bmh | Sw | 8260A |
| trans-1,2-Dichloroethene | <5.3 | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<5.3$ | bmh | Sw | B260A |
| 1,2-Dichloropropane | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.3$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | <5.3 | bmh | Sw | 8260A |
| Ethylbenzene | <5.3 | ug/kg dw | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bouh | SW | 8260A |
| n -Hexane | $<21.3$ | ug/kg dw | 08/09/2001 | 1455 | $<21.3$ | bmh | S* | 8260A |
| 2-Hexanone | $<53.2$ | ug/kg dw | 08/09/2001 | 1455 | $<53.2$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| p-Isopropyltoluene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Bromomethane | <10.6 | ug/kg dw | 08/09/2001 | 1455 | $<10.6$ | bmh | SW | 8260A |
| Methylene Chloride | <10.6 | . ug/kg dw | 08/09/2001 | 1455 | <10.6 | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.3$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<53.2$ | ug/kg dw | 08/09/2001 | 1455 | $<53.2$ | bmh | SW | 8250A |
| n -Propylbenzene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Styrene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Naphthalene | <5.3 | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 698523

SAMPLE DESCRIPTION
SBIO02:SB6:S100110:428

DATE/TIME TAKEN
08/06/2001 12:40


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Frep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 698523 |  | SBI002:SE | : SI | 0110 | 428 |  |  |  | 08/ | $6 / 2001$ | 12:40 |


| Benzo (b) fluoranthene | $<351$ | ug/kg dw | 08/10/2001 | 945 | 1454 | <351 | jcs | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benzo(k) fluoranthene | $<351$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | <351 | jcs | SW | 8270C |
| Benzo(a) pyrene | $<176$ | $u g / \mathrm{kg}$ dw | 08/10/2001 | 945 | 1454 | $<176$ | jes | SW | 8270 C |
| Benzyl alcohol | $<351$ | ug/kg dw | 08/10/2001 | 945 | 1454 | <351 | jes | SW | 8270 C |
| Benzyl butyl phthalate | $<351$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<351$ | jes | SW | 8270C |
| Bis(2-chloroethyl)ether | $<351$ | ug/kg dw | 08/10/2001 | 945 | 1454 | <351 | jes | Sw | 8270C |
| Bis (2-chloroethoxy) methane | $<351$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<351$ | jes | SW | 8270 C |
| Bis (2-ethylhexyl)phthalate | $<351$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<351$ | jcs | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | <351 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<351$ | jes | SW | 82700 |
| 4-Bromophenyl phenyl ether | <351 | ug/kg dw | 08/10/2001 | 945 | 1454 | $<351$ | jcs | SW | 8270C |
| 4-Chloroaniline | $<351$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | <351 | jes | SW | 8270 C |
| 2-Chloronaphthalene | $<351$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<351$ | jes | SW | 8270 C |
| Chrysene | $<351$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<351$ | jcs | SW | 82700 |
| Dibenzo (a, h ) anthracene | $<176$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<176$ | jes | SW | 82700 |
| Dibenzofuran | <351 | ug/kg dw | 08/10/2001 | 945 | 1454 | <351 | jes | SW | 8270 C |
| 1,2-Dichlorobenzene | <351 | ug/kg dw | 08/10/2001 | 945 | 1454 | $<351$ | jcs | SW | 8270C |
| 1,3-Dichlorobenzene | $<351$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<351$ | jcs | SW | 8270C |
| 1,4-Dichlorobenzene | $<351$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<351$ | jcs | SW | 8270 C |
| 3.3'-Dichlorobenzidine | $<703$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | $<703$ | jcs | SW | 8270C |
| Diethyl phthalate | <351 | ug/kg dw | 08/10/2001 | 945 | 1454 | $<351$ | jes | SW | 8270C |
| Dimethyl phthalate | <351 | ug/kg dw | 08/10/2001 | 945 | 1454 | <351 | jes | SW | 8270 C |
| 2,4-Dinitrotoluene | <351 | ug/kg dw | 08/10/2001 | 945 | 1454 | $<351$ | jcs | SW | 8270 C |
| 2,6-Dinitrotoluene | <351 | ug/kg dw | 08/10/2001 | 945 | 1454 | <351 | jcs | SW | 8270C |
| Di-n-octylphthalate | <351 | $u g / \mathrm{kg}$ dw | 08/10/2001 | 945 | 1454 | $<351$ | jcs | SW | 8270C |
| Fluoranthene | <351 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 915 | 1454 | $<351$ | jcs | SW | 82700 |

## ANALYTICAL REPORT

Kevin wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$08 / 27 / 2001$

Job Number: 01.1421.9
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO.

 698523SAMPLE DESCRIPTION
SBI002:SB6:S100110:428

DATE/TIME TAKEN 08/06/2001 12:40

| Fluorene | $<351$ | $\underline{u g / k g ~ d w ~}$ | 08/10/2001 | 945 | 1454 | $<351$ | jcs | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hexachlorobenzene | <351 | ug/kg dw | 08/10/2001 | 945 | 1454 | $<351$ | jcs | SW 8270C |
| Hexachloro-1,3-butadiene | $<351$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<351$ | jes | SW 8270C |
| Hexachlorocyclopentadiene | $<703$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<703$ | jes | SW 8270C |
| Hexachloroethane | <351 | ug/kg dw | 08/10/2001 | 945 | 1454 | $<351$ | jes | SW 8270C |
| Indeno (1,2,3-cd) pyrene | <351 | ug/kg dw | 08/10/2001 | 945 | 1454 | <351 | jcs | SW 8270C |
| Isophorone | $<351$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<351$ | jcs | SW 8270C |
| Naphthalene | $<351$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<351$ | jcs | SW 8270C |
| Nitrobenzene | $<351$ | ug/kg dw | 08/10/2001 | 945 | 1454 | $<351$ | jcs | SW 8270C |
| N-Nitrosodi-n-propylamine | <351 | $u g / \mathrm{kg}$ dw | 08/10/2001 | 945 | 1454 | $<351$ | jcs | SW 8270C |
| Phenanthrene | <351 | ug/kg dw | 08/10/2001 | 945 | 1454 | <351 | jcs | SW 8270C |
| Pyrene | $<351$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | <351 | jcs | SW 8270C |
| 1,2,4-Trichlorobenzene | <351 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001. | 945 | 1454 | <351 | jcs | SW 8270C |
| Surrogate: d5-Nitrobenzene | 87 | \% | 08/10/2001 | 945 | 1454 |  | jes | SW 8270C |
| Surrogate: 2-Fluorobiphenyl | 82 | 8 | 08/10/2001 | 945 | 1454 |  | jcs | SW 8270C |
| Surrogate: d14-Terphenyl | 86 | $\%$ | 08/10/2001 | 945 | 1454 |  | jcs | SW 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,760 | ug/kg dw | 08/10/2001 | 945 | 1454 | $<1,760$ | jcs | SW 8270C |
| 4-Chloro-3-methylphenol | <351 | ug/kg dw | 08/10/2001 | 945 | 1454 | <351 | jcs | SW 8270C |
| 2-Chlorophenol | <351 | ug/kg dw | 08/10/2001 | 945 | 1454 | <351 | jcs | SW 8270C |
| 2,4-Dichlorophenol | <351 | ug/kg dw | 08/10/2001 | 945 | 1454 | <351 | jcs | SW 8270C |
| 2,4-Dimethylphenol | <351 | ug/kg dw | 08/10/2001 | 945 | 1454 | <351 | jcs | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<351$ | ug/kg dw | 08/10/2001 | 945 | 1454 | <351 | jcs | SW 8270C |
| 2-Methylphenol | $<351$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 945 | 1454 | <351 | jcs | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$08 / 27 / 2001$

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 698523

DATE/TIME TAKEN 08/06/2001 12:40

| meta \& para-Methylphenol | <351 | ug/kg dw | 08/10/2001 | 945 | 1454 | $<351$ | jes | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Nitrophenol | <351 | ug/kg dw | 08/10/2001 | 945 | 1454 | <351 | jes | SW 8270C |
| Pentachlorophenol | <351 | ug/kg dw | 08/10/2001 | 945 | 1454 | <351 | jcs | SW 8270C |
| Phenol | <351 | ug/kg dw | 08/10/2001 | 945 | 1454 | <351 | jes | SW 8270C |
| 2.4,5-Trichlorophenol | <351 | ug/kg dw | 08/10/2001 | 945 | 1454 | $<351$ | jes | SW 8270C |
| 2,4,6-Trichlorophenol | <351 | ug/kg dw | 08/10/2001 | 945 | 1454 | <351 | jes | SW 8270C |
| Surrogate: d6-Phenol | 80 | 4 | 08/10/2001 | 945 | 1454 |  | jes | SW 8270C |
| Surrogate: 2-Fluorophenol | 75 | \% | 08/10/2001 | 945 | 1454 |  | jes | SW 8270C |
| Surrogate: Tribromophenol | 77 | 8 | 08/10/2001 | 945 | 1454 |  | jcs | SW 8270C |
| TPH - DRO Non-Aqueous | 25.8 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 | 195 | 280 | $<11$ | meb | SW 8015M |
| TPH - GRO (Non-Aqueous) | $<5$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 |  | 246 | <5 | meb | SW 8015M |

## SAMPLE NO. SAMPLE DESCRIPTION <br> 698524 <br> SBI002:SB6:S140150:428

DATE/TIME TAKEN 08/06/2001 12:50

| Dry Weight | 90.8 | \% | 08/15/2001 |  | 1477 |  | mhg | SM 2540 G . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/16/2001 |  | 1229 | Complete | emd | SW 6010B |
| Arsenic, ICP | <3.6 | mg/kg dw | 08/16/2001 | 900 | 2956 | $<3.6$ | emd | SW 6010B |
| Barium, ICP | 15 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2887 | $<0.73$ | emd | SW 6010B |
| Cadmium, ICP | $<1.1$ | $\mathrm{mg} / \mathrm{kg}$ dw | 08/16/2001 | 900 | 2869 | <1.1 | emd | SW 6010B |
| Chromium, ICP | 4.7 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2857 | $<1.4$ | emd | SW 6010B |
| Lead, ICP | 14 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2858 | <3.0 | emd | SW 6010B |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Balyzed | Number | Number | Limit | Initials Method Reference |

SAMPLE NO. SAMPLE DESCRIPTION
698524

DATE/TIME TAKEN 08/06/2001 12:50


## ANALY「ICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | IO1 |  |  |  |  | DAT | /TIME | TAKEN |
| 698524 |  | SBI002:SB | : S1 | 0150 | 28 |  |  |  | 08/ | 6/2001 | 1 12:50 |


| 4-Chlorotoluene | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chloroform | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| Chloromethane | $<11.0$ | ug/kg dw | 08/09/2001 | 1455 | $<11.0$ | bmh | SW | 8260A |
| Dibromochioromethane | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| Dibromomethane | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.5$ | bmh | sw | 8260A |
| Dichlorodifluoromethane | <5.5 | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | sw | 8260A |
| 1,4-Dichlorobenzene | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | < 5.5 | bmh | Sw | 8260A |
| 1,1-Dichloroethane | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | <5.5 | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | <5.5 | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | < 5.5 | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<5.5$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 1455 | <5.5 | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | <5.5 | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | brah | SW | B260A |
| cis-1,3-Dichloropropene | $<5.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.5 | bruh | SW | B260A |
| trans-1,3-Dichloropropene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.5 | bmh | SW | 8260A |
| Ethylbenzene | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | <5.5 | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| n -Hexane | $<22.0$ | ug/kg dw | 08/09/2001 | 1455 | $<22.0$ | bmh | SW | 8260A |
| 2-Hexanone | <55.1 | ug/kg dw | 08/09/2001 | 1455 | <55.1 | bmh | SW | 8250A |

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Rumber | Number | Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 698524 SBI002:SB6:S140150:428

DATE/TIME TAKEN 08/06/2001 12:50

| Isopropylbenzene (Cumene) | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| p-Isopropyltoluene | < 5.5 | ug/kg dw | 08/09/2001 | 1455 | <5.5 | bmh | SW | 8260A |
| Bromomethane | $<11.0$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<11.0$ | bmh | SW | 8260A |
| Methylene Chloride | $<11.0$ | ug/kg dw | 08/09/2001 | 1455 | $<11.0$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | <5.5 | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | <55.1 | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | <55.1 | bmh | SW | 8260A |
| n-Propylbenzene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| Styrene | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| Naphthalene | < 5.5 | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | <5.5 | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| Tetrachloroethene | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| Toluene | $<5.5$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | <5.5 | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.5$ | bmh | SN | 8260A |
| Trichloroethene | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | < 5.5 | bmh | SW | 8260A |
| Trichlorofluoromethane | $<5.5$ | $u g / \mathrm{kg} d w$ | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| Vinyl Acetate | $<5.5$ | ug/kg dw | 08/09/2001 | 1455 | $<5.5$ | bmh | SW | 8260A |
| Vinyl Chloride | $<2.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <2.2 | bmh | SW | 8260A |
| Xylenes, Total | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.5 | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 101 | $\%$ | 08/09/2001 | 1455 |  | bmh | SW | 8260A |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 698524 | SBI002:SB6:S140150:428 | $08 / 06 / 2001$ 12:50 |


| Dibromofluoromethane (surr) | 97 | 4 | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d8-Toluene (surr) | 91 | \% | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 96 | $\%$ | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| BASE NEUT. COMPS.-8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | <363 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<363$ | dmg | SW | 8270 C |
| Acenaphthylene | $<363$ | ug/ kg dw | 08/19/2001 | 946 | 1463 | <363 | ding | SW | 8270 C |
| Anthracene | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<363$ | ding | SW | 8270C |
| Benzo (a) anthracene | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<363$ | dimg | SW | 8270c |
| Benzo (b) fluoranthene | $<363$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | $<363$ | dmg | SW | 8270C |
| Benzo(k) fluoranthene | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <363 | dmg | SW | 8270 C |
| Benzo (a) pyrene | $<182$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<182$ | dimg | SW | 8270C |
| Benzyl alcohol | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <363 | dmg | Sw | 8270C |
| Benzyl butyl phthalate | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <363 | ding | SW | 8270 C |
| Bis(2-chloroethyl)ether | $<363$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<363$ | dmg | SW | 8270 C |
| Bis (2-chloroethoxy) methane | $<363$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <363 | dmg | SW | 8270C |
| Bis (2-ethylhexyl) phthalate | $<363$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <363 | dimg | Sw | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<363$ | dmg | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<363$ | ding | SW | 82700 |
| 4-Chloroaniline | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<363$ | dmg | SW | 8270 C |
| 2-Chloronaphthalene | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <363 | dmg | SW | 8270C |
| Chrysene | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <363 | dmg | SW | 8270 C |
| Dibenzo (a, h ) anthracene | $<182$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<182$ | dmg | SW | 8270C |
| Dibenzofuran | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<363$ | dmg | SW | 8270 C |
| 1,2-Dichlorobenzene | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <363 | ding | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01. 14219
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| Result Flag Units | Datch | Batch | Reporting Analyst |  |
| Analyzed | Number | Number | Limit | Initials Method Reference |

## SAMPLE NO. 698524

SAMPLE DESCRIPTION
SBI002:SB6:S140150:428

DATE/TIME TAKEN 08/06/2001 12:50

| 1,3-Dichlorobenzene | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<363$ | dmg | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,4-Dichlorobenzene | $<363$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<363$ | ding | SW 8270C |
| 3,3'-Dichlorobenzidine | $<727$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | $<727$ | dmg | SW 8270C |
| Diethyl phthalate | $<363$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | $<363$ | dimg | SW 8270C |
| Dimethyl phthalate | $<363$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/19/2001 | 946 | 1463 | $<363$ | dmg | SW 8270C |
| 2,4-Dinitrotoluene | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | -363. | dmg | SW 8270C |
| 2,6-Dinitrotoluene | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<363$ | dmg | SW 8270C |
| Di-n-octylphthalate | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<363$ | dmg | SW 8270C |
| Fluoranthene | <363 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<363$ | aing | SW 8270C |
| Fluorene | $<363$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | $<363$ | ding | SW 8270C |
| Hexachiorobenzene | $<363$ | $u g / \mathrm{kg} d w$ | 08/19/2001 | 946 | 1463 | $<363$ | dmg | SW 8270C |
| Hexachloro-1, 3-butadiene | $<363$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<363$ | dmg | SW 8270C |
| Hexachlorocyclopentadiene | $<727$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<727$ | dmg | SW 8270C |
| Hexachloroethane | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<363$ | dmg | SW 8270C |
| Indeno(1,2,3-cd) pyrene | <363 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<363$ | dmg | SW 8270C |
| Isophorone | <363 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<363$ | dmg | SW 8270C |
| Naphthalene | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<363$ | dmg | SW 8270C |
| Nitrobenzene | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<363$ | dmg | SW 8270C |
| N -Nitrosodi-n-propylamine | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<363$ | dmg | SW 8270C |
| Phenanthrene | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<363$ | ding | SW 8270C |
| Pyrene | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<363$ | dmg | SW 8270C |
| 1,2,4-Trichlorobenzene | $<363$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<363$ | dmg | SW 8270C |
| Surrogate: d5-Nitrobenzene | 87 | \% | 08/19/2001 | 946 | 1463 |  | dmg | SW 8270C |
| Surrogate: 2-Fluorobiphenyl | 93 | $\%$ | 08/19/2001 | 946 | 1463 |  | dmg | SW 8270C |
| Surrogate: d14-Terphenyl | 96 | $\%$ | 08/19/2001 | 946 | 1463 |  | dmg | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Frep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 698524 |  | SBI002:SB | : SI | 0150 | 28 |  |  |  | $08 /$ | $6 / 2001$ | 12:50 |



## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Anaiyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 698525 |  | SBI002: ${ }^{\text {a }}$ | 6: | 2004 | 428 |  |  |  | $08 /$ | 7/2001 | 08:17 |


| Dry Weight | 94.6 | 4 | 08/15/2001 |  | 1477 |  | mhg |  | 2540 G |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/16/2001 |  | 1229 | Complete | emd | SW | 6010B |
| Arsenic, ICP | $<3.5$ | $\mathrm{mg} / \mathrm{kg} \mathrm{d} w$ | 08/16/2001 | 900 | 2956 | $<3.5$ | emd | SW | 6010日 |
| Barium, ICP | 15.6 | $\mathrm{mg} / \mathrm{kg}$ dw | 08/16/2001 | 900 | 2887 | $<0.70$ | emd | SW | 6010B |
| Cadmium, ICP | $<1.0$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2869 | <1.0 | emd | SW | 6010B |
| Chromium, ICP | 3.9 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2857 | <1.4 | emd | SW | 6010B |
| Lead, ICP | 7.6 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2858 | $<2.7$ | emd | SW | 6010B |
| Mercury, CVAA | 0.011 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/15/2001 | 606 | 620 | $<0.008$ | epk | SW | 7471A |
| Selenium, ICP | $<3.5$ | $\mathrm{mg} / \mathrm{kg}$ dw | 08/16/2001 | 900 | 2936 | $<3.5$ | emd | SW | 6010B |
| Silver, ICP | $<1.4$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2889 | $<1.4$ | emd | SW | 6010B |
| ICP Digestion, Nonaqueous | Complete |  | 08/13/2001 | 900 |  | Complete | mrt | SW | 3050日 |
| Mercury Digestion, Non-Ag | Complete |  | 08/14/2001 | 606 |  | Complete | epk | SW | 7471A |
| Prep, TPH 418.1 Nonaq | Complete |  | 08/14/2001 | 592 |  | Complete | 110 | SW | 9071 |
| VOLATILE COMPOUNDS-8260 Non-Aq |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/09/2001 |  | 1455 | Complete | bmh |  |  |
| Acetone | $<106$ | ug/kg dw | 08/09/2001 |  | 1455 | $<106$ | bmh | SW | 8260A |
| Benzene | $<5.3$ | ug/kg dw | 08/09/2001 |  | 1455 | $<5.3$ | bmh | SW | 8260A |
| tert-Butylbenzene | $<5.3$ | ug/kg dw | 08/09/2001 |  | 1455 | $<5.3$ | bmh | SW | 8260A |
| sec-Butylbenzene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | $<5.3$ | bmh | SW | 8260A |
| n-Butylbenzene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | <5.3 | bmin | SW | 8260A |
| Bromochloromethane | <5.3 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 |  | 1455 | <5.3 | bmh | SW | 8260A |
| Bromodichloromethane | $<5.3$ | ug/kg dw | 08/09/2001 |  | 1455 | <5.3 | bmh | SW | 8260A |
| Bromoform | <5.3 | ug/kg dw | 08/09/2001 |  | 1455 | $<5.3$ | bmh | SW | 8260A |
| Bromobenzene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | $<5.3$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dubiin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 698525

SAMPLE DESCRIPTION
SBIO02:GB26:S020040:428

DATE/TIME TAKEN 08/07/2001 08:17

| 2-Butanone (MEK) | $<53$ | ug/kg dw | 08/09/2001 | 1455 | $<53$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carbon disulfide | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Carbon tetrachloride | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| Chlorobenzene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Chloroethane | $<10.6$ | ug/kg dw | 08/09/2001 | 1455 | $<10.6$ | bmh | SW | 8260A |
| 2-Chlorotoluene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| 4-Chlorotoluene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Chloroform | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Chioromethane | <10.6 | ug/kg dw | 08/09/2001 | 2455 | $<10.6$ | bmh | SW | 8260A |
| Dibromochloromethane | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | sw | 8260A |
| Dibromomethane | <5.3 | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.3$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 1455 | <5.3 | bmh | sw | 8260A |
| 1,2-Dichlorobenzene | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.3$ | bmh | Sw | 8260A |
| 1,3-Dichlorobenzene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | Sw | 8260A |
| Cis-1,2-Dichloroethene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 1.1-Dichloropropene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION

 698525| Cis-1,3-Dichloropropene | $<5.3$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans-1,3-Dichloropropene | <5.3 | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Ethylbenzene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| n -Hexane | $<21.1$ | ug/kg dw | 08/09/2001 | 1455 | $<21.1$ | bmh | SW | 8260A |
| 2-Hexanone | $<52.9$ | ug/kg dw | 08/09/2001 | 1455 | $<52.9$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| p-Isopropyltoluene | $<5.3$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Bromomethane | $<10.6$ | ug/kg dw | 08/09/2001 | 1455 | $<10.6$ | bmh | SW | 8260A |
| Methylene Chloride | $<10.6$ | ug/kg dw | 08/09/2001 | 1455 | $<10.6$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.3$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | < 5.3 | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<52.9$ | ug/kg dw | 08/09/2001 | 1455 | $<52.9$ | bmh | SW | 8260A |
| n-Propylbenzene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| Styrene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| Naphthalene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | <5.3 | bmh | Sw | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| Tetrachloroethene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Toluene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8250A |
| 1,1,1-Trichloroethane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.3 | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Trichloroethene | $<5.3$ | ug/kg dw | 08/09/2001 | 1455 | $<5.3$ | bmh | SW | 8260A |
| Trichlorofluoromethane | $<5.3$ | ug/kg dw | 08/09/2001 | 1455. | $<5.3$ | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.3$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | <5.3 | bmh | sw | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION 698525 <br> SBI002:GB26:S020040:428

DATE/TIME TAKEN 08/07/2001 08:17

| 1,2,4-Trimethylbenzene | $<5.3$ | ug/kg dw | 08/09/2001 |  | 1455 | $<5.3$ | bmh | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,3,5-Trimethylbenzene | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | <5.3 | bmh | SW 8260A |
| Vinyl Acetate | $<5.3$ | ug/kg dw | 08/09/2001 |  | 1455 | <5.3 | bmh | SW 8260A |
| Vinyl Chloride | $<2.1$ | ug/kg dw | 08/09/2001 |  | 1455 | <2.1 | bmh | SW 8260A |
| Xylenes, Total | <5.3 | ug/kg dw | 08/09/2001 |  | 1455 | $<5.3$ | bmh | SW 8260A |
| d4-1,2-Dichloroethane (surr) | 102 | $\%$ | 08/09/2001 |  | 1455 |  | bmh | SW 8260A |
| Dibromofluoromethane (surr) | 97 | 8 | 08/09/2001 |  | 1455 |  | bmh | SW 8260A |
| d8-Toluene (surr) | 93 | 8 | 08/09/2001 |  | 1455 |  | bmh | SW 8260A |
| Bromofluorobenzene (surr) | 94 | \% | 08/09/2001 |  | 1455 |  | bmh | SW 8260A |
| TPH - FTIR Non-aq | <53 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/15/2001 | 592 | 624 | <53 | 110 | 418.1 |

## SAMPLE NO. SAMPLE DESCRIPTION 698526 SBI002:GB27:S020040:428

| Dry Weight | 92.9 | 8 | 08/15/2001 |  | 1477 |  | mhg | SM | 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/16/2001 |  | 1229 | Complete | emd | SW | 6010B |
| Arsenic, ICP | $<10$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2956 | $<10$ | emd | SW | 6010B |
| Barium, ICP | 36 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2887 | $<2.0$ | emd | SW | 6010B |
| Cadmium, ICP | $<3.0$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2869 | $<3.0$ | end | SW | 6010B |
| Chromium, ICP | 5.5 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2857 | $<4.1$ | emd | SW | 6010B |
| Lead, ICP | 33.6 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2858 | $<8.2$ | emd | SW | 60108 |
| Mercury, CVAA | 0.227 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/15/2001 | 606 | 620 | $<0.009$ | epk | SW | 7471A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 698526

SBIO02: GB27:S020040:428

DATE/TIME TAKEN 08/07/2001 08:10

| Selenium, ICP | $<10$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2936 | $<10$ | emd | SW 6010B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Silver, ICP | <4.1 | $\mathrm{mg} / \mathrm{kg} \mathrm{d} w$ | 08/16/2001 | 900 | 2889 | <4.1 | emd | SW 6010B |
| ICP Digestion, Nonaqueous | Complete |  | 08/13/2001 | 900 |  | Complete | mrt | SW 30508 |
| Mercury Digestion, Non-Aq | Complete |  | 08/14/2001 | 606 |  | Complete | epk | SW 7471A |
| Prep, TPH 418.1 Nonaq | Complete |  | 08/14/2001 | 592 |  | Complete | 110 | SW 9071 |

VOLATILE COMPOUNDS-8260 NON-Aq

| 8260 - SW846 (Non-aq) | Complete |  | 08/09/2001 | 1455 | Complete | bmb |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | <108 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<108$ | bmh | SW 8260A |
| Benzene | $<5.4$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.4$ | bmh | SW 8260A |
| tert-Butylbenzene | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | < 5.4 | bmh | SW 8260A |
| sec-Butylbenzene | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | brha | SW 8260A |
| n -Butylbenzene | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW 8260A |
| Bromochloromethane | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW 8260A |
| Bromodichloromethane | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.4$ | bmh | SW 8260A |
| Bromoform | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | <5.4 | bmh | SW 8260A |
| Bromobenzene | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW 8260A |
| 2-Eutanone (MEK) | <54 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<54$ | bmh | SW 8260A |
| Carbon disulfide | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW 8260A |
| Carbon tetrachloride | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | <5.4 | bmh | SW 8260A |
| Chlorobenzene | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW 8260A |
| Chloroethane | $<10.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<20.8$ | bmh | SW 8260A |
| 2-Chlorotoluene | <5.4 | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW 8260A |
| 4 -Chlorotoluene | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW 8260A |
| Chloroform | <5.4 | ug/kg dw | 08/09/2001 | 1455 | <5.4 | bmh | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


DATE/TIME TAKEN
08/07/2001 08:10

| Chloromethane | $<10.8$ | ug/kg dw | 08/09/2001 | 1455 | $<10.8$ | bmh | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibromochloromethane | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | <5.4 | bmh | SW 8260A |
| Dibromomethane | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW 8260A |
| Dichlorodifluoromethane | $<5.4$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.4$ | bmh | SW 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.4$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 1455 | <5.4 | brah | SW 8260A |
| 1,2-Dichlorobenzene | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW: 8260A |
| 1,3-Dichlorobenzene | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | <5.4 | bruh | SW 8260A |
| 1,4-Dichlorobenzene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.4$ | bmh | SW 8260A |
| 1.1-Dichloroethane | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW 8260A |
| 1,2-Dichloroethane | <5.4 | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<5.4$ | bmh | Sw 8260A |
| 1,1-Dichloroethene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.4$ | bmh | SW 8260A |
| cis-1,2-Dichloroethene | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | <5.4 | bmh | SW 8260A |
| trans-1,2-Dichloroethene | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW 8260A |
| 1,2-Dichloropropane | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW 8260A |
| 1,3-Dichloropropane | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.4$ | bmh | SW 8260A |
| 2,2-Dichloropropane | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW 8260A |
| 1,1-Dichloropropene | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | brh | SW 8260A |
| cis-1,3-Dichloropropene | <5.4 | ug/kg dw | 08/09/2001 | 1455 | <5.4 | bmh | SW 8260A |
| trans-1,3-Dichloropropene | $<5.4$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW 8260A |
| Ethylbenzene | $<5.4$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.4$ | bmh | SW 8260A |
| Hexachlorobutadiene | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | <5.4 | bmh | SW 8260A |
| n -Hexane | <21.5 | ug/kg dw | 08/09/2001 | 1455 | $<21.5$ | bmh | SW 8260A |
| 2-Hexanone | $<53.8$ | ug/kg dw | 08/09/2001 | 1455 | $<53.8$ | bmh | SW 8260A |
| Isopropylbenzene (Cumene) | $<5.4$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW 8260A |
| p-Isopropyltoluene | <5.4 | ug/kg dw | 08/09/2001 | 1455 | <5.4 | bmh | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219

## Client Project ID: South Bend Indiana SBI002


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| Bromomethane | <10.8 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<10.8$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Methylene Chloride | $<10.8$ | ug/kg dw | 08/09/2001 | 1455 | $<10.8$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.4$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<53.8$ | ug/kg dw | 08/09/2001 | 1455 | $<53.8$ | bmh | SW | 8260A |
| n-Propylbenzene | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW | 8260A |
| Styrene | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | <5.4 | bmh | SW | 8260A |
| Naphthalene | <5.4 | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | brah | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW | 8260A |
| Tetrachloroethene | <5.4 | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW | 8260A |
| Toluene | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | <5.4 | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | <5.4 | ug/kg dw | 08/09/2001 | 1455 | <5.4 | bmh | SW | 8260A |
| Trichloroethene | <5.4 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.4$ | bmh | SW | 8260A |
| Trichlorofluoromethane | <5.4 | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.4$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.4$ | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW | 8260A |
| Vinyl Acetate | $<5.4$ | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | brih | SW | 8260A |
| Vinyl Chloride | <2.2 | ug/kg dw | 08/09/2001 | 1455 | <2.2 | buh | SW | 8260A |
| Xylenes, Total | <5.4 | ug/kg dw | 08/09/2001 | 1455 | $<5.4$ | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 104 | $\%$ | 08/09/2001 | 1455 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 98 | \% | 08/09/2001 | 1455 |  | bmh | SW | 8260A |
| d8-Toluene (surr) | 94 | \% | 08/09/2001 | 1455 |  | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)

08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting Limit | Analyst <br> Initials | Method R | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 698526 | SBI002: GB | 7: | 200 | : 428 |  |  |  | 08/ | $7 / 2001$ | 1 08:10 |


| Bromofluorobenzene (burr) | 94 | * | 08/09/2001 |  | 1455 |  | bmh | SW 8260A |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TPH - FTIR Non-aq | <54 | mg/kg dw | 08/15/2001 | 592 | 624 | <54 | 110 | 418.1 |  |
| SAMPLE NO. $698527$ | SAMPLE <br> SBIOO2 | $\begin{aligned} & \text { PTION } \\ & : S 0000 \end{aligned}$ | $0: 428$ |  |  |  |  | $\begin{aligned} & \text { CE/TIME } \\ & 106 / 2001 \end{aligned}$ | $\begin{aligned} & \text { TAKEN } \\ & 15: 35 \end{aligned}$ |



## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 698527

SBIO O2:HMW20S:S000020:428

08/27/2001

## Limit

Initials Method Reference
DATE/TIME TAKEN 08/06/2001 15:35

| Carbon tetrachloride | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | <5.7 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chlorobenzene | <5.7 | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| Chloroethane | $<11.3$ | ug/kg dw | 08/09/2001 | 1455 | $<11.3$ | bmh | SW | 8260A |
| 2-Chlorotoluene | <5.7 | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 4-Chlorotoluene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| Chloroform | <5.7 | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| Chloromethane | $<11.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<11.3$ | bmh | SW | 8260A |
| Dibromochloromethane | $<5.7$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| Dibromomethane | $<5.7$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<5.7$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | <5.7 | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bman | SW | 8260A |
| 1.1-Dichloroethane | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | <5.7 | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 1,2-Dichloropropane | <5.7 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | < 5.7 | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | Sw | 8260A |
| 2,2-Dichloropropane | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bmh | Sw | 8260A |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 698527

SBIO 02:HMW20S:S000020:428

| Ethylbenzene | $<5.7$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hexachlorobutadiene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bruh | SW | 8260A |
| n-Hexane | <22.7 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<22.7$ | bmh | SW | 8260A |
| 2-Hexanone | $<56.7$ | ug/kg dw | 08/09/2001 | 1455 | $<56.7$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.7$ | $u g / \mathrm{kg}$ dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| p-Isopropyltoluene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bith | SW | 8260A |
| Bromomethane | $<11.3$ | ug/kg dw | 08/09/2001 | 1455 | $<11.3$ | bmh | SW | 8260A |
| Methylene Chloride | $<11.3$ | ug/kg dw | 08/09/2001 | 1455 | $<11.3$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<56.7$ | ug/kg dw | 08/09/2001 | 1455 | $<56.7$ | bmh | SW | 8260A |
| n-Propylbenzene | <5.7 | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| Styrene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| Naphthalene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| Tetrachloroethene | <5.7 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| Toluene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | <5.7 | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | brnh | SW | 8260A |
| Trichloroethene | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| Trichlorofluoromethane | $<5.7$ | ug/kg dw | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.7$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.7$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 | 1455 | $<5.7$ | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | <5.7 | ug/kg dw | 08/09/2001 | 1455 | <5.7 | bmh | SW | 8260A |

# ANALYTICAL REPORT 

Kevin Wildman HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


| Vinyl Acetate | $<5.7$ | ug/kg dw | 08/09/2001 |  | 1455 | $<5.7$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Chloride | $<2.3$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | $<2.3$ | buh | SW | 8260A |
| Xylenes, Total | $<5.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/09/2001 |  | 1455 | $<5.7$ | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 102 | $\%$ | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 97 | 8 | 08/09/2001 |  | 1455 |  | brh | SW | 8260A |
| d8-Toluene (surr) | 92 | \% | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| Bromofluorobenzene(surr) | 95 | \% | 08/09/2001 |  | 1455 |  | bmh | SW | 8260A |
| BASE NEUT. COMPS.-8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW | 8270 C |
| Acenaphthylene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dimg | SW | 8270C |
| Anthracene | $<374$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <374 | dmg | SW | 8270C |
| Benzo(a)anthracene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW | 8270 C |
| Benzo (b) Eluoranthene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW | 8270 C |
| Benzo(k)fluoranthene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <374 | dmg | SW | 8270C |
| Benzo (a)pyrene | $<187$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<187$ | dmg | SW | 8270C |
| Benzyl alcohol | <374 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW | 8270 C |
| Benzyl butyl phthalate | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW | 8270C |
| Bis (2-chloroethyl)ether | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW | 82700 |
| Bis (2-chloroethoxy) methane | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | drng | SN | $8270{ }^{\text {c }}$ |
| Bis(2-ethylhexyl) phthalate | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <374 | dmg | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW | $8270{ }^{\text {c }}$ |
| 4-Bromophenyl phenyl ether | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW | 8270C |
| 4-Chloroaniline | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <374 | dimg | SW | 8270C |
| 2-Chloronaphthalene | <374 | ug/kg dw | 08/19/2001 | 946 | 1463 | <374 | dmg | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) . 08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 698527

SBIOO2:HMW20S:SOOOO20:428

DATE/TIME TAKEN 08/06/2001 15:35

| Chrysene | $<374$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<374$ | ding | SW | $8270{ }^{\circ}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzo( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<187$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<187$ | dmg | SW | 8270C |
| Dibenzofuran | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <374 | dmg | SW | 8270C |
| 1,2-Dichlorobenzene | $<374$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW | 8270C |
| 1,3-Dichlorobenzene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <374 | dmg | SW | 8270C |
| 1,4-Dichlorobenzene | $<374$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<374$ | ding | SW | 8270C |
| 3.3'-Dichlorobenzidine | $<748$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<748$ | dmg | SW | 8270C |
| Diethyl phthalate | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW | 8270 C |
| Dimethyl phthalate | $<374$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | <374 | dmg | SW | 8270 C |
| 2,4-Dinitrotoluene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <374 | dmg | SW | 8270C |
| 2,6-Dinitrotoluene | <374 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW | 8270C |
| Di-n-octylphthalate | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <374 | dmg | SW | 8270 C |
| Fluoranthene | <374 | ug/kg dw | 08/19/2001 | 946 | 1463 | <374 | ding | SW | 8270 C |
| Fluorene | $<374$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <374 | dmg | SW | 8270C |
| Hexachlorobenzene | $<374$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<374$ | dimg | SW | 8270C |
| Hexachloro-1,3-butadiene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <374 | dmg | SW | 8270 C |
| Hexachlorocyclopentadiene | $<748$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<748$ | dmg | SW | 82700 |
| Hexachloroethane | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <374 | dmg | SW | 8270 C |
| Indeno (1, 2,3-cd) pyrene | $<374$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<374$ | dmg | Sw | 8270C |
| Isophorone | <374 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<374$ | dimg | SW | 8270C |
| Naphthalene | <374 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <374 | ding | SW | 8270 C |
| Nitrobenzene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <374 | dmg | SW | $8270 C$ |
| N-Nitrosodi-n-propylamine | <374 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW | 8270C |
| Phenanthrene | $<374$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <374 | dimg | SW | 8270C |
| Pyrene | <374 | ug/kg dw | 08/19/2001 | 946 | 1463 | <374 | dmg | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting Analyst | Number Limit | Initials Method Reference |

SAMPIE NO. SAMPLE DESCRIPTION
698527
SBIOO2:HMW20S:S000020:428

08/27/2001
nitials Method Reference
1

| 1,2,4-Trichlorobenzene | $<374$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<374$ | dmg | Sw 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: d5-Nitrobenzene | 76 | $\%$ | 08/19/2001 | 946 | 1463 |  | dmg | SW 8270C |
| Surrogate: 2-Fluorobiphenyl | 74 | 8 | 08/19/2001 | 946 | 1463 |  | dmg | SW 8270C |
| Surrogate: di4-Terphenyl | 86 | 8 | 08/19/2001 | 946 | 1463 |  | dimg | SW 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,870 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<1,870$ | dmg | SW 8270C |
| 4-Chloro-3-methylphenol | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <374 | ding | SW 8270C |
| 2-Chlorophenol | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| 2,4-Dichlorophenol | <374 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| 2,4-Dimethylphenol | <374 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dimg | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<374$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| 2-Methylphenol | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | amg | sw 8270C |
| meta \& para-Methylphenol | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <374 | dmg | SW 8270C |
| 2-Nitrophenol | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| Pentachlorophenol | <374 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| Phenol | $<374$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| 2,4,5-Trichlorophenol | <374 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| 2,4,6-Trichlorophenol | <374 | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/19/2001 | 946 | 1463 | <374 | dmg | sw 8270C |
| Surrogate: d6-Phenol | 81 | 8 | 08/19/2001 | 946 | 1463 |  | dmg | SW 8270C |
| Surrogate: 2-Fluorophenol | 69 | 4 | 08/19/2001 | 946 | 1463 |  | dmg | SW 8270C |
| Surrogate: Tribromophenol | 70 | 8 | 08/19/2001 | 946 | 1463 |  | dmg | SW 8270C |
| TPH - GRO (Non-Aqueous) | <6 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 |  | 246 | <6 | meb | SW 8015M |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | PTIO1 |  |  |  |  | DAT | /TIME | TAKEN |
| 698528 |  | SBI002: GB | 0: | 00502 | 428 |  |  |  | 08/ | 7/2001 | 08:22. |



## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


SAMPLE NO.<br>SAMPLE DESCRIPTION 698528<br>SBIO02:GB20:S005020:428

DATE/TIME TAKEN 08/07/2001 08:22

| Bis (2-chloroethoxy) methane | $<351$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<351$ | dmg | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bis (2-ethylhexyl)phthalate | <351 | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<351$ | ding | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | $<351$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<351$ | dmg | SW | 8270 C |
| 4-Eromophenyl phenyl ether | $<351$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<351$ | dmg | SW | 8270C |
| 4-Chloroaniline | $<351$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <351 | dmg | SW | 8270C |
| 2-Chloronaphthalene | $<351$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<351$ | dimg | SW | 8270 C |
| Chrysene | <351 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <351 | dmg | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<176$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<176$ | ding | SW | 8270 C |
| Dibenzofuran | <351 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<351$ | dmg | SW | 8270 C |
| 1,2-Dichlorobenzene | $<351$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<351$ | dmg | SW | 8270C |
| 1,3-Dichlorobenzene | $<351$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<351$ | dmg | SW | 8270 C |
| 1,4-Dichlorobenzene | $<351$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<351$ | ding | SW | 8270 C |
| 3.3'-Dichlorobenzidine | $<703$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<703$ | dmg | SW | 8270 C |
| Diethyl phthalate | $<351$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<351$ | dmg | SW | 8270 C |
| Dimethyl phthalate | <351 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<351$ | ding | SW | 8270C |
| 2,4-Dinitrotoluene | <351 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<351$ | dmg | SW | 8270 C |
| 2,6-Dinitrotoluene | $<351$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<351$ | dmg | SW | 8270 C |
| Di-n-octylphthalate | $<351$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<351$ | dmg | SW | 8270 C |
| Fluoranthene | $<351$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<351$ | dmg | SW | 8270C |
| Fluorene | $<351$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | $<351$ | dmg | SW | 8270 C |
| Hexachlorobenzene | $<351$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | <351 | dmg | SW | 8270 C |
| Hexachloro-1, 3-butadiene | <351 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | $<351$ | dmg | SW | 8270 C |
| Hexachlorocyclopentadiene | $<703$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | $<703$ | dmg | SW | $8270 \mathrm{C}^{\text {c }}$ |
| Hexachloroethane | <351 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<351$ | dmg | SW | 8270 C |
| Indeno(1,2,3-cd) pyrene | <351 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <351 | dimg | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) 08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Realt |  | Date | Batch | Batch | Reporting | Analyst |  |
| R Units | Analyzed | Number | Number | Limit | Initials Method Reference |  |  |

## SAMPLE NO. 698528

SAMPLE DESCRIPTION
SBIO02:GB20:S005020:428

DATE/TIME TAKEN 08/07/2001 08:22

| Isophorone | <351 | ug/kg dw | 08/19/2001 | 946 | 1463 | <351 | ding | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Naphthalene | <351 | ug/kg dw | 08/19/2001 | 946 | 1463 | <351 | dmg | Sw | 8270C |
| Nitrobenzene | <351 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<351$ | dmg | Sw | 8270C |
| N-Nitrosodi-n-propylamine | <351 | ug/kg dw | 08/19/2001 | 946 | 1463 | <351 | dmg | SW | 8270C |
| Phenanthrene | $<351$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<351$ | dmg | SW | 8270 C |
| Pyrene | $<351$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <351 | ding | SW | 8270 C |
| 1,2,4-Trichlorobenzene | <351 | ug/kg dw | 08/19/2001 | 946 | 1463 | <351 | dmg | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 104 | $\%$ | 08/19/2001 | 946 | 1463 |  | dmg | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 110 | 8 | 08/19/2001 | 946 | 1463 |  | ding | SW | 8270 C |
| Surrogate: d14-Terphenyl | 99 | 8 | 08/19/2001 | 946 | 1463 |  | dmg | SW | 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,760 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<1,760$ | dmg | SW | 8270 C |
| 4-Chloro-3-methylphenol | <351 | ug/kg dw | 08/19/2001 | 946 | 1463 | <351 | dmg | SW | 8270 C |
| 2-Chlorophenol | <351 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<351$ | dmg | SW | 8270 C |
| 2,4-Dichlorophenol | <351 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<351$ | dmg | Sw | 82700 |
| 2,4-Dimethylphenol | $<351$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | <351 | ding | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | <351 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<351$ | dmg | sw | 8270C |
| 2-Methylphenol | <351 | ug/kg dw | 08/19/2001 | 946 | 1463 | <351 | amg | SW | 8270 C |
| meta \& para-Methylphenol | $<351$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <351 | amg | SW | 8270 C |
| 2-Nitrophenol | <351 | ug/kg dw | 08/19/2001 | 946 | 1463 | <351 | dimg | SW | 8270 C |
| Pentachlorophenol | $<351$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <351 | dmg | SW | 8270 C |
| Phenol | <351 | ug/kg dw | 08/19/2001 | 946 | 1463 | <351 | dmg | SW | 8270C |
| 2,4,5-Trichlorophenol | $<351$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <351 | dmg | SW | 8270C |
| 2,4,6-Trichlorophenol | <351 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<351$ | dmg | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin) 08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| R |  | Number | Number | Limit | Initials Method Reference |

SAMPLE NO. SAMPLE DESCRIPTION
698528

| Surrogate: d6-Phenol | 92 | 8 | 08/19/2001 | 946 | 1463 | dmg | Sw 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorophenol | 81 | 8 | 08/19/2001 | 946 | 1463 | dimg | S* 8270c |
| Surrogate: Tribromophenol | 88 | \% | 08/19/2001 | 946 | 1463 | ding | SW 8270C |

## SAMPLE NO. SAMPLE DESCRIPTION 698529 SBIO02:GB30:S000020:428

## DATE/TIME TAKEN 08/07/2001 07:33



DATE/TIME TAKEN 08/07/2001 08:22

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin) 6130 Wilcox Rd.<br>08/27/2001 Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 698529

SAMPLE DESCRIPTION
SBIO02:GB30:S000020:428

DATE/TIME TAKEN 08/07/2001 07:33

| Acenaphthene | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | ding | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | $<368$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <368 | dimg | SW | 82700 |
| Anthracene | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | dmg | SW | 8270C |
| Benzo (a) anthracene | $<368$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | $<368$ | dmg | SW | 8270C |
| Benzo (b) fluoranthene | $<368$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <368 | ding | SW | 82700 |
| Benzo (k) fluoranthene | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | dmg | SW | 8270 C |
| Benzo (a) pyrene | $<184$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<184$ | ding | SW | 8270 C |
| Benzyl alcohol | $<368$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <368 | dmg | SW | 8270C |
| Benzyl butyl phthalate | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | dmg | SW | 8270C |
| Bis (2-chloroethyl) ether | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | dmg | SW | 82700 |
| Bis (2-chloroethoxy) methane | $<368$ | ug/kg dw | .08/19/2001 | 946 | 1463 | <368 | dmg | SW | 8270 C |
| Bis (2-ethylhexyl) phthalate | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | ding | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | ding | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | dmg | SW | 8270 C |
| 4-Chloroaniline | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | dmg | SW | 8270C |
| 2-Chioronaphthalene | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | dmg | SW | 8270C |
| Chrysene | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | ding | SW | 8270C |
| Dibenzo (a, h) anthracene | $<184$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<184$ | dmg | SW | 8270 C |
| Dibenzofuran | $<368$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <368 | dmg | SW | 8270C |
| 1,2-Dichlorobenzene | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | dmg | SW | 8270 C |
| 1,3-Dichlorobenzene | $<368$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | <368 | dmg | SW | 8270 C |
| 1,4-Dichlorobenzene | $<368$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <368 | dimg | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<736$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<736$ | dmg | SW | 8270C |
| Diethyl phthalate | <368 | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | dmg | SW | 8270C |
| Dimethyl phthalate | $<368$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <368 | dmg | sw | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method R | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { SAMPLE } \\ & 698529 \end{aligned}$ | NO. | SAMPLE D SBIO02: GI | CRI | $\begin{aligned} & \text { ?TION } \\ & 00002 \end{aligned}$ | $428$ |  |  |  | $\begin{aligned} & \text { DAT } \\ & 08 / \end{aligned}$ | $\begin{aligned} & / \text { TIME } \\ & 7 / 200 \end{aligned}$ | $\begin{gathered} \text { TAKEN } \\ 1 \quad 07: 33 \end{gathered}$ |


| 2,4-Dinitrotoluene | <368 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<368$ | ding | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,6-Dinitrotoluene | $<368$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<368$ | dmg | SW 8270C |
| Di-n-octylphthalate | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<368$ | dmg | SW 8270C |
| Fiuoranthene | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | dmg | SW 8270C |
| Fluorene | <368 | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | $<368$ | dmg | SW 8270C |
| Hexachlorobenzene | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<368$ | dmg | SW 8270C |
| Hexachloro-1,3-butadiene | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<368$ | dimg | SW 8270C |
| Hexachlorocyclopentadiene | $<736$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<736$ | dmg | SW 8270C |
| Hexachloroethane | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | dmg | SW 8270C |
| Indeno (1, 2, 3-cd) pyrene | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | dimg | SW 8270C |
| Isophorone | $<368$ | ug/kg dw | 08/19/2001 | 945 | 1463 | <368 | ding | SW 8270C |
| Naphthalene | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<368$ | dmg | SW 8270C |
| Nitrobenzene | $<368$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <368 | dmg | SW 8270C |
| N-Nitrosodi-n-propylamine | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | ding | SW 8270C |
| Phenanthrene | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | dmg | SW 8270C |
| Pyrene | <368 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <368 | dmg | SW 8270C |
| 1,2,4-Trichlorobenzene | $<368$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <368 | dmg | SW 8270C |
| Surrogate: d5-Nitrobenzene | 85 | \% | 08/19/2001 | 946 | 1463 |  | dmg | SW 8270C |
| Surrogate: 2-Fluorobiphenyl | 88 | $\%$ | 08/19/2001 | 946 | 1463 |  | dmg | SW 8270C |
| Surrogate: di4-Terphenyi | 87 | $\%$ | 08/19/2001 | 946 | 1463 |  | dmg | SW 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,840 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<1,840$ | dmg | SW 8270C |
| 4-Chloro-3-methylphenol | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<368$ | dimg | SW 8270C |
| 2-Chlorophenol | <368 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <368 | dmg | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO.

 698529SAMPLE DESCRIPTION
SBIO02: GB30:S000020:428

08/27/2001

Initials Method Reference 08/07/2001 07:33

| 2,4-Dichlorophenol | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | dimg | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dimethylphenol | <368 | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | dmg | SW 8270C |
| 2-Methy1-4,6-dinitrophenol | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<368$ | dmg | SW 8270C |
| 2-Methylphenol | $<368$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <368 | dmg | SW 8270C |
| meta \& para-Methylphenol | <368 | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | dmg | SW 8270C |
| 2-Nitrophenol | <368 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <368 | ding | SW 8270C |
| Pentachlorophenol | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | dmg | SW 8270C |
| Phenol | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | dimg | SW 8270C |
| 2,4,5-Tirichlorophenol | $<368$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | dmg | SW 8270C |
| 2,4,6-Trichlorophenol | <368 | ug/kg dw | 08/19/2001 | 946 | 1463 | <368 | dmg | SW 8270C |
| Surrogate: d6-Phenol | 82 | \% | 08/19/2001 | 946 | 1463 |  | dmg | SW 8270C |
| Surrogate: 2-Fluorophenol | 68 | $\%$ | 08/19/2001 | 946 | 1463 |  | dimg | SW 8270C |
| Surrogate: Tribromophenol | 73 | $\%$ | 08/19/2001 | 946 | 1463 |  | dmg | SW 8270C |

SAMPLE NO. SAMPLE DESCRIPTION
698530 SBIO02:GB37:SOOOO20:428

| Dry Weight | 87.2 | . 8 | 08/15/2001 |  | 1477 |  | mhg | SM | 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/16/2001 |  | 1229 | Complete | emd | SW | 6010日 |
| Arsenic, ICP | $<3.6$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2956 | $<3.6$ | emd | SW | 6010日 |
| Barium, ICP | 51.8 | mg/kg dw | 08/16/2001 | 900 | 2887 | $<0.72$ | emd | SW | 60108 |
| Cadmium, ICP | $<1.1$ | mg/kg dw | 08/16/2001 | 900 | 2869 | <1.1 | end | SW | 6010B |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 698530 | SBIOO2:GB37:S000020:428 |

DATE/TIME TAKEN 08/07/2001 08:00


# ANALYTICAL REPORT 

## Kevin Wildman

HULI \& ASSOC. (Dublin) 08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |

## SAMPLE NO. 698530

SAMPLE DESCRIPTION
SBI002:GB37:S000020:428

DATE/TIME TAKEN 08/07/2001 08:00

| 2-Chloronaphthalene | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | < 678 | dmg | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chrysene | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<378$ | dmg | SW | 8270 C |
| Dibenzo (a, h) anthracene | $<189$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<189$ | dmg | SW | 8270 C |
| Dibenzofuran | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<378$ | dmg | SW | 82700 |
| 1,2-Dichlorobenzene | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<378$ | dmg | SW | 82700 |
| 1,3-Dichlorobenzene | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<378$ | dimg | SW | 8270 C |
| 1,4-Dichlorobenzene | $<378$ | $u g / \mathrm{kg} d w$ | 08/19/2001 | 946 | 1463 | $<378$ | dmg | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<757$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<757$ | dmg | SW | 8270 C |
| Diethyl phthalate | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<378$ | dmg | SW | $8270{ }^{\text {c }}$ |
| Dimethyl phthalate | $<378$ | $u g / \mathrm{kg}{ }^{\text {dw }}$ | 08/19/2001 | 946 | 1463 | $<378$ | ding | SW | 8270 C |
| 2,4-Dinitrotoluene | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<378$ | dmg | SW | 8270 C |
| 2,6-Dinitrotoluene | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/19/2001 | 946 | 1463 | $<378$ | dimg | SW | $8270{ }^{\text {c }}$ |
| Di-n-octylphthalate | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<378$ | dmg | Sw | 8270 C |
| Fluoranthene | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <378 | dmg | SW | 8270 C |
| Fluorene | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<378$ | dmg | SW | 8270 C |
| Hexachlorobenzene | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<378$ | dimg | SW | 8270C |
| Hexachloro-1, 3-butadiene | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<378$ | dmg | SW | $8270{ }^{\text {c }}$ |
| Hexachlorocyclopentadiene | $<757$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<757$ | ding | SW | 8270 C |
| Hexachloroethane | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<378$ | dmg | SW | 8270 C |
| Indeno(1,2,3-cd) pyrene | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<378$ | dmg | SW | 8270 C |
| Isophorone | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<378$ | dmg | SW | 8270 C |
| Naphthalene | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<378$ | dmg | SW | 8270C |
| Nitrobenzene | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<378$ | dmg | SW | 8270 C |
| N-Nitrosodi-n-propylamine | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<378$ | dmg | sw | 8270 C |
| Phenanthrene | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <378 | dmg | SW | $8270 C^{\text {c }}$ |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method R | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | SRI | PTIO |  |  |  |  | DAT | /TIME | TAKEN |
| 698530 |  | SBI002: GB | 37: | 00002 | 428 |  |  |  | $08 /$ | 7/2001 | 1 08:00 |


| Pyrene | <378 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<378$ | dmg | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,4-Trichlorobenzene | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/19/2001 | 946 | 1463 | <378 | dimg | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 67 | \% | 08/19/2001 | 946 | 1463 |  | dmg | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 64 | \% | 08/19/2001 | 946 | 1463 |  | dmg | SW | 8270C |
| Surrogate: d14-Terphenyl | 81 | 4 | 08/19/2001 | 946 | 1463 |  | dmg | SW | 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,890 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <1,890 | dmg | SW | 8270 C |
| 4-Chioro-3-methylphenol | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <378 | dmg | SW | 8270C |
| 2-Chlorophenol | $<378$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | $<378$ | dimg | SW | 8270 C |
| 2,4-Dichlorophenol | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<378$ | dmg | Sw | 8270 C |
| 2,4-Dimethylphenol | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<378$ | dmg | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<378$ | ding | SW | 8270 C |
| 2-Methylphenol | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<378$ | ding | SW | 8270 C |
| meta \& para-Methyiphenol | $<378$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | $<378$ | dmg | SW | 8270 C |
| 2-Nitrophenol | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<378$ | dmg | SW | 8270 C |
| Pentachlorophenol | $<378$ | ug/kg dw. | 08/19/2001 | 946 | 1463 | $<378$ | dmg | SW | 8270 C |
| Phenol | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<378$ | dmg | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<378$ | dmg | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<378$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <378 | dmg | SW | 82700 |
| Surrogate: d6-Phenol | 57 | \% | 08/19/2001 | 946 | 1463 |  | dmg | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 36 | 8 | 08/19/2001 | 946 | 1463 |  | ding | SW | 8270 C |
| Surrogate: Tribromophenol | 48 | 8 | 08/19/2001 | 946 | 1463 |  | dmg | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 698531 |  | SBI002: GB | 1: S | 1003 | 428 |  |  |  | 08/ | 7/2001 | 1 08:35 |



## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.

Dublin, OH 43016

Job Number: 01.14219

## Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |

SAMPLE NO. 698531

SAMPLE DESCRIPTION
SBIO02:GB21:S010030:428

DATE/TIME TAKEN 08/07/2001 08:35

| Bis (2-chioroethoxy) methane | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | dimg | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bis(2-ethylhexyl)phthalate | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | dmg | SW 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | dmg | SW 8270C |
| 4-Bromophenyl phenyl ether | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | dmg | SW 8270C |
| 4-Chloroaniline | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | ding | SW 8270C |
| 2-Chloronaphthalene | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | dimg | SW 8270C |
| Chrysene | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | drig | SW 8270C |
| Dibenzo (a, h) anthracene | $<185$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<185$ | dmg | SW 8270C |
| Dibenzofuran | $<370$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 2463 | $<370$ | dimg | SW 8270C |
| 1,2-Dichlorobenzene | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | dmg | SW 8270C |
| 1,3-Dichlorobenzene | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | dmg | SW 8270C |
| 1,4-Dichlorobenzene | $<370$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<370$ | dmg | SW 8270C |
| 3,3'-Dichlorobenzidine | $<741$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | $<741$ | dmg | SW 8270C |
| Diethyl phthalate | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | dimg | SW 8270C |
| Dimethyl phthalate | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | dmg | SW 8270C |
| 2,4-Dinitrotoluene | $<370$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<370$ | dmg | SW 8270C |
| 2,6-Dinitrotoluene | $<370$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<370$ | dmg | SW 8270C |
| Di-n-octylphthalate | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | ding | SW 8270C |
| Fluoranthene | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | ding | SW 8270C |
| Fluorene | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | dmg | SW 8270C |
| Hexachlorobenzene | $<370$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<370$ | dmg | SW 8270C |
| Hexachloro-1,3-butadiene | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | ding | SW 8270C |
| Hexachlorocyclopentadiene | $<741$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | $<741$ | dmg | SW 8270C |
| Hexachloroethane | $<370$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<370$ | dmg | SW 8270C |
| Indeno(1,2,3-cd) pyrene | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | dimg | SW 8270C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |  |

## SAMPLE NO. 698531

SAMPLE DESCRIPTION
DATE/TIME TAKEN 08/07/2001 08:35

| Isophorone | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | dmg | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Naphthalene | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | dmg | SW | 8270C |
| Nitrobenzene | $<370$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<370$ | ding | sw | 8270 C |
| N-Nitrosodi-n-propylamine | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | dmg | SW | 8270 C |
| Phenanthrene | <370 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | dmg | SW | 8270 C |
| Pyrene | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | dimg | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<370$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <370 | dmg | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 86 | $\%$ | 08/19/2001 | 946 | 1463 |  | dmg | SW | 8270C |
| Surrogate: 2-Fluorobipheny1 | 90 | 4 | 08/19/2001 | 946 | 1463 |  | ding | SW | 8270 C |
| Surrogate: dl4-Terphenyl | 75 | \% | 08/19/2001 | 946 | 1463 |  | dmg | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1.850$ | ug/kg dw | 08/19/2002 | 946 | 1463 | <1.850 | dmg | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<370$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<370$ | amg | SW | 8270 C |
| 2-Chlorophenol | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | dmg | SW | 8270C |
| 2,4-Dichlorophenol | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | dmg | SW | 8270 C |
| 2,4-Dimethylphenol | <370 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <370 | dmg | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | dmg | SW | 8270C |
| 2-Methylphenol | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <370 | dimg | SW | 8270 C |
| meta \& para-Methylphenol | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <370 | dimg | SW | 8270 C |
| 2-Nitrophenol | $<370$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <370 | dmg | sw | 8270 C |
| Pentachlorophenol | $<370$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<370$ | dmg | SW | 8270 C |
| Phenol | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | ding | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<370$ | dmg | SW | 8270 C |
| 2,4,6-Trichlorophenol | <370 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<370$ | dmg | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Eatch | Batch | Reporting Analyst |  |
| Analyzed | Number | Number Limit | Initials Method Reference |  |  |

SAMPLE NO. 698531

SAMPLE DESCRIPTION
SBIO02:GB2I:S010030:428
DATE/TIME TAKEN 08/07/2001 08:35


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


| Acenaphthene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jcs | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jes | SW 8270C |
| Anthracene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <374 | jcs | SW B270C |
| Benzo (a)anthracene | $<374{ }^{\circ}$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jes | SW 8270C |
| Benzo(b) fluoranthene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jes | SW 8270C |
| Benzo (k) fluoranthene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <374 | jes | SW 8270C |
| Benzo(a) pyrene | 199 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<187$ | jes | SW 8270C |
| Benzyl alcohol | $<374$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | $<374$ | jes | SW 8270C |
| Benzyl butyl phthalate | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jcs | SW 8270C |
| Bis (2-chloroethyl) ether | <374 | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | $<374$ | jcs | SW 8270C |
| Bis (2-chloroethoxy) methane | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <374 | jes | SW 8270C |
| Bis (2-ethylhexyl)phthalate | $<374$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<374$ | jes | SW 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jes | SW 8270C |
| 4-Bromophenyl phenyl ether | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jcs | SW 8270C |
| 4-Chloroaniline | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jes | SW 82700 |
| 2-Chloronaphthalene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jes | SW 8270C |
| Chrysene | <374 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jcs | SW 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<187$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<187$ | jcs | SW 8270C |
| Dibenzofuran | $<374$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<374$ | jcs | SW 8270C |
| 1,2-Dichlorobenzene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jcs | SW 8270C |
| 1,3-Dichlorobenzene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jes | SW 8270C |
| 1,4-Dichlorobenzene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jes | SW 82700 |
| 3,3'-Dichlorobenzidine | $<747$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<747$ | jcs | SW 8270C |
| Diethyl phthalate | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <374 | jcs | SW 8270C |
| Dimethyl phthalate | <374 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <374 | jся | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) 08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI0.02

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analyzed | Number | Number | Limit | Initials Method Reference |  |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 698532 | SBIOO2:GB22:S005020:428 | $08 / 07 / 200108: 45$ |


| 2,4-Dinitrotoluene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jcs | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,6-Dinitrotoluene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <374 | jes | SW 8270C |
| Di-n-octylphthalate | $<374$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<374$ | jcs | SW 8270C |
| Fluoranthene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jes | SW 8270C |
| Fluorene | $<374$ | $u \mathrm{f} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <374 | jes | SW 8270C |
| Hexachlorobenzene | <374 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <374 | jes | SW 8270C |
| Hexachloro-1,3-butadiene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jes | SW 8270C |
| Hexachlorocyclopentadiene | $<747$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<747$ | jes | SW 8270C |
| Hexachloroethane | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <374 | jes | SW 8270C |
| Indeno (1, 2,3-cd) pyrene | $<374$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<374$ | jes | SW 8270C |
| Isophorone | $<374$ | ug/ kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jcs | sw 8270C |
| Naphthalene | $<374$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | <374 | jes | SW 8270C |
| Nitrobenzene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jся | SW 8270C |
| N-Nitrosodi-n-propylamine | $<374$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<374$ | jcs | SW 8270C |
| Phenanthrene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jcs | SW 8270C |
| Pyrene | <374 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1.464 | $<374$ | jes | SW 8270C |
| 1,2,4-Trichlorobenzene | <374 | ug/kg dw | 08/19/2001 | 946 | 1464 | <374 | jcs | SW 8270C |
| Surrogate: d5-Nitrobenzene | 78 | \% | 08/19/2001 | 946 | 1464 |  | jes | SW 8270C |
| Surrogate: 2-Fluorobiphenyl | 76 | \% | 08/19/2001 | 946 | 1464 |  | jcs | SW 8270C |
| Surrogate: d14-Terphenyl | 72 | \% | 08/19/2001 | 946 | 1464 |  | jcs | SW 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,870$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<1.870$ | jcs | SW 8270C |
| 4-Chloro-3-methylphenol | $<374$ | $u \mathrm{ug} / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | $<374$ | jes | Sw 8270C |
| 2-Chlorophenol | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <374 | jся | SW 8270C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.

Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TIO1 |  |  |  |  | DAT | /TIME | TAKEN |
| 698532 |  | SBI002: G | 22 : | 0502 | 428 |  |  |  | 08/ | 7/2001 | 1 08:45 |


| 2,4-Dichiorophenol | $<374$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<374$ | jes | SW | 8270 C |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dimethylphenol | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jcs | SW | 8270 C |  |
| 2-Methyl-4,6-dinitrophenol | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jcs | SW | 8270 C |  |
| 2-Methylphenol | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jcs | SW | 8270C |  |
| meta \& para-Methylphenol | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jcs | SW | 8270C |  |
| 2-Nitrophenol | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jcs | SW | 8270C |  |
| Pentachlorophenol | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jcs | SW | 8270 C |  |
| Phenol | <374 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<374$ | jes | SW | 8270 C |  |
| 2,4,5-Trichlorophenol | $<374$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | $<374$ | jcs | SW | 8270C |  |
| 2,4,6-Trichlorophenol | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <374 | jcs | SW | 8270C |  |
| Surrogate: d6-Phenol | 74 | \% | 08/19/2001 | 946 | 1464 |  | jcs | SW | 8270C |  |
| Surrogate: 2-Fluorophenol | 75 | 8 | 08/19/2001 | 946 | 1464 |  | jes | SW | 8270C |  |
| Surrogate: Tribromophenol | 77 | * | 08/19/2001 | 946 | 1464 |  | jcs | SW | 8270 C |  |
| SAMPLE NO. S | LE | TION |  |  |  |  |  | E | TIME | TAKEN |
| 698533 | 02 : | 05020 | 428 |  |  |  |  | 07 | /2001 | 09:10 |


| Dry Weight | 89.1 | \% | 08/15/2001 |  | 1477 |  | mhg | SM | 2540 G |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/26/2001 |  | 1229 | Complete | emd | SW | 6010B |
| Arsenic, ICP | 35.9 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2956 | $<3.7$ | emd | SW | 60108 |
| Barium, ICP | 114 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2887 | $<0.74$ | emd | SW | 6010B |
| Cadmium, ICP | <1. 1 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2869 | $<1.1$ | emd | SW | 6010b |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 698533

SAMPLE DESCRIPTION
SBIO 02:GB24:S005020:428

DATE/TIME TAKEN
08/07/2001 09:I0


## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>08/27/2001

6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { SAMPLE } \\ & 698533 \end{aligned}$ | NO. | SAMPLE D SBI002: GB | $\begin{aligned} & \text { SCRI } \\ & 24: S \end{aligned}$ | $\begin{aligned} & \text { PTIO } \\ & 00502 \end{aligned}$ | $428$ |  |  |  | $\begin{aligned} & \text { DAT } \\ & 08 / \end{aligned}$ | $\begin{aligned} & / \text { TIME } \\ & 7 / 2001 \end{aligned}$ | $\begin{gathered} \text { TAKEN } \\ 1 \quad 09: 10 \end{gathered}$ |


| 2-Chloronaphthalene | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jcs | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chrysene | $<370$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<370$ | jes | Sh | 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<185$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<185$ | jcs | SW | 8270 C |
| Dibenzofuran | $<370$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | $<370$ | jсs | SW | 8270C |
| 1,2-Dichlorobenzene | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jcs | SW | 8270C |
| 1,3-Dichlorobenzene | <370 | ug/kg dw | 08/19/2001 | 946 | 1464 | <370 | jcs | SW | 8270C |
| 1,4-Dichlorobenzene | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jcs | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<741$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<741$ | jcs | SW | 8270 C |
| Diethyl phthalate | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jcs | SW | 8270C |
| Dimethyl phthalate | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jcs | SW | 8270C |
| 2,4-Dinitrotoluene | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jcs | SW | 8270C |
| 2,6-Dinitrotoluene | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jcs | SW | 82700 |
| Di-n-octylphthalate | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jcs | SW | 8270C |
| Fluoranthene | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jcs | SW | 8270C |
| Fluorene | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jcs | SW | 8270 C |
| Hexachlorobenzene | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jcs | SW | 8270C |
| Hexachloro-1, 3-butadiene | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jes | SW | 8270C |
| Hexachlorocyclopentadiene | $<741$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<741$ | jes | SH | 8270C |
| Hexachloroethane | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jes | SW | 8270 C |
| Indeno (1,2,3-cd) pyrene | $<370$ | $4 \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<370$ | jcs | SW | 8270C |
| Isophorone | $<370$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | <370 | jcs | SW | 8270C |
| Naphthalene | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jcs | SW | 8270 C |
| Nitrobenzene | $<370$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | <370 | jcs | SW | 8270 C |
| N-Nitrosodi-n-propylamine | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jes | St | 8270C |
| Fhenanthrene | <370 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jces | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy |  | Number | Number | Limit | Initials Method Reference |

SAMPLE NO. 698533

SAMPLE DESCRIPTION
DATE/TIME TAKEN 08/07/2001 09:10

| Pyrene | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jes | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,4-Trichlorobenzene | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370^{\circ}$ | jcs | SW 8270C |
| Surrogate: d5-Nitrobenzene | 84 | $\%$ | 08/19/2001 | 946 | 1464 |  | jcs | SW 8270C |
| Surrogate: 2-Fluorobiphenyl | 83 | $\%$ | 08/19/2001 | 946 | 1464 |  | jcs | SW 8270C |
| Surrogate: d14-Terphenyl | 72 | \% | 08/19/2001 | 946 | - 1464 |  | jcs | SW 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,850$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<1,850$ | jcs | SW 8270C |
| 4-Chloro-3-methylphenol | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <370 | jcs | SW 8270C |
| 2-Chlorophenol | $<370$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | $<370$ | jcs | SW 8270C |
| 2,4-Dichlorophenol | $<370$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<370$ | јся | SW 8270C |
| 2,4-Dimethylphenol | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <370 | jce | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jes | SW 8270C |
| 2-Methylphenol | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jcs | Sw 8270C |
| meta \& para-Methylphenol | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jcs | SW 8270C |
| 2-Nitrophenol | $<370$ | $u g / \mathrm{kg} d w$ | 08/19/2001 | 946 | 1464 | $<370$ | jcs | SW 8270C |
| Pentachlorophenol | $<370$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<370$ | jes | SW 8270C |
| Phenol | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jcs | SW 8270C |
| 2,4,5-Trichlorophenol | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jes | SW 8270C |
| 2,4,6-Trichlorophenol | $<370$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<370$ | jcs | SW 8270C |
| Surrogate: d6-Phenol | 67 | 8 | 08/19/2001 | 946 | 1464 |  | jcs | SW 8270C |
| Surrogate: 2-Fluorophenol | 57 | \% | 08/19/2001 | 946 | 1464 |  | jcs | SW 8270C |
| Surrogate: Tribromophenol | 66 | 8 | 08/19/2001 | 946 | 1464 |  | jes | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219

## Client Project ID: South Bend Indiana SBI002

| . |  | Result | Flag | Units | Date <br> Analyzed | Prep Bateh <br> Number | Run <br> Batch <br> Number | Reporting Limit | Analyst Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 698534 |  | SBI002: GB | 3: S | 0502 | 428 |  |  |  | 08/0 | 7/2001 | 1 09:00 |


| Dry Weight | 91.6 | 4 | 08/15/2001 |  | 1477 |  | mhg | SM 2540 G. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/16/2001 |  | 1229 | Complete | emd | SW 6010 B |  |
| Arsenic, ICP | $<3.5$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2956 | $<3.5$ | emd | SW 6010B |  |
| Barium, ICP | 36.1 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2887 | $<0.70$ | emd | SW 6010B |  |
| Cadmium, ICP | $<1.0$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2869 | $<1.0$ | emd | SW 6010B |  |
| Chromium, ICP | 4.7 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2857 | <1.4 | emd | SW 60108 |  |
| Lead, ICP | 27.6 | mg/kg dw | 08/16/2001 | 900 | 2858 | $<2.7$ | emd | SW 6010日 |  |
| Mercury, CVAA | 0.059 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/15/2001 | 606 | 620 | $<0.009$ | epk | SW 7471A |  |
| Selenium, ICP | $<3.5$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2936 | $<3.5$ | emd | SW 6010B |  |
| Silver, ICP | <1.4 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2889 | $<1.4$ | emd | SW 6010B |  |
| ICP Digestion, Nonaqueous | Complete |  | 08/13/2001 | 900 |  | Complete | mrt | SW 3050B |  |
| Mercury Digestion, Non-Aq | Complete |  | 08/14/2001 | 606 |  | Complete | epk | SW. 7471A |  |
| Prep, BNA Non-Aq | Complete |  | 08/13/2001 | 946 |  | Complete | mem | EPA 625; SW 3540C | SW 3545 |
| BASE NEUT. COMPS.-8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<360$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <360 | jcs | SW 8270C |  |
| Acenaphthylene | $<360$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<360$ | jes | SW 8270c |  |
| Anthracene | $<360$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<360$ | jes | SW 8270C |  |
| Benzo (a) anthracene | 487 | ug/kg dw | 08/19/2001 | 946 | 1464 | <360 | jes | SW 8270C |  |
| Benzo(b) Eluoranthene | 663 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<360$ | jes | SW 8270C |  |
| Benzo (k) fluoranthene | <360 | ug/kg dw | 08/19/2001 | 946 | 1464 | <360 | jcs | SW 8270C |  |
| Benzo(a)pyrene | 442 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<180$ | jcs | SW 8270C |  |
| Benzyl alcohol | <360 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<360$ | jcs | SW 8270C |  |
| Benzyl butyl phthalate | $<360$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<350$ | jcs | SW 8270C |  |
| Bis(2-chloroethyl)ether | <360 | ug/kg dw | 08/19/2001 | 946 | 1464 | <360 | jes | SW 8270C' |  |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 698534

SAMPLE DESCRIPTION SBI002:GB23:S005020:428

DATE/TIME TAKEN 08/07/2001 09:00

| Bis (2-chloroethoxy) methane | <360 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<360$ | jcs | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bis (2-ethylhexyl) phthalate | <360 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<360$ | jcs | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | <360 | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | <360 | jes | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<360$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<360$ | jcs | SW | 8270 C |
| 4-Chloroaniline | $<360$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <360 | jcs | SW | 8270C |
| 2-Chloronaphthalene | $<360$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <360 | jcs | Sw | 8270 C |
| Chrysene | 520 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<360$ | jcs | SW | 8270C |
| Dibenzo (a, h) anthracene | $<180$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<180$ | jcs | SW | 8270 C |
| Dibenzofuran | $<360$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | $<360$ | jes | SW | 8270 C |
| 1,2-Dichlorobenzene | $<360$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<360$ | jes | SW | 8270 C |
| 1,3-Dichlorobenzene | <360 | ug/ kg dw | 08/19/2001 | 946 | 1464 | <360 | jes | SW | 8270 C |
| 1,4-Dichlorobenzene | $<360$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<360$ | jcs | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<721$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<721$ | jcs | Sw | 8270C |
| Diethyl phthalate | $<360$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<360$ | jcs | SW | 8270 C |
| Dimethyl phthalate | <360 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<360$ | jcs | SW | 8270 C |
| 2,4-Dinitrotoluene | <360 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<360$ | jcs | SW | 8270 C |
| 2,6-Dinitrotoluene | <360 | ug/kg dw | 08/19/2001 | 946 | 1464 | <360 | jcs | SW | 8270 C |
| Di-n-octylphthalate | <360 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<360$ | jcs | SW | 8270 C |
| Fluoranthene | 845 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<360$ | jes | SW | 8270 C |
| Fluorene | <360 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <360 | jes | SW | 82700 |
| Hexachlorobenzene | <360 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<360$ | jes | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<360$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <360 | jcs | SW | 8270C |
| Hexachlorocyclopentadiene | $<721$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<721$ | jcs | SW | 8270 C |
| Hexachloroethane | $<360$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<360$ | jes | SW | 8270 C |
| Indeno(1,2,3-cd) pyrene | $<360$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <360 | jes | SW | 82700 |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) 08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


| Isophorone | <360 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<360$ | jes | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Naphthalene | $<360$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<360$ | jes | SW | 8270C |
| Nitrobenzene | <360 | ug/kg dw | 08/19/2001 | 946 | 1464 | <360 | jes | SW | 8270 C |
| N-Nitrosodi-n-propylamine | $<360$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <360 | јсs | SW | 8270C |
| Phenanthrene | 462 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<360$ | jes | SW | 8270C |
| Pyrene | 820 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <360 | jce | SW | 8270 C |
| 1,2,4-Trichlorobenzene | <360 | ug/kg dw | 08/19/2001 | 946 | 1464 | <360 | jcs | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 70 | $\%$ | 08/19/2001 | 946 | 1464 |  | jcs | SW | B270C |
| Surrogate: 2-Fluorobiphenyl | 72 | 8 | 08/19/2001 | 946 | 1464 |  | jcs | SW | 8270 C |
| Surrogate: dl4-Terphenyl | 74 | 8 | 08/19/2001 | 946 | 1464 |  | jcs | SW | 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,800$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<1,800$ | jcs | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<360$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<360$ | jcs | 5 W | 8270 C |
| 2-Chlorophenol | $<360$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<360$ | jes | SW | 8270 C |
| 2,4-Dichlorophenol | <360 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<360$ | jes | SW | 8270C |
| 2,4-Dimethylphenol | $<360$ | ug/kg dw | 08/19/2001 | 946 | 1454 | $<360$ | jes | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | <360 | ug/kg dw | 08/19/2001 | 946 | 1464 | <360 | jes | SW | 82700 |
| 2-Methylphenol | $<360$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<360$ | jcs | SW | 8270C |
| meta \& para-Methylphenol | $<360$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <360 | јсs | SW | 8270C |
| 2-Nitrophenol | $<360$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<360$ | jes | SW | $8270{ }^{\text {c }}$ |
| Pentachlorophenol | $<360$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<360$ | jcs | SW | $8270{ }^{\text {c }}$ |
| Phenol | $<360$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <360 | jcs | SW | 8270C |
| 2,4,5-Trichlorophenol | <360 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<360$ | jcs | SW | 8270 C |
| 2,4,6-Trichlorophenol | <360 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <360 | jcs | SW | 8270 C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION
698534 SBI002:GB23:S005020:428
Surrogate: d6-Phenol
Surrogate: 2-Fluorophenol
Surrogate: Tribromophenol

| 66 | \% |
| :--- | :--- |
| 59 | \% |
| 72 |  |


| $08 / 19 / 2001$ | 946 | 1464 |
| :--- | :--- | :--- |
| $08 / 19 / 2001$ | 946 | 1464 |
| $08 / 19 / 2001$ | 946 | 1464 |

## SAMPLE NO. SAMPLE DESCRIPTION <br> SBI002:GB-15:S000010:412



| jcs | SW 8270C |
| :--- | :--- |
| jcs | SW 8270C |
| jcs | SW 8270C |

## DATE/TIME TAKEN

08/07/2001 15:35
DATE/TIME TAKEN
08/07/2001 09:00

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 08/27/2001 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 698535<br>SBI002:GB-15:S000010:412

DATE/TIME TAKEN 08/07/2001 15:35

| Acenaphthene | $<369$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jes | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | $<369$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jes | SW | 82700 |
| Anthracene | $<369$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jes | SW | 8270C |
| Benzo (a) anthracene | 452 | ug/kg dw | 08/19/2001 | 946 | 1464 | <369 | jes | SW | 8270C |
| Benzo (b) Eluoranthene | 826 | ug/kg dw | 08/19/2001 | 946 | 1464 | <369 | jcs | SW | 8270c |
| Benzo(k) Eluoranthene | $<369$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jcs | SW | 8270 C |
| Benzo (a) pyrene | 500 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<185$ | jcı | SW | 8270C |
| Benzyl alcohol | $<369$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jcs | SW | 8270 C |
| Benzyl butyl phthalate | $<369$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jcs | SW | 8270C |
| Bis (2-chloroethyl)ether | $<369$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jes | Sw | 8270C |
| Bis (2-chloroethoxy) methane | $<369$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <369 | jes | SW | 8270C |
| Bis (2-ethylhexyl)phthalate | <369 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jes | Sw | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<369$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jes | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<369$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jes | SW | 8270 C |
| 4-Chloroaniline | $<369$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jcs | SW | 8270C |
| 2-Chloronaphthalene | $<369$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<369$ | jes | SW | 8270C |
| Chrysene | 644 | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/19/2001 | 946 | 1464 | $<369$ | jes | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<185$ | ug/kg dw | 08/19/2001 | 946 | 1454 | $<185$ | jes | SW | 8270C |
| Dibenzofuran | $<369$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jcs | SW | 8270C |
| 1,2-Dichlorobenzene | $<369$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jcs | SW | 8270C |
| 1,3-Dichlorobenzene | $<369$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <369 | jes | SW | 8270C |
| 1,4-Dichlorobenzene | $<369$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<369$ | jes | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<738$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<738$ | jcs | SW | 8270C |
| Diethyl phthalate | $<369$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<369$ | jcs | SW | 8270 C |
| Dimethyl phthalate | <369 | ug/kg dw | 08/19/2001 | 946 | 1464 | <369 | jcs | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01. 14219
Client Project ID: South Bend Indiana SBI002


| 2,4-Dinitrotoluene | $<369$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jcs | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,6-Dinitrotoluene | <369 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<369$ | jes | SW | 8270C |
| Di-n-octylphthalate | $<369$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<369$ | jcs | SW | 8270C |
| Fluoranthene | 489 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <369 | jes | SW | 82700 |
| Fluorene | $<369$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <369 | jes | SW | 8270C |
| Hexachlorobenzene | $<369$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jes | Sw | 8270 C |
| Hexachloro-1,3-butadiene | $<369$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jes | SW | 8270C |
| Hexachlorocyclopentadiene | $<738$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<738$ | jcs | SW | 8270C |
| Hexachloroethane | <369 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jce | SW | 8270C |
| Indeno(1,2,3-cd) pyrene | 371 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jce | SW | 8270 C |
| Isophorone | <369 |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | $<369$ | jes | SW | 8270C |
| Naphthalene | $<369$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jcs | SW | 82700 |
| Nitrobenzene | $<369$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<369$ | jes | SW | 8270C |
| N-Nitrosodi-n-propylamine | <369 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jes | sw | 8270C |
| Phenanthrene | 719 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jcs | SW | 8270C |
| Pyrene | 2,140 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jcs | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<369$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jes | SW | $8270{ }^{\text {c }}$ |
| Surrogate: d5-Nitrobenzene | 80 | note | 8 | 08/19/2001 | 946 | 1464 |  | jcs | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 81 |  | \% | 08/19/2001 | 946 | 1464 |  | jes | SW | 8270 C |
| Surrogate: di4-Terphenyl | 237 |  | 8 | 08/19/2001 | 946 | 1464 |  | jcs | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,850$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <1,850 | jes | sw | 8270C |
| 4-Chloro-3-methylphenol | <369 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jcs | SW | 8270C |
| 2-Chlorophenol | $<369$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jcs | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION
698535 SBI002:GB-15:S000010:412

DATE/TIME TAKEN 08/07/2001 15:35

| 2,4-Dichlorophenol | $<369$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jcs | Sw | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dimethyiphenol | $<369$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<369$ | jes | Sw | 8270 C |
| 2-Methyl-4,6-dinitrophenal | $<369$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | <369 | jes | SW | 8270C |
| 2-Methyiphenol | $<369$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<369$ | jes | SW | 8270C |
| meta \& para-Methylphenol | $<369$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jes | SW | 82700 |
| 2-Nitrophenol | $<369$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | јсв | SW | 8270C |
| Pentachlorophenol | $<369$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<369$ | jes | SW | 82700 |
| Phenol | $<369$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<369$ | jes | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<369$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<369$ | jes | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<369$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <369 | jes | SW | 8270 C |
| Surrogate: d6-Phenol | 69 | 8 | 08/19/2001 | 946 | 1464 |  | jes | SW | 8270C |
| Surrogate: 2-Fluorophenol | 58 | 8 | 08/19/2001 | 946 | 1464 |  | jcs | SW | 8270 C |
| Surrogate: Tribromophenol | 59 | \% | 08/19/2001 | 946 | 1464 |  | jes | SW | 8270 C |

## SAMPLE NO. SAMPLE DESCRIPTION 698536 SBI002:GB-16:S000005:412

## DATE/TIME TAKEN

08/07/2001 16:15

| Dry Weight | 92.1 | \% | 08/16/2001 |  | 1478 |  | ming |  | 2540 G |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/16/2001 |  | 1229 | Complete | emd |  | 6010B |
| Arsenic, ICP | 17.2 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2956 | <7.1 | emd |  | 6010B |
| Barium, ICP | 87.0 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2887 | <1.4 | emd |  | 6010b |
| Cadmium, ICP | <2.1 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2869 | <2.1 | emd |  | 6010B |

# ANALYTICAL REPORT 

Kevin Wildman $\begin{array}{ll}\text { HULL \& ASSOC. (Dublin) } & 08 / 27 / 2001 \\ \text { 6130 Wilcox Rd. } & \\ \text { Dublin, OH } 43016 & \end{array}$ Dublin, OH 43016

Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 698536

SAMPLE DESCRIPTION
SBI002:GB-16:S000005:412

DATE/TIME TAKEN 08/07/2001 16:15

| Chromium, ICP | 11.8 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2857 | $<2.8$ | emd | SW 6010B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lead, ICP | 174 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 900 | 2858 | $<5.6$ | emd | SW 6010B |
| Mercury, CVAA | 0.879 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/15/2001 | 606 | 620 | $<0.045$ | epk | SW 7471A |
| Selenium, ICP | $<7.1$ | mg/kg dw | 08/16/2001 | 900 | 2936 | $<7.1$ | emd | SW 6010B |
| Silver, ICP | <2.8 | $\mathrm{mg} / \mathrm{kg} \mathrm{d} w$ | 08/16/2001 | 900 | 2889 | <2.8 | emd | SW 6010日 |
| ICP Digestion, Nonaqueous | Complete |  | 08/13/2001 | 900 |  | Complete | mrt | SW 3050B |
| Mercury Digestion, Non-Aq | Complete |  | 08/14/2001 | 606 |  | Complete | epk | SW 7471A |
| Prep, BNA Non-Ag | Complete |  | 08/13/2001 | 946 |  | Complete | mem | EPA 625; SW 3540C; SW 3545 |
| BASE NEUT. COMPS. -8270 Non-aq |  |  |  |  |  |  |  |  |
| Acenaphthene | <358 | ug/kg dw | 08/19/2001 | 946 | 1464 | <358 | jes | SW 8270C |
| Acenaphthylene | 1,210 | ug/kg dw | 08/19/2001 | 946 | 1464 | <358 | jes | SW 8270C |
| Anthracene | 851 | ug/kg dw | 08/19/2001 | 946 | 1464 | <358 | jes | SW 8270C |
| Benzo (a) anthracene | 2,700 | ug/kg dw | 08/19/2001 | 946 | 1464 | <358 | jes | SW 8270C |
| Benzo (b) fluoranthene | 6.540 | ug/kg dw | 08/21/2001 | 946 | 1466 | $<3,580$ | dmg | SW 8270C |
| Benzo(k) fluoranthene | 2,070 | ug/kg dw | 08/19/2001 | 946 | 1464 | <358 | jes | SW 8270C |
| Benzo(a)pyrene | 3,030 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<179$ | jes | SW 8270C |
| Benzyl alcohol. | <358 | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/19/2001 | 946 | 1464 | $<358$ | jes | SW 8270C |
| Benzyl butyl phthalate | $<358$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<358$ | jes | SW 8270C |
| Bis (2-chloroethyl) ether | $<358$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <358 | jes | SW 8270C |
| Bis (2-chloroethoxy) methane | <358 | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | <358 | jes | SW 8270C |
| Bis (2-ethylhexyl) phthalate | <358 | ug/kg dw | 08/19/2001 | 946 | 1464 | <358 | jes | SW 8270C |
| 2,2'-oxybis (1-Chloropropane) | <358 | ug/kg dw | 08/19/2001 | 946 | 1464 | <358 | jes | SW 8270C |
| 4-Bromophenyl phenyl ether | $<358$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<358$ | jeg | SW 8270C |
| 4 -Chloroaniline | <358 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <358 | jcs | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

$\begin{array}{ll}\text { SAMPLE NO. SAMPLE DESCRIPTION } \\ 698536 & \text { SBIO02:GB-16:S000005:412 }\end{array}$

DATE/TIME TAKEN
08/07/2001 16:15

| 2-Chloronaphthalene | <358 | ug/kg dw | 08/19/2001 | 946 | 1464 | <358 | jcs | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chrysene | 4,040 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/21/2001 | 946 | 1466 | $<3,580$ | ding | SW | 8270C |
| Dibenzo (a, h) anthracene | 602 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<179$ | jcs | Sw | 8270 C |
| Dibenzofuran | $<358$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | $<358$ | jes | SW | 82700 |
| 1,2-Dichlorobenzene | $<358$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <358 | jes | SW | 8270 C |
| 1,3-Dichlorobenzene | $<358$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<358$ | jes | SW | 8270C |
| 1,4-Dichlorobenzene | $<358$ | ug/kg dw | 08/19/2001 | 946 | - 1464 | <358 | jes | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<717$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<717$ | jes | SW | 8270 C |
| Diethyl phthalate | $<358$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <358 | jes | SW | 8270 C |
| Dimethyl phthalate | <358 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<358$ | jes | SW | 8270 C |
| 2,4-Dinitrotoluene | <358 | ug/kg dw | 08/19/2001 | 946 | 1464 | <358 | jcs | Sw | 8270 C |
| 2,6-Dinitrotoluene | $<358$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<358$ | jcs | SW | 8270 C |
| Di-n-octylphthalate | <358 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<358$ | jes | SW | 8270C |
| Fluoranthene | 1,740 | ug/kg dw | 08/19/2001 | 946 | 1464 | <358 | jes | SW | 8270C |
| Fluorene | <358 | $\mathrm{ug} / \mathrm{kg}$ diw | 08/19/2001 | 946 | 1464 | $<358$ | jcs | SW | 8270C |
| Hexachlorobenzene | <358 | ug/kg dw | 08/19/2001 | 946 | 1464 | <358 | jes | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<358$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<358$ | jcs | SW | 8270C |
| Hexachlorocyclopentadiene | $<717$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<717$ | jes | SW | 82700 |
| Hexachloroethane | $<358$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<358$ | jcs | SW | 8270C |
| Indeno (1, 2,3-cd) pyrene | 1,410 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<358$ | jes | SW | 8270 C |
| Isophorone | <358 | ug/kg dw | 08/19/2001 | 946 | 1464 | <358 | jcs | SW | 8270C |
| Naphthalene | $<358$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <358 | jes | SW | 8270 C |
| Nitrobenzene | $<358$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<358$ | jes | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<358$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<358$ | jes | SW | 8270 C |
| Phenanthrene | 539 | ug/kg dw | 08/19/2001 | 946 | 1464 | <358 | jcs | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

08/27/2001

|  | Prep Run |
| :--- | :--- | :--- |
| Date | Batch Batch Reporting Analyst |

Result Flag Units Analyzed Number Number Limit Initials Method Reference

SAMPLE DESCRIPTION 698536

SBI002:GB-16:S000005:412

| Pyrene | 4.020 |  | ug/kg dw | 08/21/2001 | 946 | 1466 | $<3,580$ | dmg | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,4-Trichlorobenzene | <358 |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | <358 | jes | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 83 | note | \% | 08/19/2001 | 946 | 1464 |  | jes | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 82 |  | $\%$ | 08/19/2001 | 946 | 1464 |  | jcs | SW | 8270 C |
| Surrogate: d14-Terphenyl | 149 |  | 8 | 08/19/2001 | 946 | 1464 |  | jcs | SW | 8270 C |
| ACID COMPOUNDS - 8270 Nom-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,790 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <1,790 | jes | SW | 8270 C |
| 4-Chloro-3-methylphenol | <358 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <358 | jes | SW | 8270C |
| 2-Chlorophenol | $<358$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <358 | jce | SW | 8270C |
| 2,4-Dichlorophenol | $<358$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<358$ | jcs | SW | B270C |
| 2,4-Dimethylphenol | $<358$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <358 | jcs | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | <358 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <358 | jes | Sw | 82700 |
| 2-Methylphenol | $<358$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<358$ | jes | SW | 8270C |
| meta \& para-Methylphenol | $<358$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <358 | jes | SW | 8270 C |
| 2-Nitrophenol | $<358$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <358 | jcs | SW | 8270C |
| Pentachlorophenol | $<358$ |  | ug/kg dw | 08/19/2001 | 945 | 1464 | <358 | jes | SW | 8270C |
| Phenol | $<358$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<358$ | jCb | SW | 8270C |
| 2,4,5-Trichlorophenol | $<358$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<358$ | jes | SW | 8270C |
| 2,4,6-Trichlorophenol | $<358$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<358$ | jcs | SW | 8270C |
| Surrogate: d6-Phenol | 68 |  | $\%$ | 08/19/2001 | 946 | 1464 |  | jes | S* | 8270 C |
| Surrogate: 2-Fluorophenol | 53 |  | 8 | 08/19/2001 | 946 | 1464 |  | jcs | SW | 8270C |
| Surrogate: Tribromophenol | 64 |  | \% | 08/19/2001 | 946 | 1464 |  | jes | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method R | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO1 |  |  |  |  | DAT | /TIME | TAKEN |
| 698537 |  | SBI002: GB | -17: | 000 | : 412 |  |  |  | 08/ | 7/2001 | 1 16:40 |



## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin) 08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed |  |  |
| Batch | Batch | Reporting | Analyst |  |
| Number | Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 698537

SBI002:GB-17:S000015:412

DATE/TIME TAKEN 08/07/2001 16:40

| Bis (2-chloroethoxy) methane | $<371$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<371$ | jes | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bis (2-ethylhexyl) phthalate | $<371$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<371$ | jcs | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | $<371$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <371 | jes | Sw | 8270C |
| 4-Bromophenyl phenyl ether | $<371$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<371$ | jes | SW | $8270{ }^{\circ}$ |
| 4-Chloroaniline | <371 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <371 | jcs | SW | 8270C |
| 2-Chloronaphthalene | $<371$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<371$ | jcs | SW | 8270 C |
| Chrysene | 434 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<371$ | jcs | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<186$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | $<186$ | jos | SW | 8270C |
| Dibenzofuran | $<371$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<371$ | jcs | SW | 82700 |
| 1,2-Dichlorobenzene | $<371$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | <371 | jes | SW | 8270 C |
| 1,3-Dichlorobenzene | $<371$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<371$ | jes | SW | $8270{ }^{\circ}$ |
| 1,4-Dichlorobenzene | $<371$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<371$ | jcs | SW | 8270 C |
| 3.3'-Dichlorobenzidine | $<742$ | ug/kg dw | 08/19/2001 | 945 | 1464 | $<742$ | jcs | SW | 8270C |
| Diethyl phthalate | $<371$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <371 | jce | SW | 8270C |
| Dimethyl phthalate | $<371$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<371$ | jcs | SW | 8270C |
| 2,4-Dinitrotoluene | $<371$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <371 | jes | SW | 8270C |
| 2,6-Dinitrotoluene | $<371$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<371$ | j¢ | S* | 8270C |
| Di-n-octylphthalate | $<371$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<371$ | jes | SW | 8270C |
| Fluoranthene | $<371$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<371$ | jcs | SW | 8270C |
| Fluorene | $<371$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<371$ | jcs | SW | 8270 C |
| Hexachlorobenzene | $<371$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<371$ | jcs | SW | 8270C |
| Hexachloro-1, 3-butadiene | $<371$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <371 | jes | SW | 8270c |
| Hexachlorocyclopentadiene | $<742$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<742$ | jes | SW | 8270C |
| Hexachloroethane | $<371$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<371$ | jcs | SW | 8270C |
| Indeno (1, 2, 3-cd) pyrene | $<371$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | <371 | jcs | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION

SBI002:GB-17:S000015:412

DATE/TIME TAKEN
08/07/2001 16:40

| Isophorone | $<371$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<371$ | jcs | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Naphthalene | <371 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <371 | jes | SW | 8270C |
| Nitrobenzene | <371 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<371$ | jcs | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<371$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<371$ | jcs | SW | 8270C |
| Phenanthrene | 502 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<371$ | jcs | SW | 8270c |
| Pyrene | 1,120 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<371$ | jcs | SW | 8270 C |
| 1,2,4-Trichlorobenzene | <371 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<371$ | jcs | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 68 | note | $t$ | 08/19/2001 | 946 | 1464 |  | jes | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 76 |  | \% | 08/19/2001 | 946 | 1464 |  | jcs | SW | 8270 C |
| Surrogate: d14-Terphenyi | 158 |  | 8 | 08/19/2001 | 946 | 1464 |  | jes | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,860$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <1,860 | jcs | SW | 8270C |
| 4-Chloro-3-methylphenol | $<371$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <371 | jcs | SW | 8270 C |
| 2-Chlorophenol | <371 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <371 | jcs | SW | 8270 C |
| 2.4-Dichlorophenol | $<371$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<371$ | jcs | SW | 8270C |
| 2,4-Dimethylphenol | $<371$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<371$ | jcs | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | <371 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<371$ | jcs | SW | 8270C |
| 2-Methylphenol | $<371$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <371 | jcs | SW | 8270C |
| meta \& para-Methylphenol | $<371$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<371$ | jcs | SW | 8270 C |
| 2-Nitrophenol | $<371$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <371 | jcs | SW | 8270C |
| Pentachlorophenol | $<371$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<371$ | jcs | SW | 8270C |
| Phenol | $<371$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<371$ | jes | SW | 8270C |
| 2,4,5-Trichlorophenol | $<371$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <371 | jes | Sw | 8270 C |
| 2,4,6-Trichlorophenol | $<371$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <371 | jes | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 698537

SBIO 02 :GB-17:S000015:412

| 57 | \% | $08 / 19 / 2001$ | 946 | 1464 |
| :--- | :--- | :--- | :--- | :--- |
| 40 | $\%$ | $08 / 19 / 2001$ | 946 | 1464 |
| 55 | $\%$ | $08 / 19 / 2001$ | 946 | 1464 |

SAMPLE DESCRIPTION
698538 SBIO02:GB-28:S000020:412
Surrogate: d6-Phenol
Surrogate: 2-Fluorophenol
Surrogate: Tribromophenol

DATE/TIME TAKEN 08/07/2001 16:40

| jcs | SW $8270 C$ |
| :--- | :--- |
| jcs | SW $8270 C$ |
| jcs | SW $8270 c$ |

## DATE/TIME TAKEN

 08/07/2001 10:30

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>08/27/2001

Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Prep Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Unitg | Date | Analyzed | Batch Batch Reporting Analygt |  |
| Number Number Limit | Initials Method Reference |  |  |  |

SAMPLE NO. SAMPLE DESCRIPTION
698538 SBIOO2:GB-28:S0000020:412

DATE/TIME TAKEN 08/07/2001 10:30

| Acenaphthene | $<347$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | $<347$ | ug/kg dw | 08/19/2001 | 945 | 1464 | $<347$ | jcs | SW | 8270C |
| Anthracene | 521 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jcs | SW | 8270C |
| Benzo (a) anthracene | 899 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<347$ | jcs | SW | 8270C |
| Benzo(b) fluoranthene | 1.320 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<347$ | jcs | SW | 8270 C |
| Benzo (k) fluoranthene | <347 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<347$ | jcs | SW | 8270C |
| Benzo (a) pyrene | 707 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<173$ | jes | SW | 8270 C |
| Benzyl alcohol | $<347$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW | 8270 C |
| Benzyl butyl phthalate | $<347$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2002 | 946 | 1464 | $<347$ | jes | SW | 82700 |
| Bis (2-chloroethyl) ether | $<347$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW | 8270 C |
| Bis (2-chloroethoxy) methane | $<347$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW | 82700 |
| Bis (2-ethylhexyl)phthalate | $<347$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jcs | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<347$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jcs | SW | 82700 |
| 4-Bromophenyl phenyl ether | $<347$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jcs | SW | 8270C |
| 4-Chloroaniline | $<347$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | $<347$ | jcs | SW | 8270C |
| 2-Chloronaphthalene | <347 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW | 8270 C |
| Chrysene | B27 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<173$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<173$ | jcs | SW | 82700 |
| Dibenzofuran | <347 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW | 82700 |
| 1,2-Dichlorobenzene | $<347$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jcs | SW | 82700 |
| 1,3-Dichlorobenzene | $<347$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW | 8270 C |
| 1,4-Dichlorobenzene | $<347$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<693$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<693$ | jes | SW | 8270 C |
| Diethyl phthalate | $<347$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW | 8270C |
| Dimethyl phthalate | <347 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 698538

SBI002:GB-28:S000020:412

DATE/TIME TAKEN 08/07/2001 10:30

| 2,4-Dinitrotoluene | $<347$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jcs | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,6-Dinitrotoluene | $<347$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<347$ | јсв | SW 8270C |
| Di-n-octylphthalate | $<347$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <347 | jcs | SW 8270C |
| Fluoranthene | 1,340 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jcs | Sw 8270C |
| Fluorene | $<347$ |  | $u g / \mathrm{kg} d w$ | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW 8270C |
| Hexachlorobenzene | $<347$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW 8270C |
| Hexachloro-1,3-butadiene | $<347$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW 8270C |
| Hexachlorocyclopentadiene | $<693$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<693$ | jes | SW 8270C |
| Hexachloroethane | $<347$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW 8270C |
| Indeno (1,2,3-cd) pyrene | $<347$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW 8270C |
| Isophorone | $<347$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW 8270C |
| Naphthalene | $<347$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW 8270C |
| Nitrobenzene | $<347$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW 8270C |
| N-Nitrosodi-n-propylamine | $<347$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW 8270C |
| Phenanthrene | 1.800 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jcs | SW 8270C |
| Pyrene | 1,660 |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/21/2001 | 946 | 1466 | $<1.630$ | dmg | SW 8270C |
| 1,2,4-Trichlorobenzene | $<347$ |  | ug/kg diw | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW 8270C |
| Surrogate: d5-Nitrobenzene | 82 | note | $\%$ | 08/19/2001 | 946 | 1464 |  | jcs | SW 8270C |
| Surrogate: 2-Fluorobiphenyl | 86 |  | \% | 08/19/2001 | 946 | 1464 |  | jes | SW 8270C |
| Surrogate: d14-Terphenyl | 170 |  | 4 | 08/19/2001 | 946 | 1464 |  | jce | SW 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,730 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<1,730$ | jcs | SW 8270C |
| 4-Chloro-3-methylphenol | $<347$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jes | Sw 8270C |
| 2-Chlorophenol | <347 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <347 | jes | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch Reporting Analyst |  |  |
| Rnaly | Number | Number Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 698538

SBI002:GB-28:S000020:412

DATE/TIME TAKEN 08/07/2001 10:30

| 2,4-Dichlorophenol | $<347$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dimethylphenol | $<347$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<347$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW | 8270 C |
| 2-Methylphenol | $<347$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<347$ | jcs | SW | $8270{ }^{\text {c }}$ |
| meta \& para-Methylphenol | $<347$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | $<347$ | jcs | SW | 8270C |
| 2-Nitrophenol | $<347$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jes | sw | 8270 C |
| Pentachlorophenol | $<347$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW | 8270 C |
| Phenol | $<347$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW | 8270C |
| 2,4,5-Trichlorophenol | $<347$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jcs | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<347$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<347$ | jes | SW | 8270 C |
| Surrogate: d6-Phenol | 75 | \% | 08/19/2001 | 946 | 1464 |  | jcs | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 67 | \% | 08/19/2001 | 946 | 1464 |  | jcs | SW | 8270 C |
| Surrogate: Tribromophenol | 73 | $\frac{8}{6}$ | 08/19/2001 | 946 | 1464 |  | jcs | SW | 8270 C |

$\begin{array}{ll}\text { SAMPLE NO. SAMPLE DESCRIPTION } \\ 698539 & \text { SBIO02:GB-29:SOO5015:412 }\end{array}$
DATE/TIME TAKEN
08/07/2001 11:15

| Dry Weight | 85.2 | $\%$ | 08/16/2001 |  | 1478 |  | mhg |  | 2540 G |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/16/2001 |  | 1229 | Complete | ema |  | 6010B |
| Arsenic, ICP | 41.5 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2956 | $<12$ | emd |  | 6010B |
| Barium, ICP | 230 | $\mathrm{mg} / \mathrm{kg}$ dw | 08/16/2001 | 901 | 2887 | $<2.3$ | emd | SW | 6010B |
| Cadmium, ICP | $<3.5$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2869 | <3.5 | emd |  | 6010B |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01. 14219
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 698539

SBIO 02 :GB-29:S005015:412

DATE/TIME TAKEN
$08 / 07 / 2001$ 11:15

| Chromium, ICP | 22.9 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2857 | $<4.6$ | emd | SW 6010B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lead, ICP | 225 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2858 | <9.3 | emd | SW 6010B |
| Mercury, CVAA | 4.17 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/15/2001 | 606 | 620 | $<0.094$ | epk | SW 7471A |
| Selenium, ICP | $<12$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2936 | $<12$ | emd | SW 6010B |
| Silver, ICP | <4.6 | mg/kg dw | 08/16/2001 | 901 | 2889 | <4.6 | emd | SW 6010B |
| ICP Digestion, Nonaqueous | Complete |  | 08/15/2001 | 901 |  | Complete | mrt | SW 3050B |
| Mercury Digestion, Non-Aq | Complete |  | 08/14/2001 | 606 |  | Complete | epk | SW 7471A |
| Prep, BNA Non-Aq | omplet |  | 08/13/200 | 946 |  | Complet | mem | EPA 625; |

BASE NEUT. COMPS. -8270 NOn-aq

| Acenaphthene | $<774$ |
| :--- | :--- |
| Acenaphthylene | 1,040 |
| Anthracene | 999 |
| Benzo(a)anthracene | 2,570 |
| Benzo(b) fluoranthene | 5,110 |
| Benzo (k) fluoranthene | 2,380 |
| Benzo(a) pyrene | 2,620 |
| Benzyl alcohol | $<774$ |
| Benzyl butyl phthalate | $<774$ |
| Bis(2-chloroethyl)ether | $<774$ |
| Bis(2-chloroethoxy)methane | $<774$ |
| Bis(2-ethylhexyl)phthalate | $<774$ |
| 2.2'-oxybis(1-Chloropropane) | $<774$ |
| 4-Bromophenyl phenyl ether | $<774$ |
| 4-Chloroaniline | $<774$ |


| ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | amg | Sw | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<775$ | dmg | SW | $8270{ }^{\text {c }}$ |
| ug/kg dw | 08/19/2001 | 946 | 1463 | $<775$ | dimg | SW | 8270C |
| ug/kg dw | 08/19/2001 | 946 | 1463 | $<775$ | dmg | SW | 8270 C |
| ug/kg dw | 08/20/2001 | 946 | 1465 | $<3,870$ | dmg | Sw | 8270C |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<775$ | dmg | SW | 8270C |
| ug/kg dw | 08/19/2001 | 946 | 1463 | $<387$ | dmg | SW | 8270C |
| $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW | 8270C |
| ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW | 8270C |
| ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW | 8270C |
| $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW | 8270C |
| ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dimg | SW | 8270 C |
| ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dimg | SW | 8270C |
| ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW | 8270 C |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <774 | dmg | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 698539 |  | SBI002: GB | 29: | O0501 | : 412 |  |  |  | 08/ | 7/2001 | 1 11:15 |


| 2-Chloronaphthalene | $<774$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chrysene | 3,370 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<775$ | ding | SW 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<388$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<388$ | dmg | sw 8270C |
| Dibenzofuran | $<774$ | ug/kg dw | 08/19/2001 | 946 | 1463 | <774 | dmg | SW 8270c |
| 1,2-Dichlorobenzene | $<774$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW 8270C |
| 1,3-Dichlorobenzene | $<774$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | ding | SW 8270 C |
| 1,4-Dichlorobenzene | $<774$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dmag | SW. 8270 C |
| 3,3'-Dichlorobenzidine | $<1.550$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<1,550$ | dmg | SW 8270C |
| Diethyl phthalate | $<774$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW 8270C |
| Dimethyl phthalate | $<774$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW 8270C |
| 2,4-Dinitrotoluene | $<774$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW 8270C |
| 2,6-Dinitrotoluene | $<774$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW 8270C |
| Di-n-octylphthalate | $<774$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW 8270C |
| Fluoranthene | 4,580 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<775$ | dmg | SW 8270C |
| Fluorene | $<774$ | ug/kg dw | 08/19/2001 | 946 | 1453 | $<774$ | ding | SW 8270C |
| Hexachlorobenzene | $<774$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW 8270C |
| Hexachloro-1,3-butadiene | $<774$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | ding | SW 8270C |
| Hexachlorocyclopentadiene | $<1,550$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<1,550$ | dmg | SW 8270C |
| Hexachloroethane | $<774$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | ding | SW 8270C |
| Indeno (1,2,3-cd)pyrene | $<774$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW 8270C |
| Isophorone | $<774$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW 8270C |
| Naphthalene | $<774$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW 8270C |
| Nitrobenzene | $<774$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dimg | SW 8270C |
| N-Nitrosodi-n-propylamine | $<774$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | ding | SW 8270C |
| Phenanthrene | 1,350 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<775$ | ding | SW 8270C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting | Analyst |  |
| Analyzed | Number | Number | Limit | Initials | Method Reference |  |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 698539 | SBIOO2:GB-29:S005015:412 | $08 / 07 / 200111: 15$ |


| Pyrene | 6,650 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<775$ | dmg | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,4-Trichlorobenzene | $<774$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<774$ | ding | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 82 |  | \% | 08/19/2001 | 946 | 1463 |  | dimg | Sw | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 94 |  | $t$ | 08/19/2001 | 946 | 1463 |  | dmg | SW | 8270 C |
| Surrogate: d14-Terphenyl | 152 | Note | $\%$ | 08/19/2001 | 946 | 1463 |  | dmg | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<3,880$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<3,880$ | dmg | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<774$ |  | ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW | 8270C |
| 2-Chlorophenol | $<774$ |  | ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW | 8270 C |
| 2,4-Dichlorophenol | $<774$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW | 8270C |
| 2,4-Dimethylphenol | $<774$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<774$ | ding | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<774$ |  | ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW | 8270 C |
| 2-Methylphenol | $<774$ |  | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW | 8270C |
| meta \& para-Methylphenol | $<774$ |  | ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW | 8270C |
| 2-Nitrophenol | $<774$ |  | ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW | 8270C |
| Pentachlorophenol | $<774$ |  | ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW | 8270 C |
| Phenol | $<774$ |  | ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dimg | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<774$ |  | ug/kg dw | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW | 8270 C |
| 2,4,6-Trichlorophenol | <774 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<774$ | dmg | SW | 8270 C |
| Surrogate: d6-Phenol | 74 |  | $\%$ | 08/19/2001 | 946 | 1463 |  | dmg | SW | 82700 |
| Surrogate: 2-Fluorophenol | 60 |  | \% | 08/19/2001 | 946 | 1463 |  | dmg | SW | 8270 C |
| Surrogate: Tribromophenol | 80 |  | \% | 08/19/2001 | 946 | 1463 |  | dimg | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14219

## Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result |  |  |  |

SAMPLE NO. SAMPLE DESCRIPTION
698540 SBI002:GB-31:S000010:412

DATE/TIME TAKEN 08/07/2001 11:35


## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.

Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
698540 SBIOO2:GB-31:S000010:412

DATE/TIME TAKEN 08/07/2001 11:35

| Bis (2-chloroethoxy) methane | $<402$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | <402 | jes | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bis (2-ethylhexyl)phthalate | $<402$ | ug/kg dw | 08/20/2001 | 946 | 1464 | $<402$ | jes | SW | 8270C |
| 2.2'-oxybis (1-Chloropropane) | $<402$ | $u g / \mathrm{kg}$ dw | 08/20/2001 | 946 | 1464 | $<402$ | jcs | SW | 8270C |
| 4-Eromophenyl phenyi ether | $<402$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | $<402$ | jes | Sw | 82700 |
| 4-Chloroaniline | $<402$ | ug/kg dw | 08/20/2001 | 946 | 1464 | $<402$ | jes | SW | 8270 C |
| 2-Chloronaphthalene | $<402$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | $<402$ | jcs | SW | 8270C |
| Chrysene | 3,180 | ug/kg dw | 08/20/2001 | 946 | 1464 | $<402$ | jcs | SW | 8270C |
| Dibenzo ( $a, h$ ) anthracene | 1,430 | ug/kg dw | 08/20/2001 | 946 | 1464 | <201 | jcs | SW | 8270 C |
| Dibenzofuran | 637 | ug/kg dw | 08/20/2001 | 946 | 1464 | $<402$ | jcs | SW | 82700 |
| 1,2-Dichlorobenzene | $<402$ | $u g / \mathrm{kg}$ dw | 08/20/2001 | 946 | 1464 | $<402$ | jce | SW | 8270 C |
| 1,3-Dichlorobenzene | $<402$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/20/2001 | 946 | 1464 | $<402$ | jcs | SW | 8270 C |
| 1,4-Dichlorobenzene | $<402$ | $u g / \mathrm{kg}$ dw | 08/20/2001 | 946 | 1464 | $<402$ | jes | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<805$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | $<805$ | jcs | SW | 8270 C |
| Diethyl phthalate | $<402$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | $<402$ | jes | Sw | 82700 |
| Dimethyl phthalate | $<402$ | ug/kg dw | 08/20/2001 | 946 | 1464 | $<402$ | jes | SW | 8270 C |
| 2,4-Dinitrotoluene | $<402$ | ug/kg dw | 08/20/2001 | 946 | 1464 | $<402$ | jes | SW | 8270C |
| 2,6-Dinitrotoluene | $<402$ | ug/kg dw | 08/20/2001 | 946 | 1464 | $<402$ | jes | SW | 8270C |
| Di-n-octylphthalate | $<402$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | $<402$ | jcs | SW | 8270C |
| Fluoranthene | 1,820 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | $<402$ | jcs | SW | 82700 |
| Fluorene | 1,620 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | $<402$ | jes | SW | 8270 C |
| Hexachlorobenzene | $<402$ | $u g / \mathrm{kg}$ dw | 08/20/2001 | 946 | 1464 | $<402$ | jes | Sw | 82700 |
| Hexachloro-1, 3-butadiene | $<402$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | $<402$ | jes | SW | 8270 C |
| Hexachlorocyclopentadiene | $<805$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | $<805$ | jes | SW | 82700 |
| Hexachloroethane | <402 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/20/2001 | 946 | 1464 | $<402$ | jes | SW | 8270 C |
| Indeno (1, 2, 3-cd) pyrene | 2,370 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 946 | 1466 | $<2,010$ | dmg | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


| Isophorone | $<402$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | <402 | jca | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Naphthalene | <402 |  | $u g / \mathrm{kg}$ dw | 08/20/2001 | 946 | 1464 | $<402$ | jes | SW | 8270 C |
| Nitrobenzene | $<402$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | $<402$ | jcs | SW | 8270 C |
| N-Nitrosodi-n-propylamine | $<402$ |  | ug/kg dw | 08/20/2001 | 946 | 1464 | $<402$ | jcs | SW | 8270 C |
| Phenanthrene | 5,340 |  | ug/kg dw | 08/21/2001 | 946 | 1466 | <4,020 | dmg | SW | 8270C |
| Pyrene | 7,210 |  | ug/kg dw | 08/21/2001 | 946 | 1466 | <4,020 | dmg | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<402$ |  | ug/kg dw | 08/20/2001 | 946 | 1464 | <402 | jes | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 74 | note | \% | 08/20/2001 | 946 | 1464 |  | jсs | SW | B270C |
| Surrogate: 2-Fluorobiphenyl | 80 |  | 8 | 08/20/2001 | 946 | 1464 |  | jes | SW | 8270 C |
| Surrogate: d14-Terphenyl | 243 |  | \% | 08/20/2001 | 946 | 1464 |  | jcs | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <2,010 |  | ug/kg dw | 08/20/2001 | 946 | 1464 | $<2,010$ | jcs | SW | 8270 C |
| 4-Chloro-3-methylphenol | <402 |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/20/2001 | 946 | 1464 | $<402$ | jcs | SW | 8270C |
| 2-Chlorophenol | $<402$ |  | ug/kg dw | 08/20/2001 | 946 | 1464 | $<402$ | jcs | SW | 8270 C |
| 2,4-Dichlorophenol | <402 |  | ug/kg dw | 08/20/2001 | 946 | 1464 | $<402$ | jcs | SW | 8270 C |
| 2,4-Dimethylphenol | $<402$ |  | ug/kg dw | 08/20/2001 | 946 | 1464 | $<402$ | jes | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<402$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | $<402$ | jes | SW | 8270 C |
| 2-Methylphenol | $<402$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | $<402$ | jcs | SW | 8270C |
| meta \& para-Methylphenol | $<402$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | $<402$ | jcs | SW | 8270 C |
| 2-Nitrophenol | $<402$ |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/20/2001 | 946 | 1464 | $<402$ | jcs | SW | 8270 C |
| Pentachlorophenol | $<402$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | $<402$ | jcs | SW | 8270 C |
| Phenol | $<402$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | $<402$ | jся | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<402$ |  | ug/kg dw | 08/20/2001 | 946 | 1454 | <402 | jes | Sw | 8270 C |
| 2,4,6-Trichlorophenol | <402 |  | ug/kg dw | 08/20/2001 | 946 | 1464 | <402 | jes | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  | Prep Run |
| :--- | :--- |
| Date | Batch Batch Reporting Analyst |

Result Flag Units Analyzed Number Number Limit Initials Method Reference

## SAMPLE NO. 698540

SAMPLE DESCRIPTION
SBI002: GB-31: S000010:412
DATE/TIME TAKEN 08/07/2001 11:35



## ANALYTICAL REPORT

## Kevin Wildman

HULI \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batch | Reporting Analyst |  |  |
| Analy | Number | Number Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION
698541

DATE/TIME TAKEN 08/07/2001 12:45

| Acenaphthene | $<355$ | ug/kg dw | 08/19/2001 | 945 | 1464 | <355 | jcs | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | $<355$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | <355 | jcs | SW | 8270C |
| Anthracene | $<355$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <355 | jes | SW | 8270C |
| Benzo(a) anthracene | <355 | ug/kg dw | 08/19/2001 | 946 | 1464 | <355 | jcs | SW | 8270C |
| Benzo (b) fluoranthene | 569 | ug/kg dw | 08/19/2001 | 946 | 1464 | <355 | jes | SW | 8270 C |
| Benzo (k) fluoranthene | $<355$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <355 | jcs | SW | 8270 C |
| Eenzo (a) pyrene | 339 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<178$ | jes | SW | 8270C |
| Benzyl alcohol | <355 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <355 | jes | SW | 8270C |
| Benzyl butyl phthalate | <355 | ug/kg dw | 08/19/2001 | 946 | 1464 | <355 | jes | SW | 8270C |
| Bis (2-chloroethyl)ether | <355 | ug/kg dw | 08/19/2001 | 946 | 1464 | <355 | jcs | SW | 8270C |
| Bis (2-chloroethoxy) methane | $<355$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <355 | јся | SW | 8270C |
| Bis (2-ethyihexyl) phthalate | $<355$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <355 | jcs | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<355$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<355$ | jes | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<355$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <355 | jcs | SW | 8270C |
| 4-Chloroaniline | <355 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<355$ | jcs | SW | $8270{ }^{\text {c }}$ |
| 2-Chloronaphthalene | <355 | ug/kg dw | 08/19/2001 | 946 | 1464 | <355 | jcs | SW | 8270C |
| Chrysene | 360 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <355 | jcs | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<178$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<178$ | jes | SW | 8270 C |
| Dibenzofuran | $<355$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <355 | jcs | SW | 8270 C |
| 1,2-Dichlorobenzene | <355 | ug/kg dw | 08/19/2001 | 946 | 1464 | <355 | jes | SH | 8270 C |
| 1,3-Dichlorobenzene | $<355$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<355$ | jes | SW | 8270C |
| 1,4-Dichlorobenzene | <355 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <355 | jes | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<710$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<710$ | jce | SW | 8270C |
| Diethyl phthalate | $<355$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <355 | jcs | SW | 8270 C |
| Dimethyl phthalate | <355 | ug/kg dw | 08/19/2001 | 946 | 1464 | <355 | jes | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 698541

SBI002: GB-33:S000010:412

DATE/TIME TAKEN 08/07/2001 12:45

| 2,4-Dinitrotoluene | $<355$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <355 | jes | Sw | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,6-Dinitrotoluene | <355 |  | us/kg dw | 08/19/2001 | 946 | 1464 | <355 | jcs | SW | 8270C |
| Di-n-octylphthalate | $<355$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <355 | jos | SW | 8270 C |
| Fluoranthene | 440 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<355$ | jcs | SW | 8270C |
| Fluorene | <355 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <355 | jcs | SW | 82700 |
| Hexachlorobenzene | <355 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<355$ | jcs | SW | 8270C |
| Hexachloro-1,3-butadiene | $<355$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<355$ | jca | S | 8270 C |
| Hexachlorocyclopentadiene | $<710$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<710$ | jcs | sh | 8270C |
| Hexachloroethane | $<355$ |  | $u g / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | <355 | jcs | SW | 82700 |
| Indeno (1,2,3-cd) pyrene | $<355$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <355 | jes | SW | 82700 |
| Isophorone | $<355$ |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <355 | jes | S | 8270C |
| Naphthalene | <355 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<355$ | jes | SW | 8270 C |
| Nitrobenzene | <355 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<355$ | jcs | SW | 8270C |
| N-Nitrosodi-n-propylamine | <355 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001. | 946 | 1464 | <355 | jcs | Sw | 8270 C |
| Phenanthrene | 456 |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1464 | <355 | jes | SW | 8270C |
| Pyrene | $<355$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <355 | jes | SW | 8270 C |
| 1,2,4-Trichlorobenzene | <355 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <355 | jes | sw | 8270C |
| Surrogate: d5-Nitrobenzene | 81 | note | 8 | 08/19/2001 | 946 | 1464 |  | jcs | sw | 8270C |
| Surrogate: 2-Fluorobiphenyl | 84 |  | 8 | 08/19/2001 | 946 | 1464 |  | jes | SW | 8270C |
| Surrogate: d14-Terphenyl | 163 |  | * | 08/19/2001 | 946 | 1464 |  | jes | S | 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,780 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<1,780$ | jes | S | 8270 C |
| 4-Chloro-3-methylphenol | <355 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | $<355$ | jcs | S | 8270 C |
| 2-Chlorophenol | <355 |  | ug/kg dw | 08/19/2001 | 946 | 1464 | <355 | jcs | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Drep Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batch Reporting Analyst |  |  |
| Analyzed | Number | Number Limit | Initials Method Reference |  |

## SAMPLE NO. 698541

SAMPLE DESCRIPTION
DATE/TIME TAKEN
SBI002: GB-33:S000010:412

| 2,4-Dichlorophenol | <355 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<355$ | jcs | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dimethylphenol | $<355$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<355$ | jcs | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<355$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<355$ | jes | SW | 8270 C |
| 2-Methylphenol | <355 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<355$ | jes | SW | 8270C |
| meta \& para-Methylphenol | <355 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<355$ | jcs | SW | 8270 C |
| 2-Nitrophenol | <355 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<355$ | jcs | SW | 8270 C |
| Pentachlorophenol | <355 | ug/kg dw | 08/19/2001 | 946 | 1464 | <355 | jcs | SW | 8270 C |
| Phenol | <355 | ug/kg dw | 08/19/2001 | 946 | 1464 | <355 | jcs | SW | 8270 C |
| 2,4,5-Trichlorophenol | <355 | ug/ kg dw | 08/19/2001 | 946 | 1464 | $<355$ | jcs | SW | 8270 C |
| 2,4,6-Trichlorophenol | <355 | ug/kg dw | 08/19/2001 | 946 | 1464 | <355 | jcs | SW | 8270 C |
| Surrogate: d6-Phenol | 71 | 4 | 08/19/2001 | 946 | 1464 |  | jes | SW | 8270C |
| Surrogate: 2-Fluorophenol | 63 | \% | 08/19/2001 | 946 | 1464 |  | jos | SW | 8270 C |
| Surrogate: Tribromophenol | 67 | $t$ | 08/19/2001 | 946 | 1464 |  | jes | SW | 8270C |

SAMPLE NO. SAMPLE DESCRIPTION 698542 SBI002:GB-34:S000015:412

## DATE/TIME TAKEN

 08/07/2001 13:20| Dry Weight | 88.7 | 7 | 08/16/2001 |  | 1478 |  | mhg | SM | 2540 c. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/16/2001 |  | 1229 | Complete | emd | SW | 6010B |
| Arsenic, ICP | 34 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2956 | $<3.6$ | emd | SW | 6010B |
| Barium, ICP | 89 | $\mathrm{mg} / \mathrm{kg}$ dw | 08/16/2001 | 901 | 2887 | $<0.71$ | emd | SW | 6010B |
| Cadmium, ICP | <1.1 | $m \mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2869 | <1.1 | ema | S | 6010B |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$08 / 27 / 2001$

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |  |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 698542 | SBIOO2:GB-34:S000015:412 | $08 / 07 / 2001$ 13:20 |


| Chromium, ICP | 9.4 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2857 | $<1.5$ | emd | SW 6010B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lead, ICP | 125 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2858 | <2.8 | emd | SW 6010B |
| Mercury, CVAA | 0.230 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/15/2001 | 606 | 620 | $<0.009$ | epk | SW 7471A |
| Selenium, ICP | $<3.6$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2936 | <3.6 | emd | SW 6010B |
| Silver, ICP | $<1.5$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2889 | $<1.5$ | emd | SW 6010B |
| ICP Digestion, Nonaqueous | Complete |  | 08/15/2001 | 901 |  | Complete | mrt | SW 3050B |
| Mercury Digestion, Non-Aq | Complete |  | 08/14/2001 | 606 |  | Complete | epk | SW 7471A |
| Prep, BNA Non-Aq | Complete |  | 08/13/2001 | 946 |  | Complete | mem | EPA 625; |

BASE NEUT. COMPS. -8270 Non-aq

| Acenaphthene | 2,620 |
| :--- | :--- |
| Acenaphthylene | 1,430 |
| Anthracene | 6,720 |
| Benzo(a) anthracene . | 29,200 |
| Benzo(b) fluoranthene | 48,600 |
| Benzo(k) fluoranthene | $16,600^{\circ}$ |
| Benzo(a) pyrene | 30,900 |
| Benzyl alcohol | $<372$ |
| Benzyl butyl phthalate | $<372$ |
| Bis(2-chloroethyl) ether | $<372$ |
| Bis(2-chloroethoxy)methane | $<372$ |
| Bis(2-ethylhexyl)phthalate | $<372$ |
| 2,2'-oxybis(I-Chloropropane) | $<372$ |
| 4-Bromophenyl phenyl ether | $<372$ |
| 4-Chloroaniline | $<372$ |


| ug/kg dw | 08/20/2001 | 946 | 1464 | $<372$ | jcs | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ug/kg dw | 08/20/2001 | 946 | 1464 | $<372$ | jcs | SW | 8270C |
| ug/kg dw | 08/21/2001 | 946 | 1466 | $<3,720$ | dmg | SW | 8270C |
| ug/kg dw | 08/21/2001 | 946 | 1466 | $<3,720$ | dmg | SW | 8270C |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 946 | 1468 | <37,200 | jcs | SW | 8270C |
| ug/kg dw | 08/21/2001 | 946 | 1466 | $<3,720$ | dmg | SW | 8270 C |
| ug/kg dw | 08/21/2001 | 946 | 1466 | <1,860 | dmg | SW | 8270C |
| ug/kg dw | 08/20/2001 | 946 | 1464 | <372 | jes | SW | 8270C |
| ug/kg dw | 08/20/2001 | 946 | 1464 | <372 | jes | SW | 8270C |
| ug/kg dw | 08/20/2001 | 946 | 1464 | $<372$ | jcs | SW | 8270 C |
| ug/kg dw | 08/20/2001 | 946 | 1464 | $<372$ | jcs | SW | 8270C |
| ug/kg dw | 08/20/2001 | 946 | 1464 | <372 | jes | SW | 8270C |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | $<372$ | jes | SW | 8270C |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | <372 | jcs | SW | 8270C |
| ug/kg dw | 08/20/2001 | 946 | 1464 | $<372$ | jcs | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 698542 |  | SBI002: GB | -34: | 00001 | : 412 |  |  |  | 08/ | 7/2001 | 1 13:20 |


| 2-Chloronaphthalene | <372 | ug/kg dw | 08/20/2001 | 946 | 1464 | $<372$ | jcs | Sw 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chrysene | 36,900 | ug/kg dw | 08/24/2001 | 946 | 1468 | <37,200 | jcs | SW 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | 2,530 | ug/kg dw | 08/21/2001 | 946 | 1466 | <1,860 | dmg | SW 8270C |
| Dibenzofuran | 1,290 | ug/kg dw | 08/20/2001 | 946 | 1464 | $<372$ | jcs | SW 8270C |
| 1,2-Dichlorobenzene | $<372$ | ug/kg dw | 08/20/2001 | 946 | 1464 | <372 | jcs | SW 8270C |
| 1,3-Dichlorobenzene | $<372$ | ug/kg dw | 08/20/2001 | 946 | 1464 | $<372$ | jcs | SW 8270C |
| 1,4-Dichlorobenzene | $<372$ | ug/kg dw | 08/20/2001 | 946 | 1464 | <372 | jes | SW 8270C |
| 3,3'-Dichlorobenzidine | $<744$ | ug/kg dw | 08/20/2001 | 946 | 1464 | $<744$ | jes | SW 8270C |
| Diethyl phthalate | $<372$ | ug/kg dw | 08/20/2001 | 946 | 1464 | $<372$ | jes | SW 8270C |
| Dimethyl phthalate | $<372$ | ug/kg dw | 08/20/2001 | 946 | 1464 | <372 | jca | SW 8270C |
| 2,4-Dinitrotoluene | $<372$ | ug/kg dw | 08/20/2001 | 946 | 1464 | <372 | jes | SW 8270C |
| 2,6-Dinitrotoluene | $<372$ | ug/kg dw | 08/20/2001 | 946 | 1464 | <372 | jes | SW 8270C |
| Di-n-octylphthalate | $<372$ | ug/kg dw | 08/20/2001 | 946 | 1464 | <372 | jes | SW 8270C |
| Fluoranthene | 435 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | <372 | jcs | SW 8270C |
| Fluorene | 2,130 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | $<372$ | jes | SW 8270C |
| Hexachlorobenzene | $<372$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | $<372$ | jes | SW 8270C |
| Hexachloro-1, 3-butadiene | $<372$ | ug/kg dw | 08/20/2001 | 946 | 1464 | $<372$ | jes | SW 8270C |
| Hexachlorocyclopentadiene | $<744$ | ug/kg dw | 08/20/2001 | 946 | 1464 | $<744$ | jes | SW 8270C |
| Hexachloroethane | <372 | ug/kg dw | 08/20/2001 | 946 | 1454 | <372 | jes | SW 8270C |
| Indeno (1,2,3-cd) pyrene | 8,260 | ug/kg dw | 08/21/2001 | 946 | 1466 | $<3,720$ | dmg | SW 8270C |
| Isophorone | <372 | ug/kg dw | 08/20/2001 | 946 | 1464 | $<372$ | jes | SW 8270C |
| Naphthalene | 879 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | $<372$ | jes | SW 8270C |
| Nitrobenzene | $<372$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | $<372$ | jes | SW 8270C |
| N-Nitrosodi-n-propylamine | $<372$ | ug/kg dw | 08/20/2001 | 946 | 1464 | <372 | jes | SW 8270C |
| Phenanthrene | 55,600 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 946 | 1468 | $<37,200$ | jes | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.14219<br>\section*{Client Project ID: South Bend Indiana SBI002}

$08 / 27 / 2001$

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CR | TIO1 |  |  |  |  | DAT | /TIME | TAKEN |
| 698542 |  | SBI002 : GB | -34 | 0000 | : 412 |  |  |  | $08 /$ | 7/2001 | 1 13:20 |


| Pyrene | 74,900 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$. | 08/24/2001 | 946 | 1468 | $<37,200$ | jes | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,4-Trichlorobenzene | <372 |  | ug/kg dw | 08/20/2001 | 946 | 1464 | <372 | jes | SW | 82700 |
| Surrogate: d5-Nitrobenzene | 68 | note | 8 | 08/20/2001 | 946 | 1464 |  | jes | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 78 |  | \% | 08/20/2001 | 946 | 1464 |  | jcs | SW | 8270C |
| Surrogate: dis-Terphenyl | 298 |  | \% | 08/20/2001 | 946 | 1464 |  | jce | SW | 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,860$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | <1,860 | jcs | SW | 8270C |
| 4-Chloro-3-methylphenol | $<372$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/20/2001 | 946 | 1464 | $<372$ | jas | SW | 8270 C |
| 2-Chlorophenol | $<372$ |  | ug/kg dw | 08/20/2001 | 946 | 1464 | $<372$ | jes | SW | 8270 C |
| 2,4-Dichlorophenol | $<372$ |  | ug/kg dw | 08/20/2001 | 946 | 1464 | $<372$ | jes | SW | 8270 C |
| 2,4-Dimethylphenol | $<372$ |  | ug/kg dw | 08/20/2001 | 946 | 1464 | $<372$ | jca | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<372$ |  | ug/kg dw | 08/20/2001 | 946 | 1464 | $<372$ | jes | SW | 8270C |
| 2-Methylphenol | $<372$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | $<372$ | jcs | S* | 8270 C |
| meta \& para-Methylphenol | $<372$ |  | ug/kg dw | 08/20/2001 | 946 | 1464 | $<372$ | jcs | SW | 8270 C |
| 2-Nitrophenol | $<372$ |  | ug/kg dw | 08/20/2001 | 946 | 1464 | $<372$ | jcs | SW | 8270C |
| Pentachlorophenol | $<372$ |  | ug/kg dw | 08/20/2001 | 946 | 1464 | $<372$ | jcs | SW | 8270 C |
| Phenol | $<372$ |  | ug/kg dw | 08/20/2001 | 946 | 1464 | $<372$ | jcs | SW | 8270 C |
| 2,4,5-Trichlorophenol | <372 |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/20/2001 | 946 | 1464 | <372 | jcs | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<372$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1464 | <372 | jes | SW | 8270C |
| Surrogate: d6-Phenol | 62 | note | $\%$ | 08/20/2001 | 946 | 1464 |  | jcs | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 78 |  | 8 | 08/20/2001 | 946 | 1464 |  | jes | SW | 82700 |
| Surrogate: Tribromophenol | 298 |  | \% | 08/20/2001 | 946 | 1464 |  | jes | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch <br> Number | Run Batch Number | Reporting <br> Limit | Analyst Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 698543 |  | SBI002: GB | -35: | 000 | : 412 |  |  |  | 08/ | 7/2001 | 14:50 |



## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  | Result | Flag | Units | Date Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE NO. | SAMPLE D | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 698543 | SBI002: GB | -35: | 0000 | : 412 |  |  |  | 08/ | $7 / 2001$ | 14:50 |



## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


| Isophorone | <377 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<377$ | jcs | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Naphthalene | $<377$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<377$ | jcs | SW | 8270C |
| Nitrobenzene | <377 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<377$ | jcs | SW | 8270C |
| N-Nitrosodi-n-propylamine | <377 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<377$ | jcs | SW | 8270 C |
| Phenanthrene | 521 | ug/kg dw | 08/19/2001. | 946 | 1464 | <377 | jcs | sw | 8270C |
| Pyrene | 1,010 | ug/kg dw | 08/19/2001 | 946 | 1464 | <377 | jcs | SW | 8270 C |
| 1,2,4-Trichlorobenzene | <377 | ug/kg dw | 08/19/2001 | 946 | 1464 | $<377$ | jcs | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 75 | 8 | 08/19/2001 | 946 | 1464 |  | jcs | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 77 | 8 | 08/19/2001 | 946 | 1464 |  | jes | SW | 8270C |
| Surrogate: al4-Texphenyl | 84 | $\frac{\%}{6}$ | 08/19/2001 | 946 | 1464 |  | jcs | SW | 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,880$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | <1,880 | jes | Sw | 82700 |
| 4-Chloro-3-methylphenol | $<377$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <377 | jes | SW | 8270C |
| 2-Chlorophenol | $<377$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<377$ | jcs | SW | 8270C |
| 2.4-Dichlorophenol | $<377$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<377$ | jes | SW | 8270C |
| 2,4-Dimethylphenol | $<377$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<377$ | jes | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<377$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <377 | jcs | SW | 8270 C |
| 2-Methylphenol | $<377$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<377$ | jcs | SW | 8270C |
| meta \& para-Methylphenol | $<377$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<377$ | jcs | SW | 8270C |
| 2-Nitrophenol | $<377$ | ug/kg dw | 08/19/2001 | 946 | 1464 | $<377$ | jes | SW | 8270 C |
| Pentachlorophenol | <377 | ug/kg dw | 08/19/2001 | 946 | 1464 | <377 | jcs | SW | 8270C |
| Phenol | $<377$ | ug/kg dw | 08/19/2001 | 946 | 1464 | <377 | jes | SW | 8270C |
| 2,4,5-Trichlorophenol | $<377$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<377$ | jcs | Sw | 8270C |
| 2,4,6-Trichlorophenol | <377 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1464 | $<377$ | jcs | SW | $8270{ }^{\text {c }}$ |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION

 698543SBI002: GB-35:S000015:412



DATE/TIME TAKEN 08/07/2001 14:50

DATE/TIME TAKEN 08/07/2001 14:50

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBIO02

SAMPLE NO. SAMPLE DESCRIPTION
698544

DATE/TIME TAKEN 08/07/2001 14:50

| Acenaphthene | $<374$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | <374 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270 C |
| Anthracene | 497 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| Benzo (a)anthracene | 1,930 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| Benzo (b) fluoranthene | 2,940 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| Benzo (k) fluoranthene | 1,060 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<374$ | dimg | SW 8270C |
| Benzo(a) pyrene | 1,920 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<187$ | ding | SW 8270C |
| Benzyl alcohol | <374 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| Benzyl butyl phthalate | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| Bis (2-chloroethyl)ether | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| Bis (2-chloroethoxy) methane | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| Bis (2-ethylhexyl)phthalate | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | ding | SW 8270C |
| 4-Bromophenyl phenyl ether | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| 4-Chloroaniline | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| 2-Chloronaphthalene | $<374$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <374 | dmg | SW 8270C |
| Chrysene | 1,750 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | . 946 | 1463 | $<374$ | dmg | SW 8270C |
| Dibenzo (a,h) anthracene | $<187$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<187$ | dmg | SW 8270C |
| Dibenzofuran | $<374$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| 1,2-Dichlorobenzene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| 1,3-Dichlorobenzene | <374 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| 1,4-Dichlorobenzene | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| 3.3'-Dichlorobenzidine | $<748$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<748$ | dmg | SW 8270C |
| Diethyl phthalate | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| Dimethyl phthalate | <374 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)
$08 / 27 / 2001$
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 698544

SAMPLE DESCRIPTION SBIO02:GB-35D:S000015:412

DATE/TIME TAKEN 08/07/2001 14:50

| 2,4-Dinitrotoluene | $<374$ |  | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,6-Dinitrotoluene | <374 |  | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW | 8270C |
| Di-n-octylphthalate | $<374$ |  | ug/kg dw | 08/19/2001 | 946 | 1463 | <374 | dmg | SW | 8270C |
| Fluoranthene | 3.170 |  | ug/kg dw | 08/20/2001 | 946 | 1465 | $<1,870$ | dmg | SW | 8270 C |
| Fluorene | <374 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW | 8270C |
| Hexachlorobenzene | <374 |  | ug/kg dw | 08/19/2001 | 946 | 1463 | <374 | ding | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<374$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW | 8270 C |
| Hexachlorocyclopentadiene | $<748$ |  | ug/kg dw | 08/19/2001 | 946 | 1463 | $<748$ | dmg | SW | 8270 C |
| Hexachloroethane | $<374$ |  | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW | $8270 C$ |
| Indeno (1,2,3-cd) pyrene | 393 |  | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | Sw | 8270C |
| Isophorone | $<374$ |  | $u g / \mathrm{kg} d w$ | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW | 8270 C |
| Naphthalene | $<374$ |  | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dimg | SW | 8270 C |
| Nitrobenzene | $<374$ |  | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | ding | SW | 82700 |
| N-Nitrosodi-n-propylamine | <374 |  | ug/kg dw | 08/19/2001 | 946 | 1463 | <374 | ding | SW | 8270 C |
| Phenanthrene | 2,050 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | <374 | dmg | SW | 8270C |
| Pyrene | $<3,740$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 946 | 1465 | <1,870 | dmg | sw | B270C |
| 1,2,4-Trichlorobenzene | $<374$ |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | Sw | 8270C |
| Surrogate: d5-Nitrobenzene | 85 |  | 8 | 08/19/2001 | 946 | 1463 |  | drng | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 94 |  | \% | 08/19/2001 | 946 | 1463 |  | dmg | SW | $8270{ }^{\text {c }}$ |
| Surrogate: d14-Terphenyl | 87 | Note | 8 | 08/19/2001 | 946 | 1463 |  | dmg | SW | $8270{ }^{\text {c }}$ |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,870 |  | ug/kg dw | 08/19/2001 | 946 | 1463 | $<1,870$ | dmg | SW | 82700 |
| 4-Chloro-3-methylphenol | $<374$ |  | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW | 8270 C |
| 2-Chlorophenol | $<374$ |  | ug/kg dw | 08/19/2001 | 946 | 1463 | <374 | dmg | SW | 82700 |

## ANALYTICAL REPORT

Kevin Wildman<br>HULIL \& ASSOC. (Dublin) 08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 698544

SBI002:GB-35D:S000015:412

DATE/TIME TAKEN 08/07/2001 14:50

| 2,4-Dichlorophenol | <374 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dimg | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dimethylphenol | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| 2-Methylphenol | <374 | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| meta \& para-Methylphenol | $<374$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| 2-Nitrophenol | <374 | ug/kg dw | 08/19/2001 | 946 | 1463 | <374 | dmg | SW 8270C |
| Pentachlorophenol | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| Phenol | <374 | ug/kg dw | 08/19/2001 | 946 | 1463 | <374 | ding | SW 8270C |
| 2,4,5-Trichlorophenol | $<374$ | ug/kg dw | 08/19/2001 | 946 | 1463 | $<374$ | dmg | SW 8270C |
| 2,4,6-Trichlorophenol | <374 | ug/kg dw | 08/19/2001 | 946 | 1463 | <374 | ding | SW 8270C |
| Surrogate: d6-Phenol | 83 | $t$ | 08/19/2001 | 946 | 1463 |  | dmg | Sw 8270C |
| Surrogate: 2-Fluorophenol | 77 | \% | 08/19/2001 | 946 | 1463 |  | dmg | SW 8270C |
| Surrogate: Tribromophenol | 84 | 4 | 08/19/2001 | 946 | 1463 |  | ding | SW 8270C |

## SAMPLE NO. SAMPLE DESCRIPTION 698545 SBI002:HMW22D:S000020:505

## DATE/TIME TAKEN

 08/06/2001 09:25| Dry Weight | 91.6 | \% | 08/16/2001 |  | 1478 |  | mhg | SM 2540 G |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/16/2001 |  | 1229 | Complete | ema | SW 6010B |
| Arsenic, ICP | 21.4 | $\mathrm{mg} / \mathrm{kg}$ dw | 08/16/2001 | 901 | 2956 | <3.6 | emd | SW 6010日 |
| Barium, ICP | 115 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2887 | $<0.72$ | emd | SW 6010B |
| Cadmium, ICP | <1.1 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2869 | $<1.1$ | emd | SW 6010B |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |

SAMPLE NO. SAMPLE DESCRIPTION 698545

SBIOO2:HMW22D:SOOOO20:505

DATE/TIME TAKEN 08/06/2001 09:25

| Chromium, ICP | 10 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2857 | $<1.4$ | emd | SW | 6010B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lead, ICP | 74.0 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2858 | $<2.8$ | emd | SW | 6010B |
| Mercury, CVAA | 0.243 | MSDR | mg/kg dw | 08/17/2001 | 610 | 625 | $<0.009$ | epk | Sw | 7471A |
| Selenium, ICP | $<3.6$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2936 | <3.6 | ema | SW | 6010B |
| Silver, ICP | $<1.4$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2889 | <1.4 | emd | SW | 6010 B |
| ICP Digestion, Nonaqueous | Compl |  |  | 08/15/2001 | 901 |  | Complete | murt | SW | 3050B |
| Mercury Digestion, Non-Aq | Compl |  |  | 08/16/2001 | 610 |  | Complete | epk | SW | 7471A |

VOLATILE COMPOUNDS-8260 Non-Aq

| 8260 - SW846 (Non-aq) | Complete |  |  | 08/10/2001 | 1457 | Complete | bmh |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | $<109$ |  | ug/kg dw | 08/10/2001 | 1457 | $<109$ | bmh | SW | 8260A |
| Benzene | $<5.5$ | msr | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| tert-Butylbenzene | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | Sh | 8260A |
| sec-Butylbenzene | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | Sp | 8260A |
| n-Butylbenzene | <5.5 |  | ug/kg dw | 08/10/2001 | 1457 | <5.5 | bmh | SW | 8260A |
| Bromochioromethane | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | <5.5 | bmh | SW | 8260A |
| Bromodichloromethane | < 5.5 |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/10/2001 | 1457 | $<5.5$ | bmh | S | 8260A |
| Bromoform | <5.5 |  | ug/kg dw | 08/10/2001 | 1457 | <5.5 | bmh | St | 8260A |
| Bromobenzene | <5.5 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 1457 | <5.5 | bmh | SW | 8260A |
| 2-Butanone (MEK) | $<55$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 1457 | $<55$ | bmh | S | 8260A |
| Carbon disulfide | <5.5 |  | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmin | SF | 8260A |
| Carbon tetrachloride | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | <5.5 | brah | Sw | 8260A |
| Chlorobenzene | $<5.5$ | msr | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| Chloroethane | $<10.9$ |  | ug/kg dw | 08/10/2001 | 1457 | <10.9 | bmh | SW | 8260A |
| 2-Chlorotoluene | $<5.5$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 1457 | <5.5 | bmh | SW | 8260A |

# ANALYTICAL REPORT 

Kevin Wildman
HULI \& ASSOC. (Dublin)
$08 / 27 / 2001$
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batch Reporting Analyst | Analy | Number | Number Limit | Initials Method Reference |

SAMPLE NO. SAMPLE DESCRIPTION
698545 SBIO02: HMW22D:S000020:505

DATE/TIME TAKEN 08/06/2001 09:25

| 4-Chlorotoluene | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chloroform | <5.5 |  | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| Chloromethane | $<10.9$ |  | ug/kg dw | 08/10/2001 | 1457 | $<10.9$ | bmh | SW | 8260A |
| Dibromochloromethane | <5.5 |  | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | Sw | 8260A |
| Dibromomethane | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<5.5$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | < 5.5 | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | <5.5 | bmh | Sw | 8260A |
| 1,1-Dichloroethane | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | <5.5 | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.5$ | rpd | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | <5.5 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | < 5.5 |  | ug/kg dw | 08/10/2001 | 1457 | < 5.5 | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | <5.5 | bmh | SW | 8260A |
| Cis-1,3-Dichloropropene | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | <5.5 |  | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| Ethylbenzene | $<5.5$ | msx | ug/kg dw | 08/10/2001 | 1457 | <5.5 | bmh | Sw | 8260A |
| Hexachlorobutadiene | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| n -Hexane | $<21.8$ |  | ug/kg dw | 08/10/2001 | 1457 | $<21.8$ | bmh | SW | 8260A |
| 2-Hexanone | <54.6 |  | ug/kg dw | 08/10/2001 | 1457 | $<54.6$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin) : 08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


DATE/TIME TAKEN 08/06/2001 09:25

| Isopropylbenzene (Cumene) | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | brnh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| p-Isopropyltoluene | <5.5 |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 1457 | <5.5 | bmh | SW | 8260A |
| Bromomethane | $<10.9$ |  | $u g / \mathrm{kg}$ dw | 08/10/2001 | 1457 | $<10.9$ | bmh | SW | 8260A |
| Methylene Chloride | $<10.9$ |  | ug/kg dw | 08/10/2001 | 1457 | $<10.9$ | bma | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.5$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 1457 | $<5.5$ | bmh | Sw | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<54.6$ |  | ug/kg dw | 08/10/2001 | 1457 | $<54.6$ | bmh | SW | 8260A |
| n-Propylbenzene | $<5.5$ |  | $u g / \mathrm{kg}$ dw | 08/10/2001 | 1457 | < 5.5 | bmh | SW | 8260A |
| Styrene | $<5.5$ |  | $u g / \mathrm{kg}$ dw | 08/10/2001 | 1457 | <5.5 | bmh | SW | 8260A |
| Naphthalene | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | <5.5 | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.5$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| Tetrachloroethene | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | <5.5 | bmh | SW | 8260A |
| Toluene | $<5.5$ | mgr | ug/kg dw | 08/10/2001 | 1457 | <5.5 | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | <5.5 | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmi | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| Trichloroethene | $<5.5$ | msr | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | Sw | 8260A |
| Trichlorofluoromethane | $<5.5$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.5$ |  | ug/kg dw | 08/10/2001 | 1457 | <5.5 | bmh | SW | 8260A |
| Vinyl Acetate | $<5.5$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 1457 | <5.5 | bmh | SW | 8260A |
| Vinyl Chloride | $<2.2$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/10/2001 | 1457 | $<2.2$ | brh | SW | 8260A |
| XYlenes, Total | $<5.5$ | rpd | ug/kg dw | 08/10/2001 | 1457 | $<5.5$ | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (gurr) | 108 |  | $\%$ | 08/10/2001 | 1457 |  | bmh | SW | 8260A |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 698545

SBIOO2:HMW22D:S000020:505

DATE/TIME TAKEN 08/06/2001 09:25

| Dibromofluoromethane (surr) | 103 | t. | $08 / 10 / 2001$ | 1457 | bmh | SW 8260A |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| d8-Toluene (surr) | 93 | \& | $08 / 10 / 2001$ | 1457 | bmh | SW 8260A |
| Bromofluorobenzene (surr) | 94 | f | $08 / 10 / 2001$ | 1457 | bmh | SW 8260A |

SAMPLE NO. SAMPLE DESCRIPTION
698547 SBI002:FB1:W080701:505
DATE/TIME TAKEN
08/07/2001 17:00


## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002


| Prep, TPH DRO Aqueous | Complete |  | 08/09/2001 | 115 |  | Complete | rec |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VOLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 08/10/2001 |  | 3472 | Complete | bmh |  |  |
| Acetone | $<20.0$ | ug/L | 08/10/2001 |  | 3472 | $<20.0$ | bmh | SW | 8260A |
| Benzene | $<1.0$ | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | S | 8260A |
| tert-Butylbenzene | $<1.0$ | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | S | 8260A |
| sec-Butylbenzene | $<1.0$ | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| n-Butylbenzene | $<1.0$ | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| Bromochloromethane | $<1.0$ | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | S | 8260A |
| Bromodichloromethane | $<1.0$ | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmin | SW | 8260A |
| Bromoform | $<1.0$ | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| Bromobenzene | $<1.0$ | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | S | 8260A |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 08/10/2001 |  | 3472 | <12.5 | bmh | SW | 8260A |
| Carbon disulfide | $<1.0$ | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| Carbon tetrachloride | $<1.0$ | ug/L | 08/10/2001 |  | 3472 | <1.0 | bmh | SW | 8260A |
| Chlorobenzene | $<1.0$ | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| Chioroethane | < 5.0 | ug/L | 08/10/2001 |  | 3472 | <5.0 | bmh | Sw | 8260A |
| 2-Chlorotoluene | $<1.0$ | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | S | 8260A |
| 4-Chlorotoluene | $<1.0$ | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | S | 82608 |
| Chloroform | $<1.0$ | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| Chloromethane | $<5.0$ | ug/L | 08/10/2001 |  | 3472 | $<5.0$ | bmh | SW | 8260A |
| Dibromochloromethane | $<1.0$ | ug/L | 08/10/2001 |  | 3472 | <1.0 | bmh | SW | 8260A |
| Dibromomethane | $<1.0$ | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmin | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.14219<br>Client Project ID: South Bend Indiana SBI002

08/27/2001

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TIO |  |  |  |  | DAT | TIME | TAKEN |
| 698547 |  | SBI002: F | :WO | 80701 | 505 |  |  |  | 08/ | $7 / 2001$ | 1 17:00 |


| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 08/10/2001 | 3472 | <5.0 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | <1.0 | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | <1.0 | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,2-Dichloropropane | <1.0 | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| Ethylbenzene | <1.0 | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.0$ | ug/L | 08/10/2001 | 3472 | $<5.0$ | bmh | SW | 8260A |
| n -Hexane | $<5.0$ | ug/L | 08/10/2001 | 3472 | $<5.0$ | bmh | SW | 8260A |
| 2-Hexanone | $<12.5$ | ug/L | 08/10/2001 | 3472 | $<12.5$ | bmin | SW | 8260A |
| Isopropylbenzene (Cumene) | <1.0 | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | B260A |
| p-Isopropyltoluene | <1.0 | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| Bromomethane | $<5.0$ | ug/L | 08/10/2001 | 3472 | <5.0 | bmh | SW | 8260A |
| Methylene Chloride | $<5.0$ | ug/L | 08/10/2001 | 3472 | $<5.0$ | bmh | SW | 8260A |
| Methyl t-butyl echer (MTBE) ${ }_{1}$ | $<5.0$ | ug/L | 08/10/2001 | 3472 | $<5.0$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 08/10/2001 | 3472 | <12.5 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
|  | Analyzed | Number | Number | Limit | Initials Method Reference |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 698547 | SBIO02:FB1:W080701:505 | $08 / 07 / 2001$ 17:00 |


| n-Propylbenzene | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Styrene | <1.0 |  | ug/L | 08/10/2001 |  | 3472 | <1.0 | bmh | SW | 8260A |
| Naphthalene | $<5.0$ |  | ug/L | 08/10/2001 |  | 3472 | <5.0 | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<1.0$ |  | ug/s | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| Tetrachloroethene | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | <1.0 | bmh | SW | 8260A |
| Toluene | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bruh | SW | 8260A |
| 1,2,4-Trichlorobenzene | <5.0 |  | ug/L | 08/10/2001 |  | 3472 | $<5.0$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<2.0$ | bmin | SW | 8260A |
| 1,1,2-Trichloroethane | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| Trichloroethene | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| Trichlorofluoromethane | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<5.0$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| Vinyl Acetate | $<5.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<5.0$ | bmh | sw | 8260A |
| Vinyl Chloride | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| Xylenes | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 97 |  | $\%$ | 08/10/2001 |  | 3472 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 99 |  | 8 | 08/10/2001 |  | 3472 |  | bmh | SW | 8260A |
| ds-Toluene (surr) | 100 |  | 8 | 08/10/2001 |  | 3472 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 102 | note | 4 | 08/10/2001 |  | 3472 |  | bmh | SW | 8260A |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ |  | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |

## ANALYTICAL REPORT

## Kevin Wildman

HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
CIient Project ID: South Bend Indiana SBI002

08/27/2001

|  | Prep Run |
| :--- | :--- |
| Date Batch Batch Reporting Analyst |  |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 698547 | SBIOO2:FB1:W080701:505 | $08 / 07 / 2001$ 17:00 |


| Acenaphthylene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | ding | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Anthracene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | <10 | dmg | SW | 8270 C |
| Benzo (a) anthracene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| Benzo (b) Eluoranthene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| Benzo (k) fluoranthene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | ding | SW | 8270C |
| Benzo (a) pyrene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 82700 |
| Eenzyl alcohol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| Benzyl butyl phthalate | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | ding | SW | 8270 C |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dimg | SW | 8270 C |
| 4-Eromophenyl phenyl ether | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| 4-Chloroaniline | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | ding | SW | 8270 C |
| 2-Chloronaphthalene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | sw | 8270C |
| Chrysene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| Dibenzofuran | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dimg | SW | 8270 C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dring | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 08/20/2001 | 1255 | 2658 | $<50$ | dmg | SW | 8270 C |
| Diethyl phthalate | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| Dimethyl phthalate | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | sw | 8270 C |
| 2,4-Dinitrotoluene | <10 | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016<br>Job Number: 01.14219<br>Client Project ID: South Bend Indiana SBI002

08/27/2001

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analyzed | Number | Number | Limit | Initials Method Reference |  |


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 698547 | SBIOO2:FB1:W080701:505 |

DATE/TIME TAKEN 08/07/2001 17:00

| 2,6-Dinitrotoluene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dimg | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Di-n-octylphthalate | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| Fluoranthene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | <10 | dmg | SW | $8270{ }^{\text {C }}$ |
| Fluorene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | ding | SW | $8270{ }^{\text {c }}$ |
| Hexachloro-1.3-butadiene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 08/20/2001 | 1255 | 2658 | $<20$ | dmg | SW | 8270 C |
| Hexachloroethane | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | Sw | 8270 C |
| Indeno (1,2,3-cd) pyrene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| Isophorone | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| Naphthalene | $<10$ | $\underline{u g / L}$ | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| Nitrobenzene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | ding | SW | 8270 C |
| Phenanthrene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| Pyrene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 82700 |
| Surrogate: d5-Nitrobenzene | 79 | $t$ | 08/20/2001 | 1255 | 2658 |  | dmg | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 85 | \% | 08/20/2001 | 1255 | 2658 |  | dmg | SW | 8270 C |
| Surrogate: d14-Terphenyl | 84 | 8 | 08/20/2001 | 1255 | 2658 |  | dmg | SW | 8270 C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | <50 | $\underline{u g / L}$ | 08/20/2001 | 1255 | 2658 | $<50$ | dmg | SW | 8270 C |
| 4-Chloro-3-methylphenol | <10 | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| 2-Chlorophenol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| 2,4-Dichlorophenol | <10 | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) 08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01. 14219
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | SCR | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 698547 |  | SBI002: F | 1:W0 | 8070 | 505 |  |  |  | 08/ | 7/2001 | 1 17:00 |


| 2,4-Dimethylphenol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | ding | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW 8270C |
| 2-Methylphenol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | <10 | dmg | SW 8270C |
| meta \& para-Methylphenol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW 8270C |
| 2-Nitrophenol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW 8270C |
| Pentachlorophenol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW 8270C |
| Phenol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW 8270C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW 8270C |
| Surrogate: d6-Phenol | 71 | \% | 08/20/2001 | 1255 | 2658 |  | dmg | SW 8270C |
| Surrogate: 2-Fluorophenol | 70 | \% | 08/20/2001 | 1255 | 2658 |  | dmg | SW 8270C |
| Surrogate: Tribromophenol | 78 | \% | 08/20/2001 | 1255 | 2658 |  | dmg | SW 8270C |
| TPH - DRO AQUEOUS | $<1$ | mg/L | 08/13/2001 | 115 | 200 | $<1$ | meb | SW 8015M |
| TPH - GRO (Aqueous) | $<1$ | mg/L | 08/14/2001 |  | 79 | $<1$ | meb | SW 8015M |
| TPH - Method 418.1 (AQ) | $<0.20$ | $\mathrm{mg} / \mathrm{L}$ | 08/15/2001 | 595 | 714 | $<0.20$ | 110 | EPA 418.1 |

# ANALYTICAL REPORT 

Kevin Wildman HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219

## Client Project ID: South Bend Indiana SBIOO2



SAMPLE NO. 698574

SAMPLE DESCRIPTION SBI002:TBI:W080701:505

DATE/TIME TAKEN
08/08/2001


# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst <br> Initials | Method R | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 698574 |  | SBI002:TB | : WO | 070 | 05 |  |  |  | $08 /$ | $8 / 2001$ |  |


| 1;3-Dichlorobenzene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | <1.0 | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | SW | 8260A |
| 1,2-Dichloroethane | <1.0 | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | brh | SW | 8260A |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | Sw | 8260A |
| 1,3-Dichloropropane | <1.0 | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| Ethylbenzene | $<1.0$ | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.0$ | ug/L | 08/10/2001 | 3472 | $<5.0$ | bmh | SW | 8260A |
| n -Hexane | <5.0 | ug/L | 08/10/2001 | 3472 | <5.0 | bmh | SW | 8260A |
| 2-Hexanone | $<12.5$ | ug/L | 08/10/2001 | 3472 | $<12.5$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| p-Isopropyltoluene | $<1.0$ | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | SW | 8260A |
| Bromomethane | $<5.0$ | ug/L | 08/10/2001 | 3472 | $<5.0$ | bmh | SW | 8260A |
| Methylene Chloride | $<5.0$ | ug/L | 08/10/2001 | 3472 | < 5.0 | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 08/10/2001 | 3472 | < 5.0 | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 08/10/2001 | 3472 | $<12.5$ | bmh | SW | 8260A |
| n-Propylbenzene | $<1.0$ | ug/L | 08/10/2001 | 3472 | $<1.0$ | bmh | SW | 8260A |
| Styrene | <1.0 | ug/L | 08/10/2001 | 3472 | <1.0 | bmh | sw | 82608 |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14219
Client Project ID: South Bend Indiana SBI002
$08 / 27 / 2001$

|  |  |  |  | Prep | Run |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Date | Batch | Batch | Reporting | Analyet |  |
| Reauit | Flag | Unite | Analyzed | Number | Number |  | Initials | Method Reference |

SAMPLE NO. SAMPLE DESCRIPTION DATE/TIME TAKEN

698574 SBI002:TB1:W080701:505
08/08/2001

| Naphthalene | $<5.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<5.0$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | <1.0 | bmh | SW | 8260A |
| Tetrachloroethene | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A. |
| Toluene | $<1: 0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.0$ |  | ug/L | 08/10/2001 |  | 3472 | <5.0 | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| Trichloroethene | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| Trichlorofluoromethane | <1.0 |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<5.0$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| Vinyl Acetate | $<5.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<5.0$ | brnh | SW | 8260A |
| Vinyl Chloride | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| XYlenes | $<1.0$ |  | ug/L | 08/10/2001 |  | 3472 | $<1.0$ | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 98 |  | \% | 08/10/2001 |  | 3472 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 99 |  | 8 | 08/10/2001 |  | 3472 |  | bmh | SW | 8260A |
| dB-Toluene (surr) | 101 |  | 8 | 08/10/2001 |  | 3472 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 101 | note | \% | 08/10/2001 |  | 3472 |  | bmh | SW | 8260A |

## QUALITY CONTROL FLAG DEFINITIONS

Job Number: 01.14219
(*) Indicates an out-of-control QC. The analytical data was reported based on other supporting quality control information.
(Note) Indicates to review the notes and comments section of the analytical report as there is additional information concerning this analytical result.
(MS) Indicates that the Matrix Spike (MS) was out of statistical advisory limits.
(MSD) Indicates that the Matrix Spike Duplicate (MSD) was out of statistical advisory limits.
(RPD) Indicates that the Relative Percent Difference (RPD) for the MS/MSD pair was outside of statistical advisory limits.
(SS) Indicates that the MS and MSD were out of statistical advisory limits.
(SSR) Indicates that the MS, MSD and RPD were out of statistical advisory limits.
(MSR) Indicates that the MS and RPD were out of statistical advisory limits.
(MSDR) Indicates that the MSD and RPD were out of statistical advisory limits.
(DL) Indicates that the MS and MSD were diluted out and the percent recoveries of the spikes could not be calculated.
(LS) Indicates that statistical accuracy and precision data is not available for spike concentrations which are $<1 / 4$ of the sample amount. Care should be used in interpreting this data.
(J) Indicates estimated concentration due to internal standard areas or surrogate recoveries outside of control limits. A sample matrix effect is usually indicated.
(DW) Indicates Dry Weight.
Analytical Reporting Limits
The reporting limits listed for non-aqueous samples in the analytical report section are Practical Quantitation Limits (PQLS). These PQLs are based upon a typical standard weight used for a non-aqueous sample. The reporting limit for a sample may be different from the PQL listed depending upon the actual weight of sample used, the samples moisture content and any dilutions used during the analysis.

NOTES AND COMMENTS

TestAmerica Job Number: 1.14219
Sample Number: 698547, 698574
Analysis: 8260
Blank analyzed with samples had hexachlorobutadiene above the reporting limit. No detection was noted for this compound in the samples.

Analysis: 8270 BNA
Sample Number: 698543
Due to elevated levels of non-target compounds, the d12-perylene internal standard was below the recommended response level. Results for the following should be considered estimates:
benzo(b) fluoranthene and benzo(a) pyrene
Sample Number: 698536
Due to elevated levels of non-target compounds, the d12-chrysene and di2-perylene internal standards were below their recommended response levels. Results for the following should be considered estimates:
benzo(a) anthracene, benzo(k)fluoranthene, benzo(a)pyrene, indeno ( $1,2,3-c, d$ ) pyrene, and dibenz ( $a, h$ ) anthracene

The surrogate, d14-p-terphenyl, was above the recommended \% recovery criteria.

Sample Number: 698537
Due to elevated levels of non-target compounds, the d12-chrysene and di2-perylene internal standards were below their recommended response levels. Results for the following should be considered estimates:
pyrene, chrysene, benzo(b)fluoranthene, and benzo(a) pyrene

The surrogate, d14-p-terphenyl, was above the recommended \% recovery criteria.

NOTES AND COMMENTS

TestAmerica Job Number: 1.14219

Analysis: 8270 BNA (cont'd)
Sample Number: 698538
Due to elevated levels of non-target compounds, the d12-chrysene and di2-perylene internal standards were below their recommended response levels. Results for the following should be considered estimates:
benzo(a) anthracene, chrysene, benzo(b)fluoranthene, and benzo(a) pyrene
The surrogate, d14-p-terphenyl, was above the recommended \% recovery criteria.

Sample Number: 698541
Due to elevated levels of non-target compounds, the di2-chrysene and di2-perylene internal standards were below their recommended response levels. Results for the following should be considered estimates:
pyrene, chrysene, benzo(b) fluoranthene, and benzo(a) pyrene The surrogate, di4-p-terphenyl, was above the recommended \% recovery criteria.
Sample Number: 698535
Due to elevated levels of non-target compounds, the d12-chrysene and d12-perylene internal standards were below their recommended response levels. Results for the following should be considered estimates:
pyrene, benzo(a) anthracene, chrysene, benzo(b) fluoranthene, benzo(a) pyrene, indeno (1,2,3-c,d) pyrene
The surrogate, d14-p-terphenyl, was above the recommended \% recovery criteria.

Sample Number: 698540
Due to elevated levels of non-target compounds, the di2-chrysene and di2-perylene internal standards were below the recommended response levels. Results for the following should be considered estimates:
chrysene, benzo( $k$ )fluoranthene, and dibenz ( $a, h$ ) anthracene

## NOTES AND COMMENTS

TestAmerica Job Number: 1.14219
Analysis: 8270 BNA (cont'd)
The surrogate, d14-p-terphenyl, was above the recommended \% recovery criteria.

Sample Number: 698542
Due to elevated levels of non-target compounds, the di2-perylene internal standard was below the recommended response level. Effected target compounds found were all above the calibration limit, and are reported from diluted analyses.

The surrogates, d14-p-terphenyl and 2,4,6-tribromophenol had elevated \% recovery criteria.

Sample Number: 698544
Analysis: 8270 BNA
Due to elevated levels of non-target compounds, the d12-perylene internal standard was below the recommended response level. Consequently, results for the following compounds should be considered estimates:
benzo(b)fluoroanthene, benzo(k)fluoroanthene, benzo(a)pyrene, indeno (1,2,3-c,d) pyrene.

Sample 698539
Analysis: 8270 BNA
Due to elevated levels of non-target compounds, the di2-perylene internal standard was below the recommended response level. Consequently, results for the following compounds should be considered estimates:
benzo( $k$ ) fluoranthene and benzo(a) pyrene
The surrogate d14-p-terphenyl had elevated \% recovery criteria.
1429





TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
08/29/2001
Job Number: 01.14706

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

Sample
Number
700077
Sample Description

70078 700079 700080 700081 700082 700083 70008 70008 700086 700087 700088 700089 700090

SBI002:GB-36:S000020:412
BI002:GB-11:S000015:412
SBIO02:HMW25S:S010025:412
SBIO02:HMW27S:S000015:412
SBI002:HMW18S:S000010:412
SBI002:HMW18S:S230250:412
SBI002:HMW34S:S000010:412
SBI002:HMW-12D:S000020:505
SBI002:HMW-11D:S020040:505
SBIO02:HMW21D:S005020:428
SBI002:HMW12S:S005020:428
SBI002:FB-1:W081401:412
SBI002:TB-1:W081401
SBIO02:HMW25S:S210230:412

Date Taken

08/10/2001 08/15/2001 08/10/2001 08/15/2001
08/10/2001 08/15/2001 08/13/2001 08/15/2001 08/14/2001 08/15/2001 08/14/2001 08/15/2001 08/14/2001 08/15/2001 08/13/2001 08/14/2001 08/13/2001 08/14/2001 08/14/2001 08/14/2001 08/10/2001

Date Received

$$
08 / 15 / 2001
$$

$$
08 / 15 / 2001
$$

08/15/2001
08/15/2001
08/15/2001
08/15/2001
08/15/2001
08/15/2001

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted only in its entirety.

Enclosure


# ANALYTICAL REPORT 

Kevin Wildman HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/29/2001

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Rumber | Number | Limit | Initials Method Reference |  |  |

## SAMPLE NO. 700077 <br> SAMPLE DESCRIPTION <br> SBI002:GB-36:S000020:412



## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706

Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TIO |  |  |  |  | DAT | TIME | TAKEN |
| 700077 |  | SBI002: GB | -36: | 000 | : 412 |  |  |  | 08/ | 0/2001 | 1 11:10 |


| s(2-chloroethoxy) methane | $<393$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<393$ | dmg | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bis (2-ethylhexyl) phthalate | $<393$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<393$ | dmg | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<393$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<393$ | dmg | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<393$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<393$ | dmg | SW | 8270C |
| 4-Chloroaniline | $<393$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<393$ | dmg | SW | 8270C |
| 2-Chloronaphthalene | $<393$ | $u g / \mathrm{kg} d w$ | 08/21/2001 | 949 | 1466 | $<393$ | dmg | SW | 8270C |
| Chryaene | $<393$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<393$ | dmg | SW | 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<197$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<197$ | dmg | SW | 8270C |
| Dibenzofuran | $<393$ | ug/kg dw | 08/21/2001 | 949 | 1466 | <393 | dmg | SW | 8270C |
| 1,2-Dichlorobenzene | $<393$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<393$ | dmg | SW | 8270 C |
| 1,3-Dichlorobenzene | $<393$ | ug/kg dw | 08/21/2001 | 949 | 1466 | <393 | dmg | SW | 8270C |
| 1,4-Dichlorobenzene | $<393$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<393$ | dmg | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<787$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<787$ | dmg | SW | 8270C |
| Diethyl phthalate | $<393$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<393$ | dmg | SW | 8270 C |
| Dimethyl phthalate | $<393$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<393$ | dmg | SW | 8270C |
| 2,4-Dinitrotoluene | $<393$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | <393 | dmg | SW | 8270C |
| 2,6-Dinitrotoluene | $<393$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<393$ | dmg | SW | 8270C |
| Di-n-octylphthalate | $<393$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<393$ | dmg | SW | 8270C |
| Fluoranthene | $<393$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<393$ | dmg | SW | 8270 C |
| Fluorene | $<393$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<393$ | dmg | SW | 8270C |
| Hexachlorobenzene | $<393$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<393$ | dmg | SW | 8270C |
| Hexachloro-1, 3-butadiene | $<393$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<393$ | dmg | SW | 8270C |
| Hexachlorocyclopentadiene | $<787$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<787$ | dmg | SW | 8270C |
| Hexachloroethane | $<393$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | <393 | dmg | SW | 8270C |
| Indeno(1, 2,3-cd) pyrene | $<393$ | ug/kg dw | 08/21/2001 | 949 | 1466 | <393 | dmg | SW | 8270C |

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO.

SAMPLE DESCRIPTION
700077
SBI002:GB-36:S000020:412
DATE/TIME TAKEN 08/10/2001 11:10


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002
08/29/2001

SAMPLE NO. SAMPLE DESCRIPTION
700077

DATE/TIME TAKEN 08/10/2001 11:10

| $08 / 21 / 2001$ | 949 | 1466 |
| :--- | :--- | :--- |
| $08 / 21 / 2001$ | 949 | 1466 |
| $08 / 21 / 2001$ | 949 | 1466 |


| dmg | SW 8270C |
| :--- | :--- |
| dmg | SW 8270C |
| dmg | SW 8270C |

Surrogate: 2-Fluorophenol
77 \% 08/21/2001 $949 \quad 146$

## DATE/TIME TAKEN

08/10/2001 11:33


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

## Job Number: 01.14706

Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch <br> Number | Run Batch Number | Reporting <br> Limit | Analyst Initials | Method Re | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 700078 |  | SBI002: GB | -11: | 0000 | : 412 |  |  |  | 08/ | 0/2001 | 1 11:33 |


| VOLATILE COMPOUNDS-8260 Non-Aq |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8260 - SW846 (Non-aq) | Complete |  | 08/16/2001 | 1468 | Complete | bmh |  |
| Acetone | <115 | ug/kg dw | 08/16/2001 | 1468 | <115 | bmh | SW 8260A |
| Benzene | < 5.8 | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW 8260A |
| tert-Butylbenzene | <5.8 | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmin | SW 8260A |
| sec-Butylbenzene | $<5.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.8 | bmh | SW 8260A |
| n-Butylbenzene | $<5.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.8$ | bmh | SW 8260A |
| Bromochloromethane | $<5.8$ | $u g / \mathrm{kg}$ dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW 8260A |
| Bromodichloromethane | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW 8260A |
| Eromoform | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW 8260A |
| Bromobenzene | <5.8 | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW 8260A |
| 2-Butanone (MEK) | $<58$ | ug/kg dw | 08/16/2001 | 1468 | $<58$ | bmh | SW 8260A |
| Carbon disulfide | $<5.8$ | $u g / \mathrm{kg}$ dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW 8260A |
| Carbon tetrachloride | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW 8260A |
| Chlorobenzene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | <5.8 | bmh | SW 8260A |
| Chloroethane | <11.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<11.5$ | bmh | SW 8260A |
| 2-Chlorotoluene | <5.8 | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW 8260A |
| 4-Chlorotoluene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW 8260A |
| Chloroform | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW 8260A |
| Chloromethane | $<11.5$ | ug/kg dw | 08/16/2001 | 1468 | $<11.5$ | bmh | SW 8260A |
| Dibromochloromethane | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW 8260A |
| Dibromomethane | <5.8 | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW 8260A |
| Dichlorodifluoromethane | <5.8 | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW 8260A |
| 1,2-Dichlorobenzene | <5.8 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.8$ | bmh | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/29/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
$700078 \quad$ SBIO02:GB-11:S000015:412

DATE/TIME TAKEN
08/10/2001 11:33

| . 3-Dichlorobenzene | $<5.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,4-Dichlorobenzene | <5.8 | $u g / \mathrm{kg}$ dw | 08/16/2001 | 1468 | <5.8 | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | <5.8 | bmin | SW | 8260A |
| 1,2-Dichloroethane | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | <5.8 | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | <5.8 | bmh | SW | 8260A |
| 1,3-Dichloropropane | <5.8 | $u g / \mathrm{kg}$ dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| Cis-1,3-Dichloropropene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | <5.8 | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.8$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.8 | bmh | SW | 8260A |
| Ethylbenzene | $<5.8$ | $u \mathrm{f} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.8 | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| n -Hexane | $<23.0$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<23.0$ | bmh | SW | 8260A |
| 2-Hexanone | $<57.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<57.5$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | <5.8 | bmh | SW | 8260A |
| p-Isopropyltoluene | $<5.8$ | ug/ kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| Bromomethane | $<11.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<11.5$ | bmh | SW | 8260A |
| Methylene Chloride | <11.5 | ug/kg dw | 08/16/2001 | . 1468 | $<11.5$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | <5.8 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | < 5.8 | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<57.5$ | ug/kg dw | 08/16/2001 | 1468 | $<57.5$ | bmh | SW | 8260A |
| n-Propylbenzene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | <5.8 | bmh | SW | 8260A |
| Styrene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | <5.8 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
08/29/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 700078 | SBIOO2:GB-11:S000015:412 |

DATE/TIME TAKEN
08/10/2001 11:33

| Naphthalene | $<5.8$ | ug/kg dw | 08/16/2001 |  | 1468 | < 5.8 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | $<5.8$ | ug/kg dw | 08/16/2001 |  | 1468 | $<5.8$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.8$ | ug/kg dw | 08/16/2001 |  | 1468 | <5.8 | bmh | SW | 8260A |
| Tetrachloroethene | $<5.8$ | ug/kg dw | 08/16/2001 |  | 1468 | $<5.8$ | bmh | SW | 8260A |
| Toluene | $<5.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 |  | 1468 | $<5.8$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.8$ | ug/kg dw | 08/16/2001. |  | 1468 | $<5.8$ | bmh | Sw | 8260A |
| 1,1,1-Trichloroethane | $<5.8$ | ug/kg dw | 08/16/2001 |  | 1458 | $<5.8$ | bmh | Sw | 8260A |
| 1,1,2-Trichloroethane | $<5.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 |  | 1468 | $<5.8$ | bmh | SW | 8260A |
| Trichloroethene | $<5.8$ | $u g / \mathrm{kg}$ dw | 08/16/2001 |  | 1468 | $<5.8$ | bmh | SW | 8260A |
| 'Trichlorofluoromethane | $<5.8$ | ug/kg dw | 08/16/2001 |  | 1468 | $<5.8$ | bmh | sw | 8260A |
| 1,2,3-Trichloropropane | < 5.8 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 |  | 1468 | <5.8 | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | <5.8 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 |  | 1468 | $<5.8$ | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.8$ | ug/kg dw | 08/16/2001 |  | 1468 | $<5.8$ | bmh | SW | 8260A |
| Vinyl Acetate | <5.8 | ug/kg dw | 08/16/2001 |  | 1468 | $<5.8$ | bmh | SW | 8260A |
| Vinyl Chloride | $<2.3$ | ug/kg dw | 08/16/2001 |  | 1468 | $<2.3$ | bmh | SW | 8260A |
| 'xylenes, Total | <5.8 | ug/kg dw | 08/16/2001 |  | 1468 | <5.8 | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 86 | 8 | 08/16/2001 |  | 1468 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 93 | \% | 08/16/2001 |  | 1468 |  | bmh | SW | 8260A |
| d8-Toluene (gurr) | 107 | \% | 08/16/2001 |  | 1468 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 112 | 8 | 08/16/2001 |  | 1468 |  | bmh | SW | 8260A |
| BASE NEUT. COMPS.-8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 82700 |
| Acenaphthylene | $<380$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270 C |
| Anthracene | 412 | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) 08/29/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  |  | . | Prep | Run |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Date | Batch | Eatch | Reporting | Analyst |  |
| Result | Flag | Units | Analyzed | Number | Number | Limit | Initials | Method Reference |

SAMPLE NO.
700078
SAMPLE DESCRIPTION
SBI002:GB-11:S000015:412

DATE/TIME TAKEN 08/10/2001 11:33

| Benzo (a) anthracene | 1,740 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<380$ | dmg |  | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benzo (b) fluoranthene | 2,090 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270C |
| Benzo(k) fluoranthene | 751 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270 C |
| Benzo (a) pyrene | 1,610 | ug/kg dw | 08/21/2001 | 949 | 1466 | $<190$ | dmg | SW | 8270 C |
| Benzyl alcohol | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270 C |
| Benzyl butyl phthalate | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | ding | SW | 8270C |
| Bis (2-chloroethyl)ether | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270C |
| Bis (2-chloroethoxy) methane | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270C |
| Bis (2-ethylhexyl) phthalate | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270C |
| 4-Chloroaniline | $<380$ | $u g / \mathrm{kg}$ dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270 C |
| 2-Chloronaphthalene | $<380$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270 C |
| Chrysene | 1,880 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<190$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<190$ | dmg | SW | 8270 C |
| Dibenzofuran | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | ding | SW | 8270 ${ }^{\text {c }}$ |
| 1,2-Dichlorobenzene | $<380$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270C |
| 1,3-Dichlorobenzene | $<380$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270C |
| 1,4-Dichlorobenzene | $<380$ | $u \mathrm{f} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<759$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<759$ | ding | SW | 8270C |
| Diethyl phthalate | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dimg | SW | 82700 |
| Dimethyl phthalate | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270 C |
| 2,4-Dinitrotoluene | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270C |
| 2,6-Dinitrotoluene | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270 C |
| Di-n-octylphthalate | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270 C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin) 08/29/2001<br>6130 Wilcox Rd.

Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 700078

## SAMPLE DESCRIPTION

SBI002:GB-11:S000015:412

| Fluoranthene | 4,210 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 949 | 1468 | $<3,800$ | jcs | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fluorene | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SN | 8270C |
| Hexachlorobenzene | $<380$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270 C |
| Hexachloro-1,3-butadiene | <380 | ug/kg dw | 08/21/2001 | 949 | 1466 | <380 | dmg | SW | 8270C |
| Hexachlorocyclopentadiene | $<759$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<759$ | dmg | SW | 8270C |
| Hexachloroethane | $<380$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<380$ | ding | SW | 8270C |
| Indeno (1,2,3-cd) pyrene | 521 | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270C |
| Isophorone | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270C |
| Naphthalene | $<380$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270C |
| Nitrobenzene | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<380$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270 C |
| Phenanthrene | 4,170 | ug/kg dw | 08/23/2001 | 949 | 1468 | $<3,800$ | jes | SW | 8270C |
| Pyrene | 4,750 | ug/kg dw | 08/23/2001 | 949 | 1468 | <3,800 | jcs | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 88 | \% | 08/21/2001 | 949 | 1466 |  | dmg | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 97 | \% | 08/21/2001 | 949 | 1466 |  | dmg | SW | 8270 C |
| Surrogate: d14-Terphenyl | 85 | \% | 08/21/2001 | 949 | 1466 |  | dmg | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,900$ | ug/kg dw | 08/21/2001 | 949 | 1466 | <1,900 | dmg | Sw | 8270 C |
| 4-Chloro-3-methylphenol | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270C |
| 2-Chlorophenol | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270C |
| 2,4-Dichlorophenol | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270 C |
| 2,4-Dimethylphenol | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<380$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW | 82700 |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
08/29/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | SCR | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 700078 |  | SBI002:G | -11 | 000 | : 412 |  |  |  | 08/ | 0/2001 | 1 11:33 |


| - Methylphenol | $<380$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| meta \& para-Methylphenol | <380 |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW 8270C |
| 2-Nitrophenol | $<380$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | ding | SW 8270C |
| Pentachlorophenol | $<380$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW 8270C |
| Phenol | $<380$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | <380 | dmg | SW 8270C |
| 2,4,5-Trichlorophenol | $<380$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | amg | SW 8270C |
| 2,4,6-Trichlorophenol | $<380$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<380$ | dmg | SW 8270C |
| Surrogate: d6-Phenol | 84 |  | 8 | 08/21/2001 | 949 | 1466 |  | dmg | SW 8270C |
| Surrogate: 2-Fluorophenol | 77 |  | \% | 08/21/2001 | 949 | 1466 |  | dmg | SW 8270C |
| Surrogate: Tribromophenol | 84 |  | $\%$ | 08/21/2001 | 949 | 1466 |  | dmg | SW 8270C |
| PCB's M 8082, Non-Aq |  |  |  |  |  |  |  |  |  |
| Aroclor 1016 | $<0.58$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 103 | 188 | $<0.58$ | jdc | SW 8082 |
| Aroclor 1221 | $<0.58$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 103 | 188 | $<0.58$ | jdc | SW 8082 |
| Aroclor 1232 | $<0.58$ |  | $\mathrm{mg} / \mathrm{kg}$ dw | 08/20/2001 | 103 | 188 | $<0.58$ | jdc | SW 8082 |
| Aroclor 1242 | $<0.58$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 103 | 188 | $<0.58$ | jdc | SW 8082 |
| Aroclor 1248 | $<0.58$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 103 | 188 | $<0.58$ | jdc | SW 8082 |
| Aroclor 1254 | $<0.58$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 103 | 188 | $<0.58$ | jdc | SW 8082 |
| Aroclor 1260 | $<0.58$ |  | mg/kg dw | 08/20/2001 | 103 | 188 | $<0.58$ | jde | SW 8082 |
| Surrogate:TCX/DCB | 74/89 | note | \% | 08/20/2001 | 103 | 188 |  | jdc | SW 8082 |
| TPH - FTIR Non-aq | <58 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 594 | 626 | $<58$ | 110 | 418.1 |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 700079 SBIO02:HMW25S:S010025:412

DATE/TIME TAKEN
08/10/2001 08:15


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Raly | Number | Number | Limit | Initials Method Reference |  |

SAMPLE DESCRIPTION
SBIO02:HMW25S:S010025:412

DATE/TIME TAKEN 08/10/2001 08:15

| sromoform | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bromobenzene | <5.8 | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| 2-Butanone (MEK) | $<58$ | ug/kg dw | 08/16/2001 | 1468 | $<58$ | brh | SW | 8260A |
| Carbon disulfide | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| Carbon tetrachloride | $<5.8$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.8 | bmh | SW | 8260A |
| Chlorobenzene | <5.8 | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| Chloroethane | $<11.7$ | ug/kg dw | 08/16/2001 | 1468 | $<11.7$ | bmh | SW | 8260A |
| 2-Chlorotoluene | $<5.8$ | $u g / \mathrm{kg}$ dw | 08/16/2001 | 1468 | $<5.8$ | bmah | SW | 8260A |
| 4-Chlorotoluene | < 5.8 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | < 5.8 | bmh | SW | 8260A |
| chloroform | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| Chloromethane | $<11.7$ | ug/kg dw | 08/16/2001 | 1468 | $<11.7$ | bmh | SW | 8260A |
| Dibromochloromethane | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| Dibromomethane | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SN | 8260A |
| Dichlorodifluoromethane | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | <5.8 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.8 | bmh | SW | 8260A |
| 1.2-Dichlorobenzene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | <5.8 | ug/kg dw | 08/16/2001 | 1468 | < 5.8 | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<5.8$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | <5.8 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 700079 |  | SBIOO2: H | N25 | S01 | 25:412 |  |  |  | 08/ | 0/2001 | 1 08:15 |


| 2,2-Dichloropropane | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1-Dichloropropene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | <5.8 | bmh | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.8$ | $u g / \mathrm{kg} \mathrm{d} w$ | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | <5.8 | ug/kg dw | 08/16/2001 | 1468 | <5.8 | bmh | SW | 8260A |
| Ethylbenzene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | <5.8 | bmh | SW | 8260A |
| n -Hexane | $<23.3$ | ug/kg dw | 08/16/2001 | 1468 | $<23.3$ | bmh | SW | 8260A |
| 2-Hexanone | $<58.3$ | ug/kg dw | 08/16/2001 | 1468 | $<58.3$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| p-Isopropyltoluene | $<5.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.8 | bmh | SW | 8260A |
| Bromomethane | $<11.7$ | ug/kg dw | 08/16/2001 | 1468 | $<11.7$ | bmh | SW | 8260A |
| Methylene Chloride | $<11.7$ | ug/kg dw | 08/16/2001 | 1468 | $<11.7$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<58.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<58.3$ | bmh | SW | 8260A |
| n-Propylbenzene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | <5.8 | bmh | SW | 8260A |
| Styrene | $<5.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| Naphthalene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| Tetrachloroethene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| Toluene | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | < 5.8 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/16/2001 | 1468 | <5.8 | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.8$ | ug/kg dw | 08/16/2001 | 1468 | $<5.8$ | bmh | SW | 8260A |
| Trichloroethene | <5.8 | ug/kg dw | 08/16/2001 | 1468 | <5.8 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


08/29/2001

SAMPLE NO. 700079

SAMPLE DESCRIPTION
SBIO02:HMW25S:S010025:412

DATE/TIME TAKEN 08/10/2001 08:15

| srichlorofluoromethane | $<5.8$ | ug/kg dw | 08/16/2001 |  | 1468 | <5.8 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,3-Trichloropropane | $<5.8$ | ug/kg dw | 08/16/2001 |  | 1468 | $<5.8$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.8$ | ug/kg dw | 08/16/2001 |  | 1468 | $<5.8$ | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 |  | 1468 | $<5.8$ | bmh | SW | 8260A |
| Vinyl Acetate | <5.8 | ug/kg dw | 08/16/2001 |  | 1468 | <5.8 | bmh | SW | 8260A |
| Vinyl Chloride | $<2.3$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 |  | 1468 | $<2.3$ | bmh | SW | 8260A |
| Xylenes, Total | $<5.8$ | ug/kg dw | 08/16/2001 |  | 1468 | $<5.8$ | bmh | SW | 8260A |
| d4-1,2-Dichloroethane(surr) | 89 | 8 | 08/16/2001 |  | 1468 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 98 | \% | 08/16/2001 |  | 1468 |  | bmh | SW | 8260A |
| ds-Toluene (surr) | 106 | \% | 08/16/2001 |  | 1468 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 119 | 8 | 08/16/2001 |  | 1468 |  | bmh | SW | 8260A |
| BASE NEUT. COMPS. 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| Acenaphthylene | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| Anthracene | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | <385 | dmg | SW | 8270C |
| Benzo (a) anthracene | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| Benzo (b) fluoranthene | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | <385 | dmg | SW | 8270C |
| Benzo(k) fluoranthene | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | <385 | dmg | SW | 8270C |
| Benzo (a) pyrene | $<193$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<193$ | dmg | SW | 8270C |
| Benzyl alcohol | <385 | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| Benzyl butyl phthalate | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| Bis (2-chloroethyl)ether | $<385$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | <385 | dmg | SW | 8270C |
| Bis (2-chloroethoxy) methane | <385 | ug/kg dw | 08/20/2001 | 949 | 1465 | <385 | dmg | SW | 8270C |
| Bis (2-ethylhexyl)phthalate | <385 | ug/kg dw | 08/20/2001 | 949 | 1465 | <385 | dmg | SW | 8270C |

## ANALY7IICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/29/2001

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


DATE/TIME TAKEN 08/10/2001 08:15

| 2.2'-oxybis(1-Chloropropane) | <385 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<385$ | dmg | Sw | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Bromophenyl phenyl ether | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | dimg | SW | 8270C |
| 4-Chloroaniline | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | <385 | dimg | SW | 8270 C |
| 2-Chloronaphthalene | <385 | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| Chrysene | $<385$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | <385 | dmg | SW | 8270C |
| Dibenzo (a, h) anthracene | $<193$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<193$ | dmg | SW | 82700 |
| Dibenzofuran | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| 1,2-Dichlorobenzene | $<385$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<385$ | dimg | SW | 8270C |
| 1,3-Dichlorobenzene | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | dimg | SW | 8270C |
| 1,4-Dichlorobenzene | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<770$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<770$ | dmg | SW | 8270C |
| Diethyl phthalate | $<385$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/20/2001 | 949 | 1465 | $<385$ | ding | SW | 8270 C |
| Dimethyl phthalate | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | <385 | dmg | SW | 8270C |
| 2,4-Dinitrotoluene | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| 2,6-Dinitrotoluene | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| Di-n-octylphthalate | <385 | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| Fluoranthene | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| Fluorene | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270 C |
| Hexachlorobenzene | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| Hexachloro-1,3-butadiene | <385 | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| Hexachlorocyclopentadiene | $<770$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<770$ | dmg | SW | 8270C |
| Hexachloroethane | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | ding | SW | 8270C |
| Indeno (1, 2, 3-cd) pyrene | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| Isophorone | $<385$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270 C |
| Naphthalene | <385 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 82700 |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)

08/29/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batch | Reporting Analyst |  |  |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |  |

## SAMPLE NO. SAMPLE DESCRIPTION 700079 <br> SBIOO2:HMW25S:S010025:412

| .crobenzene | <385 | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N-Nitrosodi-n-propylamine | $<385$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<385$ | dimg | SW | 82700 |
| Phenanthrene | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| Pyrene | $<385$ | $u g / \mathrm{kg} \mathrm{d} w$ | 08/20/2001 | 949 | 1465 | <385 | dmg | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<385$ | $u g / \mathrm{kg}$ dw | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 75 | \% | 08/20/2001 | 949 | 1465 |  | dmg | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 75 | 8 | 08/20/2001 | 949 | 1465 |  | dmg | SW | 8270 C |
| Surrogate: dl4-Terphenyl | 87 | \% | 08/20/2001 | 949 | 1465 |  | dmg | SW | 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,930 | ug/kg dw | 08/20/2001 | 949 | 1465 | $<1.930$ | dmg | SW | 82700 |
| 4-Chloro-3-methylphenol | <385 | ug/kg dw | 08/20/2001 | 949 | 1465 | <385 | dmg | SW | 82700 |
| 2-Chlorophenol | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | ding | SW | 8270 C |
| 2,4-Dichlorophenol | $<385$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| 2,4-Dimethylphenol | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<385$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | <385 | dmg | SW | 8270C |
| 2-Methylphenol | $<385$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| meta \& para-Methylphenol | $<385$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270 C |
| 2-Nitrophenol | $<385$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| Pentachlorophenol | $<385$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<385$ | dmg | SW | 8270C |
| Phenol | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | <385 | dmg | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<385$ | ug/kg dw | OB/20/2001 | 949 | 1465 | <385 | dmg | SW | 8270C |
| 2,4,6-Trichlorophenol | $<385$ | ug/kg dw | 08/20/2001 | 949 | 1465 | <385 | dmg | SW | 8270C |
| Surrogate: d6-Phenol | 73 | \% | 08/20/2001 | 949 | 1465 |  | dmg | SW | 8270C |
| Surrogate: 2-Fluorophenol | 68 | \% | 08/20/2001 | 949 | 1465 |  | dmg | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/29/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBIO02

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting | Analyst |  |
| Number | Limit | Initials Method Reference |  |  |  |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 700079

SBIO02:HMW25S:S010025:412

DATE/TIME TAKEN 08/10/2001 08:15

| Surrogate: Tribromophenol PCB's M 8082, Non-Aq | 174 | \% | 08/20/2001 | 949 | 1465 |  | dmg | SW 8270C |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
| Aroclor 1016 | $<0.58$ | mg/kg dw | 08/20/2001 | 105 | 187 | $<0.58$ | jdc | SW 8082 |  |
| Aroclor 1221 | $<0.58$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 105 | 187 | $<0.58$ | jdc | SW 8082 |  |
| Aroclor 1232 | $<0.58$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 105 | 187 | $<0.58$ | jdc | SW 8082 |  |
| Aroclor 1242 | $<0.58$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 105 | 187 | $<0.58$ | jdc | SW 8082 |  |
| Aroclor 1248 | $<0.58$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 105 | 187 | $<0.58$ | jdc | SW 8082 |  |
| Aroclor 1254 | $<0.58$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 105 | 187 | $<0.58$ | jdc | SW 8082 |  |
| Aroclor 1260 | $<0.58$ | $\mathrm{mg} / \mathrm{kg}$ dw | 08/20/2001 | 105 | 187 | $<0.58$ | jdc | SW 8082 |  |
| Surrogate:TCX/DCB | 71/75 | 8 | 08/20/2001 | 105 | 187 |  | jdc | SW 8082 |  |
| TPH - FTIR Non-aq | $<58$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 594 | 626 | $<58$ | 110 | 418.1 |  |
| SAMPLE NO. | SAMPLE DESCRIPTION |  |  |  |  |  | DATE/TIME TAKEN |  |  |
| 700080 | SBI002 : HMW27S : S000015:412 |  |  |  |  |  | 08/13/2001 |  | 10:25 |


| Dry Weight | 89.1 | $\%$ | 08/22/2001 |  | 1482 |  | mhg | SM 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/23/2001 |  | 1245 | Complete | emd | SW 6010B |
| Arsenic, ICP | 11 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2975 | $<3.6$ | emd | SW 6010B |
| Barium, ICP | 77.3 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2906 | $<0.73$ | emd | SW 6010B |
| Cadmium, ICP | $<2.2$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2888 | <2.2 | emd | SW 6010B |
| Chromium, ICP | 15.5 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2876 | $<1.5$ | emd | SW 6010B |
| Lead, ICP | 132 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2877 | <2.9 | emd | SW 6010B |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/29/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  | Prep Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch |  |  |  |
|  | Analyzed | Number | Number | Limit | Initials Method Reference |


| SAMPLE NO. | SAMPLE DESCRIPTION |
| :--- | :--- |
| 700080 | SBIOO2:HMW27S:S000015:412 |

DATE/TIME TAKEN
08/13/2001 10:25
1


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/29/2001

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 700080 | SBIOO2:HMW27S:S000015:412 |

DATE/TIME TAKEN 08/13/2001 10:25

| 4-Chlorotoluene | $<11$ | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chloroform | $<11$ | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | SW B260A |
| Chloromethane | $<22$ | ug/kg dw | 08/17/2001 | 1471 | <22 | bmh | SW 8260A |
| Dibromochloromethane | $<11$ | ug/kg dw | 08/17/2001 | 1471 | <11 | bmh | SW 8260A |
| Dibromomethane | $<11$ | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | SW 8260A |
| Dichlorodifluoromethane | $<11$ | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | SW 8260A |
| 1,2-Dibromo-3-chloropropane | $<11$ | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | SW 8260A |
| 1,2-Dichlorobenzene | $<11$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 1471 | $<11$ | bmh | SW 8260A |
| 1,3-Dichlorobenzene | $<11$ | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | SW 8260A |
| 1,4-Dichlorobenzene | <11 | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | SW 8260A |
| 1,1-Dichloroethane | <11 | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | SW 8260A |
| 1,2-Dichloroethane | <11 | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | SW 8260A |
| 1,1-Dichloroethene | <11 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<11$ | bmh | SW 8260A |
| cis-1,2-Dichloroethene | <11 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<11$ | bmh | SW 8260A |
| trans-1,2-Dichloroethene | $<11$ | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | SW 8260A |
| 1,2-Dichloropropane | <11 | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | SW 8260A |
| 1,3-Dichloropropane | <11 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<11$ | bmh | Sw 8260A |
| 2,2-Dichloropropane | $<11$ | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | Sw 8260A |
| 1,1-Dichloropropene | $<11$ | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | SW 8260A |
| cis-1,3-Dichloropropene | $<11$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <11 | bmh | SW 8260A |
| trans-1,3-Dichloropropene | $<11$ | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | SW 8260A |
| Ethylbenzene | $<11$ | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | SW 8260A |
| Hexachlorobutadiene | $<11$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/17/2001 | 1471 | $<11$ | bmh | SW 8260A |
| n -Hexane | $<45$ | ug/kg dw | 08/17/2001 | 1471 | $<45$ | bmh | SW 8260A |
| 2-Hexanone | $<112$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <112 | bmh | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION
$700080 \quad$ SBIOO2:HMW27S:S000015:412
DATE/TIME TAKEN
08/13/2001 10:25

| ssopropylbenzene (Cumene) | $<11$ | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| p-Isopropyltoluene | $<11$ | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | SW | 8260A |
| Bromomethane | $<22$ | ug/kg dw | 08/17/2001 | 1471 | $<22$ | bmh | SW | 8260A |
| Methylene Chloride | <22 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/17/2001 | 1471 | $<22$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<11$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 1471 | $<11$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<112$ | ug/kg dw | 08/17/2001 | 1471 | $<112$ | bmh | SW | 8260A |
| $n$-Propylbenzene | $<11$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <11 | bmh | SW | 8260A |
| Styrene | $<11$ | ug/kg dw | 08/17/2001 | 1471 | <11 | bmh | SW | 8260A |
| Naphthalene | $<11$ | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<11$ | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<11$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<11$ | bmh | SW | 8260A |
| Tetrachloroethene | 14.7 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<11$ | bmh | SW | 8260A |
| Toluene | $<11$ | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | 5w | 8260A |
| 1,2,4-Trichlorobenzene | $<11$ | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<11$ | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<11$ | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | SW | 8260A |
| Trichloroethene | <11 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <12 | bmh | SW | 8260A |
| Trichlorofluoromethane | $<11$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 1471 | <11 | bmh | Sw | 8260A |
| 1,2,3-Trichloropropane | <11 | ug/kg dw | 08/17/2001 | 1471 | <11 | brh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<11$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 1471 | $<11$ | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | <11 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <11 | bmh | SW | 8260A |
| Vinyl Acetate | $<11$ | ug/kg dw | 08/17/2001 | 1471 | $<11$ | bmh | SW | 8260A |
| Vinyl Chloride | $<4.5$ | ug/kg dw | 08/17/2001 | 1471 | $<4.5$ | bmh | SW | 8260A |
| Xylenes, Total | $<11$ | ug/kg dw | 08/17/2001 | 1471 | $<11$ | brih | SW | 8260A |
| d4-1,2-Dichloroethane(surr) | 99 | $\%$ | 08/17/2001 | 1471 |  | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION
700080 $\quad$ SBIOO2:HMW27S:S000015:412
DATE/TIME TAKEN
08/13/2001 10:25

| Dibromofluoromethane (surr) | 98 |  | \% | 08/17/2001 |  | 1471 |  | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ds-Toluene (surr) | 111 |  | 4 | 08/17/2001 |  | 14.71 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 114 | Note | * | 08/17/2001 |  | 1471 |  | bmh | SW | 8260A |
| BASE NEUT. COMPS.-8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<370$ |  | ug/kg dw | 08/2i/2001 | 949 | 1466 | <370 | ding | SW | 8270C |
| Acenaphthylene | $<370$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<370$ | dimg | SW | 8270C |
| Anthracene | 630 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | <370 | dmg | SW | 8270C |
| Benzo (a) anthracene | 4,990 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 949 | 1468 | $<3,700$ | jes | SW | 8270C |
| Benzo(b) fluoranthene | 9.290 |  | ug/kg dw | 08/24/2001 | 949 | 1468 | $<3,700$ | jcs | SW | 8270 C |
| Benzo (k) fluoranthene | 3,780 |  | ug/kg dw | 08/24/2001 | 949 | 1468 | $<3,700$ | jcs | SW | 8270 C |
| Benzo (a) pyrene | 5,970 |  | ug/kg dw | 08/24/2001 | 949 | 1468 | $<1,800$ | jes | SW | 8270C |
| Benzyl alcohol | <370 |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<370$ | dmg | SW | 8270C |
| Benzyl butyl phthalate | $<370$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | <370 | dmg | SW | $8270{ }^{\text {c }}$ |
| Bis (2-chloroethyl) ether | $<370$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<370$ | dmg | SW | 8270C |
| Bis (2-chloroethoxy) methane | $<370$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | <370 | dmg | SW | 82700 |
| Bis (2-ethylhexyl) phthalate | $<370$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<370$ | dmg | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<370$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<370$ | dmg | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<370$ |  | $u g / \mathrm{kg}$ dw | 08/21/2001 | 949 | 1466 | $<370$ | dmg | SW | 8270C |
| 4-Chloroaniline | $<370$ |  | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | <370 | dmg | SW | 8270C |
| 2-Chloronaphthalene | $<370$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<370$ | dmg | SW | 8270C |
| Chrysene | 6,550 |  | ug/kg dw | 08/24/2001 | 949 | 1468 | $<3,700$ | jcs | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | 368 |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<185$ | ding | SW | 8270C |
| Dibenzofuran | $<370$ |  | $u g / \mathrm{kg}$ dw | 08/21/2001 | 949 | 1466 | $<370$ | dmg | SW | 82700 |
| 1,2-Dichlorobenzene | $<370$ |  | $u g / \mathrm{kg} \mathrm{d} w$ | 08/21/2001 | 949 | 1466 | $<370$ | dmg | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/29/2001

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  |  |  | Prep | Run |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Result |  | Units | Date <br> Analyzed | Batch <br> Number | Batch <br> Number | Reporting | Analyst |  |
|  | Flag | Units | Analyzed |  | Number |  | Initials | Method Reference |


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 700080 | SBIOO2:HMW27S:S000015:412 |

DATE/TIME TAKEN 08/13/2001 10:25

| 1.3-Dichlorobenzene | $<370$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<370$ | dmg | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,4-Dichlorobenzene | $<370$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<370$ | dmg | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<741$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<741$ | dmg | SW | 8270 C |
| Diethyl phthalate | $<370$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<370$ | dmg | SW | 8270C |
| Dimethyl phthalate | $<370$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<370$ | ding | SW | 8270 C |
| 2,4-Dinitrotoluene | $<370$ |  | $u g / \mathrm{kg}$ dw | 08/21/2001 | 949 | 1466 | $<370$ | ding | SW | 8270C |
| 2,6-Dinitrotoluene | $<370$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<370$ | dmg | SW | 8270C |
| Di-n-octylphthalate | $<370$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<370$ | dimg | Sw | 8270C |
| Fluoranthene | 11,000 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 949 | 1468 | $<3,700$ | jes | SW | 8270C |
| Fluorene | <370 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<370$ | dimg | Sw | 8270C |
| Hexachlorobenzene | $<370$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<370$ | dimg | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<370$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<370$ | dmg | SW | 8270C |
| Hexachlorocyclopentadiene | $<741$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<741$ | dmg | SW | 8270 C |
| Hexachloroethane | $<370$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<370$ | dimg | SW | 8270 C |
| Indeno(1,2,3-cd) pyrene | 1,170 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<370$ | dmg | SW | 8270C |
| Isophorone | $<370$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | <370 | dmg | SW | 8270C |
| Naphthalene | $<370$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | <370 | ding | SW | 82700 |
| Nitrobenzene | $<370$ |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/21/2001 | 949 | 1466 | $<370$ | dmg | SW | 8270 C |
| N-Nitrosodi-n-propylamine | $<370$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<370$ | dimg | SW | 8270C |
| Phenanthrene | 6,000 |  | ug/kg dw | 08/24/2001 | 949 | 1468 | $<3,700$ | jes | SW | 8270 C |
| Pyrene | 10,500 |  | ug/kg dw | 08/24/2001 | 949 | 1468 | $<3,700$ | jes | sw | 8270 C |
| 1,2,4-Trichlorobenzene | $<370$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | <370 | dmg | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 93 |  | \% | 08/21/2001 | 949 | 1466 |  | dmg | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 99 |  | * | 08/21/2001 | 949 | 1466 |  | dmg | SW | 8270C |
| Surrogate: d14-Terphenyl | 101 | Note | $\%$ | 08/21/2001 | 949 | 1466 |  | ding | SW | 8270C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
08/29/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 700080

SAMPLE DESCRIPTION
SBIO02:HMW27S:S000015:412

DATE/TIME TAKEN 08/13/2001 10:25


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/29/2001

## Job Number: 01.14706

## Client Project ID: South Bend Indiana SBI002



SAMPLE NO. SAMPLE DESCRIPTION
700081 SBI002:HMW18S:S000010:412

DATE/TIME TAKEN 08/14/2001 07:53


# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/29/2001

Job Number: 01.14706
Client Project ID: South Bend Indiana SBIOO2


SAMPLE DESCRIPTION 700081

SBIO02:HMW18S:S000010:412

| Dibromochloromethane | <5.6 | ug/kg dw | 08/16/2001 | 1468 | < 5.6 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibromomethane | <5.6 | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bma | SW | 8260A |
| Dichlorodifluoromethane | <5.6 | ug/kg dw | 08/16/2001 | 1468 | <5.6 | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | <5.6 | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | < 5.6 | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | <5.6 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| Cis-1,2-Dichloroethene | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | <5.6 | bmh | Sw | 8260A |
| 2,2-Dichloropropane | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| Cis-1,3-Dichloropropene | $<5.6$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| Ethylbenzene | $<5.6$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/16/2001 | 1468 | $<5.6$ | bmin | SW | 8260A |
| Hexachlorobutadiene | <5.6 | $u g / \mathrm{kg}$ dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| $n$-Hexane | $<22.3$ | ug/kg dw | 08/16/2001 | 1468 | $<22.3$ | bmh | SW | 8260A |
| 2-Hexanone | $<55.8$ | ug/kg dw | 08/16/2001 | 1468 | $<55.8$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| p-Isopropyltoluene | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | <5.6 | bmh | SW | 8260A |
| Bromomethane | $<11.2$ | ug/kg dw | 08/16/2001 | 1468 | $<11.2$ | bmh | SW | 8260A |

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

## Job Number: 01.14706

## Client Project ID: South Bend Indiana SBIOO2



## SAMPLE NO. SAMPLE DESCRIPTION 700081 <br> SBI002:HMW18S:S000010:412

DATE/TIME TAKEN 08/14/2001 07:53

| .ethylene Chloride | $<11.2$ | ug/kg dw | 08/16/2001 | 1468 | $<11.2$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Methyl t-butyl ether (MTBE) | $<5.6$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<55.8$ | $u g / \mathrm{kg}$ dw | 08/16/2001 | 1468 | $<55.8$ | bmh | SW | 8260A |
| n-Propylbenzene | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| Styrene | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| Naphthalene | $<5.6$ | $u g / \mathrm{kg}$ dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | Sw | 8260A |
| Tetrachloroethene | 31.8 | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| Toluene | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.6$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{d} w$ | 08/16/2001 | 1468 | $<5.6$ | buh | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.6$ | $u g / \mathrm{kg}$ dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| Trichloroethene | <5.6 | ug/kg dw | 08/16/2001 | 1468 | <5.6 | bmh | SW | 8260A |
| Trichlorofluoromethane | <5.6 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.6$ | bmin | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | <5.6 | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| Vinyl Acetate | $<5.6$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| Vinyl Chloride | <2.2 | ug/kg dw | 08/16/2001 | 1468 | $<2.2$ | bmh | SW | 8260A |
| Xylenes, Total | <5.6 | ug/kg dw | 08/16/2001 | 1468 | <5.6 | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 91 | \% | 08/16/2001 | 1468 |  | bmh | sw | 8260A |
| Dibromofluoromethane (surr) | 92 | 7 | 08/16/2001 | 1468 |  | bmh | SW | 8260A |
| d8-Toluene (surr) | 105 | $t$ | 08/16/2001 | 1468 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 112 | \% | 08/16/2001 | 1468 |  | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 700081<br>SBI002:HMW18S:S000010:412

DATE/TIME TAKEN 08/14/2001 07:53

BASE NEUT. COMPS.-8270 NOR-aq

| Acenaphthene | $<368$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | <368 | ding | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | <368 | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dimg | SW | 8270 C |
| Anthracene | 1,670 | ug/kg dw | 08/21/2001 | 949 | 1466 | <368 | dmg | SW | 82700 |
| Benzo (a) anthracene | 5,510 | ug/kg dw | 08/24/2001 | 949 | 1468 | <3,680 | jcs | SW | 8270C |
| Benzo (b) fluoranthene | 7,920 | ug/kg dw | 08/24/2001 | 949 | 1468 | $<3,680$ | jes | SW | 8270 C |
| Benzo (k) fluoranthene | 3,110 | $u g / \mathrm{kg}$ dw | 08/21/2001 | 949 | 1466 | <368 | dimg | SW | 8270C |
| Benzo(a) pyrene | 5,260 | ug/kg dw | 08/24/2001 | 949 | 1468 | <1,790 | jes | SW | 8270C |
| Benzyl alcohol | <368 | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW | 8270C |
| Benzyl butyl phthalate | $<368$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW | 8270 C |
| Bis (2-chloroethyl) ether | $<368$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | ding | SW | 8270 C |
| Bis (2-chloroethoxy) methane | $<368$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW | 8270C |
| Bis (2-ethylhexyl) phthalate | $<368$ | $u g / \mathrm{kg}$ dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW | 8270 C |
| 2,2'-oxybis(1-Chloropropane) | <368 | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | Sw | 8270 C |
| 4-Bromophenyl phenyl ether | <368 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW | 8270C |
| 4-Chloroaniline | $<368$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dimg | Sw | 82700 |
| 2-Chloronaphthalene | $<368$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW | 8270 C |
| Chrysene | 5,280 | ug/kg dw | 08/24/2001 | 949 | 1468 | <3,680 | jes | SW | $8270{ }^{\text {c }}$ |
| Dibenzo (a, h) anthracene | $<184$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<184$ | dmg | SW | 8270 C |
| Dibenzofuran | $<368$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW | 8270 C |
| 1,2-Dichlorobenzene | $<368$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW | 8270C |
| 1,3-Dichlorobenzene | $<368$ | ug/kg dw | 08/21/2001 | 949 | 1466 | <368 | dmg | SW | 8270 C |
| 1,4-Dichlorobenzene | $<368$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<737$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<737$ | ding | SW | $8270{ }^{\text {c }}$ |
| Diethyl phthalate | <368 | .ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/29/2001

Job Number: 01.14706
Client Project ID: South Bend Indiana SBIO02

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPIE D | CRI | PTIOI |  |  |  |  | DAT | /TIME | TAKEN |
| 700081 |  | SBI002:H | 185 | : S000 | 0:412 |  |  |  | 08/ | 4/2001 | 07:53 |


| methyl phthalate | <368 |  | ug/kg dw | 08/21/2001 | 949 | 1466 | <368 | dmg | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dinitrotoluene | $<368$ |  | ug/kg dw | 08/21/2001 | 949 | 1456 | $<368$ | dimg | SW | 8270 C |
| 2,6-Dinitrotoluene | <368 |  | ug/kg dw | 08/21/2001 | 949 | 1466 | <368 | dmg | SW | 8270C |
| Di-n-octylphthalate | $<368$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW | 8270C |
| Fluoranthene | 10,300 |  | ug/kg dw | 08/24/2001 | 949 | 1468 | $<3,680$ | jes | SW | 8270C |
| Fluorene | 477 |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | <368 | dimg | Sw | 8270C |
| Hexachlorobenzene | $<368$ |  | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW | 8270C |
| Hexachloro-1,3-butadiene | $<368$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW | 8270C |
| Hexachlorocyclopentadiene | $<737$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<737$ | dmg | SW | 8270C |
| Hexachloroethane | $<368$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | amg | SW | 8270 C |
| Indeno(1,2,3-cd) pyrene | 820 |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW | 8270 C |
| Isophorone | $<368$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW | 8270C |
| Naphthalene | $<368$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW | 8270C |
| Nitrobenzene | <368 |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW | 8270C |
| N-Nitrosodi-n-propylamine | <368 |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW | 82700 |
| Phenanthrene | 8,200 |  | ug/kg dw | 08/24/2001 | 949 | 1468 | $<3,680$ | jcs | SW | 8270 C |
| Pyrene | 11,800 |  | ug/kg dw | 08/24/2001 | 949 | 1468 | $<3,680$ | jcs | SW | 8270 C |
| 1,2,4-Trichlorobenzene. | <368 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | <368 | dmg | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 95 |  | \% | 08/21/2001 | 949 | 1466 |  | dmg | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 105 |  | \% | 08/21/2001 | 949 | 1466 |  | dmg | SW | 8270 C |
| Surrogate: d14-Terphenyl | 88 | Note | \% | 08/21/2001 | 949 | 1466 |  | dmg | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,840$ |  | ug/kg dw | 08/21/2001 | 949 | 1466 | $<1,840$ | dmg | SW | 8270C |
| 4-Chloro-3-methylphenol | <368 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | <368 | dmg | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/29/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting | Analyst |  |
| Number | Limit | Initials Method Reference |  |  |  |  |  |


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 700081 | SBIOO2:HMW18S:S000010:412 |

DATE/TIME TAKEN
08/14/2001 07:53

| 2-Chlorophenol | $<368$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dichlorophenol | $<368$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW 8270 C |
| 2,4-Dimethylphenol | $<368$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<368$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | Sw 8270c |
| 2-Methylphenol | $<368$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW 8270C |
| meta \& para-Methylphenol | $<368$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<368$ | dimg | SW 8270C |
| 2-Nitrophenol | <368 | ug/kg dw | 08/21/2001 | 949 | 1466 | <368 | dmg | SW 8270C |
| Pentachlorophenol | $<368$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW 8270C |
| Phenol | $<368$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW 8270C |
| 2,4,5-Trichlorophenol | $<368$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW 8270C |
| 2,4,6-Trichlorophenol | $<368$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<368$ | dmg | SW 8270C |
| Surrogate: d6-phenol | 86 | $\%$ | 08/21/2001 | 949 | 1466 |  | dmg | SW 8270C |
| Surrogate: 2-Fluorophenol | 77 | \% | 08/21/2001 | 949 | 1466 |  | dmg | SW 8270C |
| Surrogate: Tribromophenol | 88 | 8 | 08/21/2001 | 949 | 1466 |  | dimg | SW 8270C |
| TPH - DRO Non-Aqueous | 528 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/18/2001 | 197 | 283 | $<11$ | meb | SW 8015M |
| TPH - FTIR Non-aq | 395 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 594 | 626 | $<56$ | 110 | 418.1 |

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
08/29/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |
| Anal |  | Number | Number Limit | Initials Method Reference |  |  |

## SAMPLE NO. 700082

SAMPLE DESCRIPTION
SBIO02:HMW18S:S230250:412

DATE/TIME TAKEN 08/14/2001 09:25


## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/29/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
700082 SBIOO2:HMWI8S:S230250:412

| Dibromochloromethane | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | <5.2 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibromomethane | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.2 | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | <5.2 | ug/kg dw | 08/16/2001 | 1468 | <5.2 | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.2 | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| 1,2-Dichloropropane | <5.2. | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | <5.2 | bmh | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| Ethylbenzene | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| n -Hexane | $<21.0$ | $u g / \mathrm{kg}$ dw | 08/16/2001 | 1468 | $<21.0$ | bmh | SW | 8260A |
| 2-Hexanone | $<52.4$ | ug/kg dw | 08/16/2001 | 1468 | $<52.4$ | bmh | SW | 8260A |
| Isopropyibenzene (Cumene) | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | <5.2 | bmh | SW | 8260A |
| p-Isopropyltoluene | <5.2 | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| Bromomethane | $<10.5$ | ug/kg dw | 08/16/2001 | 1468 | $<10.5$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULI \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.14706<br>Client Project ID: South Bend Indiana SBI002

08/29/2001


| thylene Chioride | $<10.5$ | ug/kg dw | 08/16/2001 | 1468 | $<10.5$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Methyl t-butyl ether (MTBE) | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<52.4$ | ug/kg dw | 08/16/2001 | 1468 | $<52.4$ | bmh | SW | 8260A |
| n-Propylbenzene | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| Styrene | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | <5.2 | bmh | SW | 8260A |
| Naphthalene | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | <5.2 | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| Tetrachloroethene | 9.7 | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| Toluene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | <5.2 | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| Trichloroethene | <5.2 | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| Trichlorofluoromethane | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | <5.2 | ug/kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | <5.2 | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.2$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| Vinyl Acetate | $<5.2$ | ug/ kg dw | 08/16/2001 | 1468 | $<5.2$ | bmh | SW | 8260A |
| Vinyl Chloride | $<2.1$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<2.1$ | bmh | SW | 8260A |
| Xylenes, Total | $<5.2$ | ug/kg dw | 08/16/2001 | 1468 | <5.2 | bmh | SW | 8260A |
| d4-1, 2-Dichloroethane (surr) | 90 | 8 | 08/16/2001 | 1468 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 92 | 8 | 08/16/2001 | 1468 |  | bmh | SW | 8260A |
| ds-Toluene (surr) | 95 | $\%$ | 08/16/2001 | $1468{ }^{\circ}$ |  | bmh | SW | 8260A |
| Bromofluorobenzene(surr) | 92 | \% | 08/16/2001 | 1468 |  | bmh | SW | 8260A |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin) 08/29/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 0I. 14706
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 700082<br>SBI002:HMW18S:S230250:412

| Acenaphthene | $<345$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<346$ | dimg | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | $<346$ | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | dmg | SW | 8270 C |
| Anthracene | $<346$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/20/2001 | 949 | 1465 | <346 | dmg | SW | 8270 C |
| Benzo (a)anthracene | $<346$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<346$ | dmg | SW | 8270C |
| Benzo(b) fluoranthene | $<346$ | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | dmg | SW | 8270 C |
| Benzo(k)fluoranthene | $<346$ | $u g / \mathrm{kg}$ dw | 08/20/2001 | 949 | 1465 | <346 | dmg | SW | 8270 C |
| Benzo (a) pyrene | $<173$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<173$ | dmg | SW | 8270C |
| Benzyl alcohol | $<346$ | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | dmg | SW | 8270C |
| Benzyl butyl phthalate | <346 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<346$ | ding | Sw | 8270C |
| Bis (2-chloroethyl) ether | $<346$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<346$ | dimg | SW | 8270C |
| Bis (2-chloroethoxy) methane | $<346$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<346$ | dmg | SW | 8270C |
| Bis (2-ethylhexyl) phthalate | $<346$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<346$ | dmg | SW | 8270C |
| 2,2'-oxybis(1-Chloropropane) | $<346$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<346$ | dmg | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<346$ | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | ding | SW | 8270 C |
| 4-Chloroaniline | $<346$ | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | dmg | SW | 8270C |
| 2-Chloronaphthalene | $<346$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<346$ | dimg | SW | 8270C |
| Chrysene | $<346$ | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | ding | Sw | 8270C |
| Dibenzo (a, h) anthracene | $<173$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<173$ | dimg | Sw | 8270C |
| Dibenzofuran | $<346$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | <346 | dmg | SW | 8270C |
| 1,2-Dichlorobenzene | $<346$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<346$ | dmg | Sw | 8270C |
| 1,3-Dichlorobenzene | $<346$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<346$ | dmg | SW | 8270C |
| 1,4-Dichlorobenzene | $<346$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<346$ | dmg | SW | $8270{ }^{\circ}$ |
| 3,3'-Dichlorobenzidine | $<692$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | <692 | dmg | SW | 8270C |
| Diethyl phthalate | <346 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | <346 | dmg | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
08/29/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting Limit | Analyst Initials | Method Re | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { SAMPLE } \\ & 700082 \end{aligned}$ | NO. | $\begin{aligned} & \text { SAMPLE DE } \\ & \text { SBIOO2:HN } \end{aligned}$ | $\begin{aligned} & \text { SCRI } \\ & \text { W18S } \end{aligned}$ | $\begin{aligned} & \text { PTIO } \\ & : S 23 \end{aligned}$ | $0: 412$ |  |  |  | $\begin{aligned} & \text { DAT } \\ & 08 / \end{aligned}$ | $\begin{aligned} & 3 / T I M E \\ & 4 / 200 \end{aligned}$ | $\begin{array}{r} \text { TAKEN } \\ 1 \quad 09: 25 \end{array}$ |


| -methyl phthalate | <346 | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | dmg | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dinitrotoluene | <346 | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | dmg | sw | 82700 |
| 2,6-Dinitrotoluene | <346 | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | dmg | sw | 8270 C |
| Di-n-octylphthalate | <346 | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | dmg | Sw | 8270 C |
| Fluoranthene | <346 | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | dmg | sw | 8270 C |
| Fluorene | <346 | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | ding | Sw | 8270 C |
| Hexachlorobenzene | $<346$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<346$ | dmg | Sw | 8270 C |
| Hexachloro-1,3-butadiene | <346 | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | dmg | Sw | 8270 C |
| Hexachlorocyclopentadiene | $<692$ | ug/kg dw | 08/20/2001 | 949 | 1465 | <692 | dmg | Sw | 8270 C |
| Hexachloroethane | $<346$ | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | dimg | SW | 8270 C |
| Indeno (1,2,3-cd) pyrene | <346 | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | dmg | sw | 82700 |
| Isophorone | <346 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | <346 | dimg | SW | 8270C |
| Naphthalene | <346 | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | dmg | Sw | 8270 C |
| Nitrobenzene | <346 | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | dmg | Sw | 8270 C |
| N -Nitrosodi-n-propylamine | <346 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/20/2001 | 949 | 1465 | $<346$ | dmg | Sw | 8270 C |
| Phenanthrene | <346 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/20/2001 | 949 | 1465 | <346 | dmg | Sw | 8270C |
| Pyrene | <346 | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | dmg | sw | 8270 C |
| 1,2,4-Trichlorobenzene | <346 | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | dmg | Sw | 8270 C |
| Surrogate: d5-Nitrobenzene | 88 | $\%$ | 08/20/2001 | 949 | 1465 |  | dmg | Sw | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 93 | 8 | 08/20/2001 | 949 | 1465 |  | dmg | Sw | 8270C |
| Surrogate: di4-Terpheny | 101 | \% | 08/20/2001 | 949 | 1465 |  | dmg | sw | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,730 | ug/kg dw | 08/20/2001 | 949 | 1465 | <1,730 | dmg | Sw | 82700 |
| 4-Chloro-3-methylphenol | <346 | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | dimg | sw | 82700 |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

08/29/2001

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |
| Analyed | Number | Number | Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 700082

SBI002:HMW18S:S230250:412

DATE/TIME TAKEN 08/14/2001 09:25

| 2-Chlorophenol | $<346$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | ding | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dichlorophenol | $<346$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<346$ | ding | SW 8270C |
| 2,4-Dimethylphenol | $<346$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<346$ | dmg | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<346$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | <346 | dmg | SW 8270C |
| 2-Methylphenol | $<346$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | dmg | SW 8270C |
| meta \& para-Methylphenol | <346 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | <346 | dmg | SW 8270C |
| 2-Nitrophenol | $<346$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<346$ | dmg | SW 8270C |
| Pentachlorophenol | <346 |  | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | dmg | SW 8270C |
| Phenol | <346 |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<346$ | dmg | SW 8270C |
| 2,4,5-Trichlorophenol | $<346$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<346$ | dmg | SW 8270C |
| 2,4,6-Trichlorophenol | <346 |  | ug/kg dw | 08/20/2001 | 949 | 1465 | <346 | dmg | SW 8270C |
| Surrogate: d6-Phenol | 37 |  | $\%$ | 08/20/2001 | 949 | 1465 |  | dmg | SW 8270C |
| Surrogate: 2-Fluorophenol | 20 | Note | \% | 08/20/2001 | 949 | 1465 |  | dmg | SW 8270C |
| Surrogate: Tribromophenol | 54 |  | 7 | 08/20/2001 | 949 | 1465 |  | dmg | SW 8270C |
| TPH - DRO Non-Aqueous | 11.8 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 197 | 283 | $<10$ | meb | SW 8015M |
| TPH - FTIR Non-aq | <52 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 594 | 626 | <52 | 110 | 418.1 |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/29/2001

Job Number: 01.14706
Client Project ID: South Bend Indiana SBIOO2

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |

## SAMPLE NO. SAMPIE DESCRIPTION 700083 <br> SBIO02:HMW34S:S000010:412



# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
08/29/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |  |
| Analyzed | Number | Number | Limit | Initials Method Reference |  |  |  |

## SAMPLE NO. 700083

SAMPIE DESCRIPTION
DATE/TIME TAKEN 08/14/2001 11:36

| Dibromochloromethane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibromomethane | $<5.3$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | <5.3 | $u g / \mathrm{kg}$ dw | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.3$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.3$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<5.3$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $\leqslant 5.3$ | bmh | S* | 8260A |
| 1,1-Dichloroethene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.3$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| Ethylbenzene | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| n -Hexane | $<21.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<21.3$ | bmh | SW | 8260A |
| 2-Hexanone | $<53.1$ | ug/kg dw | 08/16/2001 | 1468 | $<53.1$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.3$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| p-Isopropyltoluene | $<5.3$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| Bromomethane | <10.6 | ug/kg dw | 08/16/2001 | 1468 | <10.6 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/29/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 700083

SAMPLE DESCRIPTION
SBIO02:HMW34S:S000010:412

DATE/TIME TAKEN
08/14/2001 11:36

| chylene Chloride | $<10.6$ |
| :---: | :---: |
| Methyl t-butyl ether (MTBE) | <5.3 |
| 4-Methyl-2-pentanone (MIBK) | $<53.1$ |
| n-Propylbenzene | $<5.3$ |
| Styrene | $<5.3$ |
| Naphthalene | $<5.3$ |
| 1,1,1,2-Tetrachloroethane | $<5.3$ |
| 1,1,2,2-Tetrachloroethane | $<5.3$ |
| Tetrachloroethene | $<5.3$ |
| Toluene | <5.3 |
| 1,2,4-Trichlorobenzene | $<5.3$ |
| 1,1,1-Trichloroethane | $<5.3$ |
| 1,1,2-Trichloroethane | $<5.3$ |
| Trichloroethene | $<5.3$ |
| Trichlorofluoromethane | $<5.3$ |
| 1,2,3-Trichloropropane | <5.3 |
| 1,2,4-Trimethylbenzene | $<5.3$ |
| 1,3,5-Trimethylbenzene | $<5.3$ |
| Vinyl Acetate | $<5.3$ |
| Vinyl Chloride | $<2.1$ |
| XYlenes, Total | <5.3 |
| d4-1,2-Dichloroethane (surr) | 89 |
| Dibromofluoromethane (surr) | 84 |
| d8-Toluene (surr) | 95 |
| Bromofluorobenzene (surr) | 94 |


| ug/kg dw | 08/16/2001 | 1468 | $<10.6$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| ug/kg dw | 08/16/2001. | 1468 | $<53.1$ | bmh | SW | 8260A |
| ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| ug/kg dw. | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmh | Sw | 8260A |
| ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.3 | bmh | Sw | 8260A |
| ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.3 | bmin | SW | 8260A |
| ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | sw | 8260A |
| ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmh | Sw | 8260A |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.3$ | bonh | SW | 8260A |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.3 | bmin | SW | 8260A |
| ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmh | S | 8260A |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <2.1 | bmh | Sw | 8260A |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| \% | 08/16/2001 | 1468 |  | bmh | SW | 8260A |
| \% | 08/16/2001 | 1468 |  | bmh | SW | 8260A |
| 8 | 08/16/2001 | 1468 |  | bmh | S | 8260A |
| 4 | 08/16/2001 | 1468 |  | bmh | S | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>\section*{Job Number: 01.14706}<br>\section*{Client Project ID: South Bend Indiana SBIO02}

08/29/2001

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | IIO |  |  |  |  | DAT | /TIME | TAKEN |
| 700083 |  | SBI002 : HM | N4S | S000 | 0:412 |  |  |  | 08/ | 4/2001 | 1 11:36 |


| Acenaphthene | $<351$ | ug/kg dw | 08/21/2001 | 949 | 1466 | <351 | dmg | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | $<351$ | ug/kg dw | 08/21/2001 | 949 | 1466 | <351 | dmg | SW 8270C |
| Anthracene | $<351$ | ug/kg dw | 08/21/2001 | 949 | 1466 | <351 | dmg | SW 8270C |
| Benzo(a) anthracene | 353 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<351$ | dmg | SW 8270C |
| Benzo (b) fluoranthene | 494 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<352$ | ding | SW 8270C |
| Benzo (k) fluoranthene | <351 | ug/kg dw | 08/21/2001 | 949 | 1466 | <351 | dmg | SW 8270C |
| Benzo (a) pyrene | 340 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<175$ | dmg | SW 8270C |
| Benzyl alcohol | <351 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/21/2001 | 949 | 1466 | $<351$ | dmg | SW 8270C |
| Benzyl butyl phthalate | <351 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<351$ | ding | SW 8270C |
| Bis (2-chloroethyl) ether | $<351$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | <351 | dmg | SW 8270C |
| Bis (2-chloroethoxy) methane | $<351$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<351$ | dmg | SW 8270C |
| Bis (2-ethyihexyl) phthalate | $<351$ | ug/ kg dw | 08/21/2001 | 949 | 1466 | $<351$ | dmg | SW 8270C |
| 2,2'-oxybis (1-Chloropropane) | <351 | ug/kg dw | 08/21/2001 | 949 | 1466 | $<351$ | dmg | SW 8270C |
| 4-Bromophenyl phenyl ether | $<351$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<351$ | dmg | SW 8270C |
| 4-Chloroaniline | <351 | ug/kg dw | 08/21/2001 | 949 | 1466 | <351 | dmg | SW 8270C |
| 2-Chloronaphthalene | $<351$ | ug/kg dw | 08/21/2001 | 949 | 1466 | <351 | dmg | SW 8270C |
| Chrysene | 408 | ug/kg dw | 08/21/2001 | 949 | 1466 | $<351$ | dmg | SW 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<175$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<175$ | dmg | SW 8270C |
| Dibenzofuran | <351 | ug/kg dw | 08/21/2001 | 949 | 1466 | $<351$ | dmg | SW 8270C |
| 1,2-Dichlorobenzene | $<351$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | <351 | dmg | SW 8270C |
| 1,3-Dichlorobenzene | $<351$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<351$ | dmg | SW 8270C |
| 1,4-Dichlorobenzene | $<351$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<351$ | dmg | SW 8270C |
| 3.3'-Dichlorobenzidine | $<701$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<701$ | dmg | SW 8270C |
| Diethyl phthalate | <351 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | <351 | dimg | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/29/2001

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


| smethyl phthalate | <351 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | <351 | dmg | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dinitrotoluene | <351 | ug/kg dw | 08/21/2001 | 949 | 1466 | <351 | dmg | SW | 8270c |
| 2,6-Dinitrotoluene | <351 | $u g / \mathrm{kg}$ dw | 08/21/2001 | 949 | 1466 | <351 | dmg | SW | 8270C |
| Di-n-octylphthalate | <351 | $u g / \mathrm{kg} d w$ | 08/21/2001 | 949 | 1466 | $<351$ | dimg | SW | 8270C |
| Fluoranthene | $<351$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<351$ | dmg | SW | 8270C |
| Fluorene | <351 | ug/kg dw | 08/21/2001 | 949 | 1466 | <351 | dmg | SW | 8270c |
| Hexachlorobenzene | <351 | ug/kg dw | 08/21/2001 | 949 | 1466 | <351 | dmg | SW | 8270C |
| Hexachloro-1, 3-butadiene. | $<351$ | ug/kg dw | 08/21/2001 | 949 | 1466 | <351 | dmg | SW | 8270C |
| Hexachlorocyclopentadiene | $<701$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<701$ | dmg | SW | 8270C |
| Hexachloroethane | $<351$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<351$ | dmg | SW | 8270 C |
| Indeno (1,2,3-cd) pyrene | <351 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | <351 | dmg | SW | 8270C |
| Isophorone | $<351$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<351$ | dmg | SW | 8270C |
| Naphthalene | <351 | ug/kg dw | 08/21/2001 | 949 | 1466 | <351 | dmg | SW | 8270C |
| Nitrobenzene | <351 | ug/kg dw | 08/21/2001 | 949 | 1466 | <351 | dmg | SW | 8270 C |
| N-Nitrosodi-n-propylamine | <351 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | <351 | dmg | SW | 82700 |
| Phenanthrene | 458 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | <351 | dmg | SW | 8270C |
| Pyrene | 704 | ug/kg dw | 08/21/2001 | 949 | 1466 | $<351$ | dmg | SN | 8270C |
| 1,2,4-Trichlorobenzene | $<351$ | ug/kg dw | 08/21/2001 | 949 | 1466 | <351 | dmg | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 87 | \% | 08/21/2001 | 949 | 1466 |  | dmg | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 97 | \% | 08/21/2001 | 949 | 1466 |  | dmg | SW | 8270 C |
| Surrogate: di4-Terphenyl | 96 | $\%$ | 08/21/2001 | 949 | 1466 |  | dmg | SN | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,750 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | <1,750 | dmg | SW | 8270C |
| 4-Chloro-3-methylphenol | <351 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | <351 | dmg | SW | 8270C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706

## Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CR | TIO1 |  |  |  |  | DAT | /TIME | TAKEN |
| 700083 |  | SBIOO2:HN | N34S | :S000 | $0: 412$ |  |  |  | 08/ | $4 / 2001$ | 11:36 |


| 2-Chlorophenol | $<351$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<351$ | dmg | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dichlorophenol | $<351$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<351$ | dmg | SW 8270C |
| 2,4-Dimethylphenol | $<351$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<351$ | ding | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<351$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<351$ | dmg | SW 8270C |
| 2-Methylphenol | $<351$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<351$ | dmg | SW 8270C |
| meta \& para-Methylphenol | $<351$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<351$ | dimg | SW 8270C |
| 2-Nitrophenol | $<351$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 949 | 1466 | $<351$ | dmg | SW 8270C |
| Pentachlorophenol | $<351$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<351$ | dimg | SW 8270C |
| Phenol | $<351$ | ug/kg dw | 08/21/2001 | 949 | 1466 | $<351$ | dimg | SW 8270C |
| 2,4,5-Trichlorophenol | $<351$ | ug/kg dw | 08/21/2001 | 949 | 1466 | <351 | dmg | SW 8270C |
| 2,4,6-Trichlorophenol | $<351$ | ug/kg dw | 08/21/2001 | 949 | 1466 | <351 | dmg | SW 8270C |
| Surrogate: d6-Phenol | 73 | f | 08/21/2001 | 949 | 1466 |  | dmg | SW 8270C |
| Surrogate: 2-Fluorophenol | 50 | \% | 08/21/2001 | 949 | 1466 |  | dmg | SW 8270C |
| Surrogate: Tribromophenol | 25 | \% | 08/21/2001 | 949 | 1466 |  | dmg | SW 8270C |
| TPH - DRO Non-Aqueous | 30.4 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 197 | 283 | $<11$ | meb | SW 8015M |
| TPH - FTIR Non-aq | $<53$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 594 | 626 | $<53$ | 110 | 418.1 |

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
08/29/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch Reporting Analyst |  |  |
| Analyed | Number | Number Limit | Initials Method Reference |  |  |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 700084 | SBIOO2:HMW-12D:S000020:505 | $08 / 13 / 2001$ 11:00 |


| - .. y Weight | 91.6 |  | \% | 08/23/2001 |  | 1483 |  | mhg | SM | 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  |  | 08/23/2001 |  | 1245 | Complete | emd | SW | 6010B |
| Arsenic, ICP | 4.9 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2975 | <3.5 | emd | SW | 6010 |
| Barium, ICP | 58.0 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2906 | $<0.70$ | emd | Sw | 6010B |
| Cadmium, ICP | <1.0 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2888 | $<1.0$ | emd | SW | 6010B |
| Chromium, ICP | 8.4 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2876 | $<1.4$ | emd | SW | 6010B |
| Lead, ICP | 58.0 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2877 | <2.8 | emd | SW | 6010B |
| Mercury, CVAA | 0.11 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 613 | 631 | $<0.009$ | epk | SW | 7471A |
| Selenium, ICP | $<3.5$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2955 | <3.5 | emd | SW | 6010B |
| Silver, ICP | <1.4 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2908 | $<1.4$ | emd | SW | 6010B |
| ICP Digestion, Nonaqueous | Complete |  |  | 08/22/2001 | 907 |  | Complete | -mrt | SW | 3050B |
| Mercury Digestion, Non-Aq | Complete |  |  | 08/24/2001 | 613 |  | Complete | clm | SW | 7471A |
| VOLATILE COMPOUNDS-8260 Non-Aq |  |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  |  | 08/16/2001 |  | 1468 | Complete | bmh |  |  |
| Acetone | $<109$ |  | ug/kg dw | 08/16/2001 |  | 1468 | $<109$ | bmh | SW | 8260A |
| Benzene | <5.5 | msr | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 |  | 1468 | <5.5 | bmh | SW | 8260A |
| tert-Butylbenzene | $<5.5$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 |  | 1468 | $<5.5$ | bmh | SW | 8260A |
| sec-Butylbenzene | <5.5 |  | ug/kg dw | 08/16/2001 |  | 1468 | $<5.5$ | bmh | SW | 8260A |
| n-Butylbenzene | $<5.5$ |  | ug/kg dw | 08/16/2001 |  | 1468 | $<5.5$ | bmh | SW | 8260A |
| Bromochloromethane | < 5.5 |  | $u g / \mathrm{kg}$ dw | 08/16/2001 |  | 1468 | $<5.5$ | bmh | SW | 8260A |
| Bromodichloromethane | <5.5 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 |  | 1468 | <5.5 | bmh | SW | 8260A |
| Bromoform | $<5.5$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 |  | 1468 | $<5.5$ | bmh | SW | 8260A |
| Bromobenzene | $<5.5$ |  | ug/kg dw | 08/16/2001 |  | 1468 | $<5.5$ | bmh | SW | 8260A |
| 2-Butanone (MEK) | $<55$ |  | ug/kg dw | 08/16/2001 |  | 1468 | $<55$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/29/2001

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


SAMPLE DESCRIPTION
SBI002:HMW-12D:S000020:505

DATE/TIME TAKEN 08/13/2001 11:00


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/29/2001
6130 Wilcox Rd.
Dublin, OH 43016

## Job Number: 01.14706

## Client Project ID: South Bend Indiana SBI002



| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 700084 | SBIOO2:HMW-12D:S000020:505 | $08 / 13 / 2001$ 11:00 |


| --ans-1,3-Dichloropropene | $<5.5$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ethylbenzene | <5.5 | 88 | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| Hexachlorobutadiene | <5.5 |  | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| $n$-Hexane | $<21.8$ |  | ug/kg dw | 08/16/2001 | 2468 | $<21.8$ | bmh | SW | 8260A |
| 2-Hexanone | $<54.6$ |  | ug/kg dw | 08/16/2001 | 1468 | $<54.6$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.5$ |  | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| p-Isopropyltoluene | <5.5 |  | $u g / \mathrm{kg}$ dw | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| Bromomethane | $<10.9$ |  | ug/kg dw | 08/16/2001 | 1468 | $<10.9$ | bmh | SW | 8260A |
| Methylene Chloride | $<10.9$ |  | ug/kg dw | 08/16/2001 | 1468 | $<10.9$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.5$ |  | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | bmin | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<54.6$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<54.6$ | bmh | SW | 8260A |
| $n$-Propylbenzene | $<5.5$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| Styrene | $<5.5$ |  | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| Naphthalene | <5.5 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.5$ |  | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | <5.5 |  | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmin | SW | 8260A |
| Tetrachloroethene | < 5.5 |  | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| Toluene | $<5.5$ | ms | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.5$ | bmh | s | 8260A |
| 1,2,4-Trichlorobenzene | <5.5 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | < 5.5 | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | <5.5 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | < 5.5 |  | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| Trichloroethene | $<5.5$ | mar | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| Trichlorofluoromethane | $<5.5$ |  | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | <5.5 |  | ug/kg dw | 08/16/2001 | 1468 | < 5.5 | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | <5.5 |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBIOO2


## SAMPLE NO. SAMPLE DESCRIPTION 700084 <br> SBIO02:HMW-12D: S000020:505

DATE/TIME TAKEN
08/13/2001 11:00

| 1,3,5-Trimethylbenzene | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmh | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Acetate | <5.5 | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmh | SW 8260A |
| Vinyl Chloride | $<2.2$ | ug/kg dw | 08/16/2001 | 1468 | <2.2 | bmh | SW 8260A |
| Kylenes, Total | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | bmh | SW 8260A |
| d4-1,2-Dichloroethane (surr) | 88 | \% | 08/16/2001 | 1468 |  | bmh | SW 8260A |
| Dibromofluoromethane (surr) | 91 | \% | 08/16/2001 | 1468 |  | brh | SW 8260A |
| d8-Toluene (surr) | 96 | \% | 08/16/2001 | 1468 |  | bmh | SW 8260A |
| Bromofluorobenzene (surr) | 94 | $\%$ | 08/16/2001 | 1468 |  | bmh | SW 8260A |

SAMPLE NO. SAMPLE DESCRIPTION 700085 SBI002:HMW-11D:S020040:505

| Dry Weight | 93.1 | \% | 08/23/2001 |  | 1483 |  | mhg |  | 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/24/2001 |  | 1249 | Complete | emd |  | 6010B |
| Arsenic, ICP | <14 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 907 | 2980 | $<14$ | emd |  | 6010B |
| Barium, ICP | 99.5 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2906 | <1.4 | emd | S | 6010B |
| Cadmium, ICP | $<2.1$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2888 | $<2.1$ | emd | S | 6010B |
| Chromium, ICP | 11.4 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2876 | $<2.8$ | emd |  | 6010B |
| Lead, ICP | 177 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2877 | <5.6 | emd |  | 6010B |
| Mercury, CVAA | 0.159 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 613 | 631 | $<0.009$ | epk | S | 7471A |
| Selenium, ICP | $<7.0$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2955 | $<7.0$ | emd | S | 6010B |
| Silver, ICP | <2.8 | mg/kg dw | 08/23/2001 | 907 | 2908 | <2.8 | emd | S | 6010B |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBIO02


## SAMPLE NO. 700085

SAMPLE DESCRIPTION
SBI002:HMW-11D:S020040:505

DATE/TIME TAKEN 08/14/2001 08:00

| ICP Digestion, Nonaqueous | Complete |  | 08/22/2001 | 907 |  | Complete |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mercury Digestion, Non-Aq | Complete |  | 08/24/2001 | 613 |  | Complete | clm | SW | 7471A |
| VOLATILE COMPOUNDS-8260 NOn-Aq |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/16/2001 |  | 1468 | Complete | bmin |  |  |
| Acetone | $<107$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 |  | 1468 | $<107$ | bmh | SW | 8260A |
| Benzene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 |  | 1468 | <5.4 | bmh | SW | 8260A |
| tert-Butylbenzene | <5.4 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/16/2001 |  | 1468 | <5.4 | bmh | SW | 8260A |
| sec-Butylbenzene | <5.4 | ug/kg dw | 08/16/2001 |  | 1468 | $<5.4$ | bmh | SW | 8260A |
| n-Butylbenzene | $<5.4$ | ug/kg dw | 08/16/2001 |  | 1468 | $<5.4$ | bmh | SW | 8260A |
| Bromochloromethane | $<5.4$ | ug/kg dw | 08/16/2001 |  | 1468 | $<5.4$ | bmh | SW | 8260A |
| Bromodichloromethane | $<5.4$ | ug/kg dw | 08/16/2001 |  | 1468 | $<5.4$ | bmh | SW. | 8260A |
| Eromoform | $<5.4$ | ug/kg dw | 08/16/2001 |  | 1468 | $<5.4$ | bmh | SW | 8260A |
| Bromobenzene | < 5.4 | ug/kg dw | 08/16/2001 |  | 1468 | $<5.4$ | bmh | SW | 8260A |
| 2-Butanone (MEK) | <54 | ug/kg dw | 08/16/2001 |  | 1468 | $<54$ | bmh | SW | 8260A |
| Carbon disulfide | <5.4 | ug/kg dw | 08/16/2001 |  | 1468 | $<5.4$ | bmh | SW | 8260A |
| Carbon tetrachloride | <5.4 | ug/kg dw | 08/16/2001 |  | 1468 | $<5.4$ | bmh | SW | 8260A |
| Chlorobenzene | <5.4 | ug/kg dw | 08/16/2001. |  | 1468 | $<5.4$ | bmh | SW | 8260A |
| Chloroethane | $<10.7$ | ug/kg dw | 08/16/2001 |  | 1468 | $<10.7$ | bmh | SW | 8260A |
| 2-Chlorotoluene | $<5.4$ | ug/kg dw | 08/16/2001 |  | 1468 | $<5.4$ | bmh | SW | 8260A |
| 4-Chlorotoluene | <5.4 | ug/kg dw | 08/16/2001 |  | 1468 | $<5.4$ | bmh | SW | 8260A |
| Chloroform | <5.4 | ug/kg dw | 08/16/2001 |  | 1468 | $<5.4$ | brah | SW | 8260A |
| Chloromethane | $<10.7$ | ug/kg dw | 08/16/2001 |  | 1468 | $<10.7$ | bmh | SW | 8260A |
| Dibromochloromethane | $<5.4$ | ug/kg dw | 08/16/2001 |  | 1468 | <5.4 | bmh | SW | 8260A |
| Dibromomethane | <5.4 | ug/kg dw | 08/16/2001 |  | 1468 | <5.4 | bmh | SW | 8260A |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin) 08/29/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
700085 SBIOO2:HMW-11D:S020040:505

DATE/TIME TAKEN 08/14/2001 08:00

| Dichlorodifluoromethane | $<5.4$ | ug/kg dw | 08/16/2001 | 1468 | $<5.4$ | bmh | SW B260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dibromo-3-chloropropane | <5.4 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.4$ | bmh | SW 8260A |
| 1,2-Dichlorobenzene | <5.4 | ug/kg dw | 08/16/2001 | 1468 | $<5.4$ | bmh | SW 8260A |
| 1,3-Dichlorobenzene | $<5.4$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.4$ | bmh | SW 8260A |
| 1,4-Dichlorobenzene | <5.4 | ug/kg dw | 08/16/2001 | 1468 | <5.4 | bmh | SW 8260A |
| 1,1-Dichloroethane | $<5.4$ | ug/kg dw | 08/16/2001 | 1468 | $<5.4$ | bmh | SW 8260A |
| 1,2-Dichloroethane | $<5.4$ | ug/kg dw | 08/16/2001 | 1468 | $<5.4$ | bmh | SW 8260A |
| 1,1-Dichloroethene | $<5.4$ | ug/kg dw | 08/16/2001 | 1468 | $<5.4$ | bmh | SW 8260A |
| cis-1,2-Dichloroethene | $<5.4$ | ug/kg dw | 08/16/2001 | 1468 | $<5.4$ | bmh | SW 8260A |
| trans-1,2-Dichloroethene | $<5.4$ | ug/kg dw | 08/16/2001 | 1468 . | <5.4 | bmh | SW 8260A |
| 1,2-Dichloropropane | $<5.4$ | ug/kg dw | 08/16/2001 | 1468 | <5.4 | bmh | SW 8260A |
| 1,3-Dichloropropane | <5.4 | ug/kg dw | 08/16/2001 | 1468 | <5.4 | bmh | SW 8260A |
| 2,2-Dichloropropane | $<5.4$ | ug/kg dw | 08/16/2001 | 1468 | $<5.4$ | bmh | SW 8260A |
| 1,1-Dichloropropene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.4$ | bmh | SW 8260A |
| Cis-1,3-Dichloropropene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.4$ | bmh | SW 8260A |
| trans-1,3-Dichloropropene | $<5.4$ | ug/kg dw | 08/16/2001 | 1468 | $<5.4$ | bah | SW 8260A |
| Ethylbenzene | <5.4 | ug/kg dw | 08/16/2001 | 1468 | <5.4 | bmh | SW 8260A |
| Hexachlorobutadiene | <5.4 | ug/kg dw | 08/16/2001 | 1468 | <5.4 | bmh | SW 8260A |
| n -Hexane | $<21.5$ | ug/kg dw | 08/16/2001 | 1468 | $<21.5$ | bmh | SW 8260A |
| 2-Hexanone | $<53.7$ | ug/kg dw | 08/16/2001 | 1468 | $<53.7$ | bmh | SW 8260A |
| Isopropylbenzene (Cumene) | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.4$ | bmh | SW 8260A |
| p-Isopropyltoluene | $<5.4$ | ug/kg dw | 08/16/2001 | 1468 | $<5.4$ | bmh | SW 8260A |
| Bromomethane | $<10.7$ | ug/kg dw | 08/16/2001 | 1468 | $<10.7$ | bmh | SW 8260A |
| Methylene Chloride | $<10.7$ | ug/kg dw | 08/16/2001 | 1468 | $<10.7$ | bmh | SW 8260A |
| Methyl t-butyl ether (MTBE) | $<5.4$ | ug/kg dw | 08/16/2001 | 1468 | $<5.4$ | bmh | SW 8260A |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/29/2001

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION 700085 <br> SBIO02:HMW-11D:S020040:505

DATE/TIME TAKEN 08/14/2001 08:00


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 700086 SBI002:HMW21D:S005020:428

08/29/2001

Limit
Initials Method Reference


## ANALYTICAL REPORT

Kevin Wildman<br>HUL工 \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.14706<br>\section*{Client Project ID: South Bend Indiana SBI002}

$08 / 29 / 2001$

SAMPLE NO. SAMPLE DESCRIPTION
700086

DATE/TIME TAKEN
08/13/2001.09:30

| ....oromomethane | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dichlorodifluoromethane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.3$ | bmh | Sw | 8260A |
| 1,2-Dichlorobenzene | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | < 5.3 | brih | SW | 8260A |
| 1,3-Dichlorobenzene | <5.3 | ug/kg dw | 08/16/2001 | 1468 | < 5.3 | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmh | Sw | 8260A |
| 1,1-Dichloroethane | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmin | SW | 8260A |
| 1,2-Dichloroethane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmh | Sw | 8260A |
| trans-1,2-Dichloroethene | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.3$ | bmh | Sw | 8260A |
| 1,3-Dichloropropane | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| cis-1,3-Dichloropropene | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| Ethylbenzene | $<5.3$ | $\underline{u g} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| Hexachlorobutadiene | <5.3 | ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| n -Hexane | <21.1 | ug/kg dw | 08/16/2001 | 1468 | $<21.1$ | bmh | SW | 8260A |
| 2-Hexanone | $<52.9$ | ug/kg dw | 08/16/2001 | 1468 | $<52.9$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| p-Isopropyltoluene | <5.3 | ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| Bromomethane | $<10.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<10.6$ | bmh | SW | 8260A |
| Methylene Chloride | <10.6 | ug/kg dw | 08/16/2001 | 1468 | $<10.6$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | PTIO1 |  |  |  |  | DAT | /TIME | TAKEN |
| 700086 |  | SBIO02: HM | N21D | : S005 | 0: 428 |  |  |  | 08/ | 3/2001 | 1 09:30 |


| Methyl t-butyl ether (MTBE) | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Methyl-2-pentanone (MIBK) | $<52.9$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<52.9$ | bmh | SW | 8260A |
| n-Propylbenzene | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | <5.3 | bruh | SW | 8260A |
| Styrene | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| Naphthalene | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| 1,1,2,2-Tetrachlorothane | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| Tetrachloroethene | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| Toluene | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | <5.3 | ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | <5.3 | ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| Trichloroethene | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| Trichlorofluoromethane | $<5.3$ | $u g / \mathrm{kg}$ dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| Vinyl Acetate | $<5.3$ | ug/kg dw | 08/16/2001 | 1468 | <5.3 | bmh | SW | 8260A |
| Vinyl Chloride | $<2.1$ | ug/kg dw | 08/16/2001 | 1468 | $<2.1$ | bmh | SW | 8260A |
| Xylenes, Total | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.3$ | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 89 | 8 | 08/16/2001 | 1468 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 90 | 8 | 08/16/2001 | 1468 |  | bmh | SW | 8260A |
| d8-Toluene (surr) | 93 | \% | 08/16/2001 | 1468 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 92 | 4 | 08/16/2001 | 1468 |  | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/29/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

## Job Number: 01.14706

## Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION
700086

| Acenaphthene | $<349$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | $<349$ | $u g / \mathrm{kg}$ dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW 8270C |
| Anthracene | $<349$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<349$ | dimg | SW 8270C |
| Benzo (a)anthracene | $<349$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW 8270C |
| Benzo(b) fluoranthene | $<349$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | Sw 8270C |
| Benzo(k) fluoranthene | $<349$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW 8270C |
| Benzo (a) pyrene | $<174$ | ug/kg dw. | 08/20/2001 | 949 | 1465 | $<174$ | dmg | SW 8270C |
| Benzyl alcohol | $<349$ | $u g / \mathrm{kg}$ dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW 8270C |
| Benzyl butyl phthalate | $<349$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW 8270C |
| Bis (2-chloroethyl) ether | $<349$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW 8270C |
| Bis (2-chloroethoxy) methane | $<349$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW 8270C |
| Bis (2-ethylhexyl) phthalate | $<349$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW 8270C |
| 2,2'-oxybis(1-Chloropropane) | $<349$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW 8270C |
| 4-Bromophenyl phenyi ether | $<349$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW 8270C |
| 4-Chloroaniline | $<349$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<349$ | dimg | Sw 8270C |
| 2-Chloronaphthalene | $<349$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW 8270C |
| Chrysene | $<349$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<349$ | ding | SW 8270C |
| Dibenzo( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<174$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<174$ | dmg | SW 8270C |
| Dibenzofuran | $<349$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW 8270C |
| 1,2-Dichlorobenzene | $<349$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW 8270C |
| 1,3-Dichlorobenzene | $<349$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW 8270C |
| 1,4-Dichlorobenzene | $<349$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<349$ | dmg | Sw 8270C |
| 3.3'-Dichlorobenzidine | $<698$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<698$ | dmg | SW 8270C |
| Diethyl phthalate | <349 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | <349 | dmg | SW 8270C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/29/2001

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | PTIO |  |  |  |  | DAT | /TIME | TAKEN |
| 700086 |  | SBIO 02 : HM | W21D | : S005 | $0: 428$ |  |  |  | 08/ | 3/2001 | 1 09:30 |


| Dimethyl phthalate | $<349$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dinitrotoluene | $<349$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW | 8270C |
| 2,6-Dinitrotoluene | <349 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | <349 | dimg | SW | 8270C |
| Di-n-octylphthalate | <349 |  | ug/kg dw | 08/20/2001 | 949 | 1465 | <349 | dimg | Sw | 8270C |
| Fluoranthene | <349 |  | ug/kg dw | 08/20/2001 | 949 | 1465 | <349 | ding | SW | 8270C |
| Fluorene | $<349$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | <349 | dmg | SW | 8270C |
| Hexachlorobenzene | $<349$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW | 8270 C |
| Hexachloro-1,3-butadiene | <349 |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW | 8270 C |
| Hexachlorocyclopentadiene | $<698$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | <698 | dimg | SW | 8270C |
| Hexachloroethane | $<349$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW | 8270 C |
| Indeno(1,2,3-cd) pyrene | $<349$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | <349 | dimg | SW | 8270C |
| Isophorone | $<349$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW | 8270C |
| Naphthalene | $<349$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dimg | SW | 8270C |
| Nitrobenzene | $<349$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<349$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<349$ | ding | SW | 8270 C |
| Phenanthrene | $<349$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<349$ | dmg | Sw | 8270C |
| Pyrene | $<349$ | MS | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW | 8270C |
| 1,2,4-Trichlorobenzene | <349 |  | ug/kg dw | 08/20/2001 | 949 | 1465 | <349 | dmg | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 82 |  | $\%$ | 08/20/2001 | 949 | 1465 |  | dmg | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 91 |  | 8 | 08/20/2001 | 949 | 1465 |  | dmg | SW | 8270C |
| Surrogate: d14-Terphenyl | 94 |  | $\%$ | 08/20/2001 | 949 | 1465 |  | dmg | SW | 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,740 |  | ug/kg dw | 08/20/2001 | 949 | 1465 | <1,740 | dmg | SW | 8270C |
| 4-Chloro-3-methylphenol | <349 |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 700086

SAMPLE DESCRIPTION
SBI002:HMW21D:S005020:428
DATE/TIME TAKEN
08/13/2001 09:30

| Chlorophenol | $<349$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW | 8270C |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dichlorophenol | $<349$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW | 8270C |  |
| 2,4-Dimethylphenol | <349 |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW | 8270C |  |
| 2-Methyi-4,6-dinitrophenol | $<349$ |  | ug/kg. dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW | $8270{ }^{\text {c }}$ |  |
| 2-Methylphenol | <349 |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW | 8270C |  |
| meta \& para-Methylphenol | $<349$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW | 8270C |  |
| 2-Nitrophenol | $<349$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW | 8270C |  |
| Pentachlorophenol | $<349$ | SS | $\mathrm{ug} / \mathrm{kg}$ dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW | 8270C |  |
| Phenol | $<349$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dimg | SW | 8270C |  |
| 2,4,5-Trichlorophenol | $<349$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW | 8270C |  |
| 2,4,6-Trichlorophenol | $<349$ |  | ug/kg dw | 08/20/2001 | 949 | 1465 | $<349$ | dmg | SW | 8270C |  |
| Surrogate: d6-Phenol | 71 |  | 8 | 08/20/2001 | 949 | 1465 |  | dmg | SW | 82700 |  |
| Surrogate: 2-Fluorophenol | 51 |  | 8 | 08/20/2001 | 949 | 1465 |  | dmg | SW | 8270C |  |
| Surrogate: Tribromophenol | 28 |  | 8 | 08/20/2001 | 949 | 1465 |  | dmg | SW | 8270 C |  |
| TPH - FTIR Non-aq | 64 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 594 | 626 | $<53$ | 110 |  |  |  |
| SAMPLE NO. S | SAMPLE DESCRIPTION |  |  |  |  |  |  | DATE/TIME TAKEN |  |  |  |
| 700087 S | SBI002 : HMW12S:S005020:428 |  |  |  |  |  |  | 08/14/2001 08:00 |  |  |  |


| Dry Weight | 88.8 |  | $08 / 23 / 2001$ |  | 1483 |  | mhg | SM 2540 G. |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ICP NONAQUEOUS | Complete |  | $08 / 23 / 2001$ |  | 1245 | Complete | emd | SW | $6010 B$ |
| Arsenic, ICP | $<7.4$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | $08 / 23 / 2001$ | 907 | 2975 | $<7.4$ | emd | SW | 6010 B |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Rumber | Number | Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION
700087

DATE/TIME TAKEN 08/14/2001 08:00

| Barium, ICP | 176 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2906 | $<0.74$ | emd | SW | 6010B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cadmium, ICP | <1.1 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2888 | <1.1 | emd | SW | 6010B |
| Chromium, ICP | 6.4 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2876 | <1.5 | emd | SW | 6010B |
| Lead, ICP | 241 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2877 | $<2.9$ | emd | SH | 6010B |
| Mercury, CVAA | 0.089 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 613 | 631 | $<0.009$ | epk | SW | 7471A |
| Selenium, ICP | $<3.7$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2955 | $<3.7$ | emd | Sw | 6010B |
| Silver, ICP | <1.5 | $\mathrm{mg} / \mathrm{kg}$ dw | 08/23/2001 | 907 | 2908 | <1.5 | emd | SW | 6010日 |
| ICP Digestion, Nonaqueous | Complete |  | 08/22/2001 | 907 |  | Complete | mrt | S | 3050B |
| Mercury Digestion, Non-Aq | Complete |  | 08/24/2001 | 613 |  | Complete | clm | SW | 7471A |
| VOLATILE COMPOUNDS-8260 NOR-Aq |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/16/2001 |  | 1468 | Complete | bmh |  |  |
| Acetone | <113 | ug/kg dw | 08/16/2001 |  | 1468 | $<113$ | bmh | SW | 8260A |
| Benzene | <5.6 | ug/kg dw | 08/16/2001 |  | 1468 | <5.6 | bmh | SW | 8260A |
| tert-Butylbenzene | $<5.6$ | ug/kg dw | 08/16/2001 |  | 1468 | $<5.6$ | bmh | SW | 8260A |
| sec-Butylbenzene | $<5.6$ | ug/kg dw | 08/16/2001 |  | 1468 | $<5.6$ | bmh | SW | 8260A |
| n-Butylbenzene | <5.6 | ug/kg dw | 08/16/2001 |  | 1468 | <5.6 | bmh | SW | 8260A |
| Bromochloromethane | <5.6 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 |  | 1468 | <5.6 | bmh | SW | 8260A |
| Bromodichloromethane | $<5.6$ | ug/kg dw | 08/16/2001 |  | 1468 | $<5.6$ | bmh | Sh | 8260A |
| Bromoform | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 |  | 1468 | $<5.6$ | bmh | SW | 8260A |
| Bromobenzene | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 |  | 1468 | $<5.6$ | bmh | SW | 8260A |
| 2-Butanone (MEK) | $<56$ | ug/kg dw | 08/16/2001 |  | 1468 | $<56$ | bmh | SW | 8260A |
| Carbon disulfide | < 5.6 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 |  | 1468 | <5.6 | bmh | SW | 8260A |
| Carbon tetrachloride | <5.6 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 |  | 1468 | $<5.6$ | bmh | SH | 8260A |
| Chlorobenzene | <5.6 | ug/kg dw | 08/16/2001 |  | 1468 | <5.6 | bmh | SH | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
08/29/2001
6130 Wilcox Rd.
Dublin, OH 43016

## Job Number: 01.14706

Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION
700087 SBIOO2:HMW12S:S005020:428

DATE/TIME TAKEN
08/14/2001 08:00

| chloroethane | $<11.3$ | ug/kg dw | 08/16/2001 | 1468 | $<11.3$ | bmh | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Chlorotoluene | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | < 5.6 | bmh | SW 8260A |
| 4-Chlorotoluene | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | <5.6 | bmh | SW 8260A |
| Chloroform | <5.6 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.6$ | bmh | SW 8260A |
| Chloromethane | $<11.3$ | ug/kg dw | 08/16/2001 | 1468 | $<11.3$ | bmh | SW 8260A |
| Dibromochloromethane | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.6$ | bmh | SW 8260A |
| Dibromomethane | < 5.6 | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW 8260A |
| Dichlorodifluoromethane | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW 8260A |
| 1,2-Dibromo-3-chloropropane | <5.6 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.6$ | bmh | SW 8260A |
| 1,2-Dichlorobenzene | <5.6 | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | brah | SW 8260A |
| 1,3-Dichlorobenzene | <5.6 | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | Sw 8260A |
| 1,4-Dichlorobenzene | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW 8260A |
| 1,1-Dichloroethane | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW 8260A |
| 1,2-Dichloroethane | $<5.6$ | $u g / \mathrm{kg}$ dw | 08/16/2001 | 1468 | <5.6 | bmh | SW 8260A |
| 1,1-Dichloroethene | $<5.6$ | $u g / \mathrm{kg}$ dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW 8260A |
| cis-1,2-Dichloroethene | <5.6 | ug/kg dw | 08/16/2001 | 1468 | <5.6 | bmh | SW 8260A |
| trans-1,2-Dichloroethene | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | <5.6 | bmh | SW 8260A |
| 1,2-Dichloropropane | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW 8260A |
| 1,3-Dichloropropane | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW 8260A |
| 2,2-Dichloropropane | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | <5.6 | bmh | SW B260A |
| 1,1-Dichloropropene | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.6$ | bmh | SW 8260A |
| Cis-1,3-Dichloropropene | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.6 | bmh | SW 8260A |
| trans-1,3-Dichloropropene | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW 8260A |
| Ethylbenzene | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW 8260A |
| Hexachlorobutadiene | <5.6 | ug/kg dw | 08/16/2001 | 1468 | <5.6 | bah | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units |  | Date | Batch | Batch | Reporting | Analyst |  |
| Rumber | Number | Limit | Initials Method Reference |  |  |  |  |

## SAMPLE NO. 700087

SAMPLE DESCRIPTION
SBIO02:HMW12S:S005020:428

DATE/TIME TAKEN 08/14/2001 08:00

| n-Hexane | $<22.5$ | ug/kg dw | 08/16/2001 | 1468 | $<22.5$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Hexanone | $<56.3$ | ug/kg dw | 08/16/2001 | 1468 | $<56.3$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | <5.6 | ug/kg dw | 08/16/2001 | 1468 | <5.6 | bmh | sw | 8260A |
| p-Isopropyltoluene | <5.6 | ug/kg dw | 08/16/2001 | 1468 | <5.6 | bmh | SW | 8260A |
| Eromomethane | $<11.3$ | ug/kg dw | 08/16/2001 | 1468 | $<11.3$ | bmh | SW | 8260A |
| Methylene Chloride | $<11.3$ | ug/kg dw | 08/16/2001 | 1468 | $<11.3$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | <5.6 | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<56.3$ | ug/kg dw | 08/16/2001 | 1468 | $<56.3$ | bmh | SW | 8260A |
| $n$-Propylbenzene | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| Styrene | <5.6 | ug/kg dw | 08/16/2001 | 1468 | <5.6 | bomh | SW | 8260A |
| Naphthalene | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | <5.6 | ug/kg dw | 08/16/2001 | 1468 | < 5.6 | buh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| Tetrachloroethene | 19.6 | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| Toluene | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | <5.6 | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | <5.6 | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | <5.6 | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| Trichloroethene | $<5.6$ | ug/kg dw | .08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| Trichlorofluoromethane | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.6$ | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| Vinyl Acetate | <5.6 | ug/kg dw | 08/16/2001 | 1468 | $<5.6$ | bmh | SW | 8260A |
| Vinyl Chloride | <2.3 | ug/kg dw | 08/16/2001 | 1468 | <2.3 | bmh | SW | 8260A |

## ANALYIICAL REPORT

Kevin Wildman<br>HULI \& ASSOC. (Dublin)<br>08/29/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.14706<br>Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analyzed | Number | Number | Limit | Initials Method Reference |  |

SAMPLE NO. 700087

SAMPLE DESCRIPTION SBIO02:HMW12S:SO05020:428

DATE/TIME TAKEN 08/14/2001 08:00

| . enes, Total | <5.6 |  | ug/kg dw | 08/16/2001 | 1468 | <5.6 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d4-1,2-Dichloroethane (surr) | 90 |  | $\%$ | 08/16/2001 | 1468 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 94 |  | \% | 08/16/2001 | 1468 |  | bmh | SW | 8260A |
| d8-Toluene (burr) | 96 |  | $t$ | 08/16/2001 | 1468 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 100 |  | $\%$ | 08/16/2001 | 1468 |  | bmh | SW | 8260A |
| TPH - GRO (Non-Aqueous) | <6 | ss | mg/kg dw | 08/16/2001 | 247 | <6 | meb | SW | 8015M |

## SAMPLE NO. SAMPLE DESCRIPTION 700088 SBI002:FB-1:W081401:412

DATE/TIME TAKEN 08/14/2001 17:40

| ICPMS TOtal metals | Complete |  | 08/27/2001 |  | 2475 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 08/27/2001 | 1810 | 3582 | <0.0050 | ekh | SW | 6020 |
| Barium, ICPMS | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 08/27/2001 | 1810 | 3791 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | mg/L | 08/27/2001 | 1810 | 3461 | $<0.0010$ | ekh | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | mg/L | 08/27/2001 | 1810 | 3848 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | $<0.0010$ | mg/L | 08/27/2001 | 1810 | 3539 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | mg/L | 08/21/2001 | 1372 | 1313 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | mg/L | 08/20/2001 | 732 | 556 | $<0.0050$ | 1 nh | SW | 7740 |
| Silver, ICPMS | <0.0005 | mg/L | 08/27/2001 | 1810 | 3793 | $<0.0005$ | ekh | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 08/23/2001 | 1810 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 08/20/2001 | 732 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 08/20/2001 | 1372 |  | Complete | clm | Sw | 7470A |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed |  |  |  |  |
| Batch | Batch | Reporting Analyst | Number Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 700088

SBI002:FB-1:W081401:412

DATE/TIME TAKEN 08/14/2001 17:40
Prep, Base Neutral
Prep, Acid Extractable
Prep, PCB Aqueous 8082
Prep, TPH - 418.1 aq
Prep, TPH DRO Aqueous
VOLATILE COMPOUNDS - 8260 (AQ)


## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin) 08/29/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 700088 |  | SBI002: FB | - | 81401 | 412 |  |  |  | 08/ | 4/2001 | 17:40 |


| - 1 loromethane | $<5.0$ | ug/L | 08/15/2001 | 3488 | < 5.0 | $m \mathrm{~m}$ | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibromochloromethane | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| Dibromomethane | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 08/15/2001 | 3488 | $<5.0$ | mrh | SW | 8260A |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 08/15/2001 | 3488 | <1.0 | mrh | SW | 8260A |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| Cis-1,3-Dichloropropene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrs | SW | 8260A |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| Ethylbenzene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| Hexachlorobutadiene | $<5.0$ | ug/L | 08/15/2001 | 3488 | $<5.0$ | mrh | SW | 8260A |
| n -Hexane | $<5.0$ | ug/L | 08/15/2001 | 3488 | <5.0 | mrh | SW | 8260A |
| 2 -Hexanone | $<12.5$ | ug/L | 08/15/2001 | 3488 | $<12.5$ | mrh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| p-Isopropyltoluene | <1.0 | ug/L | 08/15/2001 | 3488 | <1.0 | mrh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman

HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting | Analyst |  |
| Number | Limit | Initials Method Reference |  |  |  |  |  |

## SAMPLE NO. SAMPLE DESCRIPTION 700088 <br> SBI002:FB-1:W081401:412

| Bromomethane | $<5.0$ | ug/L | 08/15/2001 | 3488 | $<5.0$ | mrh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Methylene Chloride | $<5.0$ | ug/L | 08/15/2001 | 3488 | <5.0 | mrh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 08/15/2001 | 3488 | $<5.0$ | mrh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 08/15/2001 | 3488 | $<12.5$ | mrh | SW | 8260A |
| n-Propylbenzene | <1.0 | ug/L | 08/15/2001 | 3488 | <1.0 | mrh | SW | 8260A |
| Styrene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | $m \times h$ | SW | 8260A |
| Naphthalene | $<5.0$ | ug/L | 08/15/2001 | 3488 | <5.0 | mre | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 08/15/2001 | 3488 | <1.0 | mrh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| Tetrachloroethene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| Toluene | $<1.0$ | ug/L | 08/15/2001 | 3488 | <1.0 | mrh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 08/15/2001 | 3488 | $<5.0$ | mrh | SW | 8260A |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 08/15/2001 | 3488 | <1.0 | mrh | SW | 8260A |
| Trichloroethene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh. | SW | 8260A |
| Trichlorofluoromethane | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 08/15/2001 | 3488 | <5.0 | mrh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| Vinyl Acetate | $<5.0$ | ug/L | 08/15/2001 | 3488 | $<5.0$ | mrh | SW | 8260A |
| Vinyl Chloride | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| Xylenes | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 100 | \% | 08/15/2001 | 3488 |  | mrh | SW | 8260A |
| Dibromofluoromethane (surr) | 98 | $\%$ | 08/15/2001 | 3488 |  | mrh | SW | 8260A |
| d8-Toluene (surr) | 99 | 8 | 08/15/2001 | 3488 |  | mrh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/29/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBIO02

|  |  | Result | Flag | Unita | Date <br> Analyzed | Prep Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | SCRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 700088 |  | SBI002: FB | -1:W | 8140 | 412 |  |  |  | 08/ | $4 / 2001$ | 1 17:40 |


| _omofluorobenzene (surr) | 103 | \% | 08/15/2001 | 3488 |  |  | mrh | SW 8260A |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jes | SW | 8270C |
| Acenaphthylene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW | 8270C |
| Anthracene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jes | SW | $8270{ }^{\text {c }}$ |
| Benzo (a) anthracene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jes | Sw | 8270C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jes | SW | 8270 C |
| Benzo (k) fluoranthene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW | 8270C |
| Benzo (a) pyrene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jes | SW | 8270C |
| Benzyl alcohol | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW | 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jes | SW | 8270 C |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW | 8270 C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jes | SW | 8270 C |
| bis (2-Ethylhexyl)phthalate | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jes | SW | $8270{ }^{\text {c }}$ |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jes | SW | 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW | $8270{ }^{\text {c }}$ |
| 2-Chloronaphthalene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jes | Sw | 8270 C |
| Chrysene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jes | SW | 8270 C |
| Dibenzo (a, h) anthracene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW | 8270C |
| Dibenzofuran | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW | 8270c |
| 1,2-Dichlorobenzene | <10 | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jes | SW | 8270 C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jes | SW | 82700 |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) 08/29/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 700088

SAMPLE DESCRIPTION
SBI002:FB-1:W081401:412

DATE/TIME TAKEN 08/14/2001 17:40

| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 08/23/2001 | 1256 | 2661 | $<50$ | jcs | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Diethyl phthalate | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jes | SW 8270C |
| 2.6-Dinitrotoluene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jes | SW 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW 8270C |
| Fluoranthene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jes | SW 8270C |
| Fluorene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW 8270C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 08/23/2001 | 1256 | 2661 | $<20$ | jcs | SW 8270C |
| Hexachloroethane | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW 8270C |
| Indeno(1,2,3-cd) pyrene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW 8270C |
| Isophorone | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW 8270C |
| Naphthalene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jes | SW 8270C |
| Nitrobenzene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jes | SW 8270C |
| Phenanthrene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW 8270C |
| Pyrene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | Sw 8270C |
| Surrogate: d5-Nitrobenzene | 76 | \% | 08/23/2001 | 1256 | 2661 |  | jes | SW 8270C |
| Surrogate: 2-Fluorobiphenyl | 78 | 8 | 08/23/2001 | 1256 | 2661 |  | jes | SW 8270C |
| Surrogate: d14-Terphenyl | 82 | 8 | 08/23/2001 | 1256 | 2661 |  | jes | SW 8270C |

ACID COMPOUNDS (AQ) 8270

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/29/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

## Job Number: 01.14706

Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 700088 |  | SBI002: FB | -1: | 814 | 412 |  |  |  | 08/ | $4 / 2001$ | 1 17:40 |


| -enzoic acid | $<50$ | ug/L | 08/23/2001 | 1256 | 2661 | $<50$ | jcs | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW | 8270 C |
| 2-Chlorophenol | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW | 8270 C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW | 82700 |
| 2,4-Dimethylphenol | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW | 8270C |
| 2-Methyi-4,6-dinitrophenol | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jсs | SW | 8270 C |
| 2-Methylphenol | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jes | SW | 8270 C |
| meta \& para-Methylphenol | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW | 8270C |
| 2-Nitrophenol | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jes | SW | 8270 C |
| Pentachlorophenol | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW | 8270 C |
| Phenol | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | <10 | jes | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jcs | SW | 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 08/23/2001 | 1256 | 2661 | $<10$ | jes | SW | 8270 C |
| Surrogate: d6-Phenol | 74 | \% | 08/23/2001 | 1256 | 2661 |  | jes | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 75 | \% | 08/23/2001 | 1256 | 2661 |  | jcs | SW | 8270 C |
| Surrogate: Tribromophenol | 83 | \% | 08/23/2001 | 1256 | 2661 |  | jes | SW | 8270 C |
| PCB'e M 8082. Aqueous |  |  |  |  |  |  |  |  |  |
| Aroclor 1016 | $<0.22$ | ug/L | 08/18/2001 | 56 | 102 | $<0.22$ | mrb | SW | 8082 |
| Aroclor 1221 | $<0.22$ | ug/L | 08/18/2001 | 56 | 102 | $<0.22$ | mrb | SW | 8082 |
| Aroclor 1232 | $<0.22$ | ug/L | 08/18/2001 | 56 | 102 | $<0.22$ | mrb | SW | 8082 |
| Aroclor 1242 | $<0.22$ | ug/L | 08/18/2001 | 56 | 102 | $<0.22$ | mrb | SW | 8082 |
| Aroclor 1248 | $<0.22$ | ug/L | 08/18/2001 | 56 | 102 | $<0.22$ | mrb | SW | 8082 |
| Aroclor 1254 | $<0.22$ | ug/L | 08/18/2001 | 56 | 102 | $<0.22$ | mrb | SW | 8082 |
| Aroclor 1260 | $<0.22$ | ug/L | 08/18/2001 | 56 | 102 | $<0.22$ | mrb | SW | 8082 |
| Surrogate:DCB/TCX | 82/58 | 4 | 08/18/2001 | 56 | 102 |  | mrb | SW | 8082 |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/29/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method R | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | PTIO |  |  |  |  | DAT | /TIME | TAKEN |
| 700088 |  | SBI002: FB | - 1 : W | 814 | 412 |  |  |  | 08/ | 4/2001 | 1 17:40 |


| TPH - DRO AQUEOUS | $<1$ | $\mathrm{mg} / \mathrm{L}$ | $08 / 17 / 2001$ | 117 | 202 | $<1$ | meb | SW 8015M |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| TPH - GRO (Aqueous) | $<1$ | $\mathrm{mg} / \mathrm{L}$ | $08 / 22 / 2001$ |  | 80 | $<1$ | rrs | SW 8015M |
| TPH - Method 418.1 (AQ) | $<0.2$ | $\mathrm{mg} / \mathrm{L}$ | $08 / 24 / 2001$ | 596 | 715 | $<0.2$ | 110 | EPA 418.1 |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/29/2001



Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting Limit | Analyst Initials | Method | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { SAMPLE } \\ & 700089 \end{aligned}$ | NO. | SAMPLE D SBI002:TB | $\begin{aligned} & \text { SCRI } \\ & -1: W \end{aligned}$ | $\begin{aligned} & \text { PTIO } \\ & 0814 \end{aligned}$ |  |  |  |  | $\begin{aligned} & \text { DAT: } \\ & 08 / \end{aligned}$ | $\begin{aligned} & \text { /TIME } \\ & 4 / 200 \end{aligned}$ | TAKEN |


| LLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8260 - SW846 (AQ) | Complete |  | 08/15/2001 | 3488 | Complete | mrh |  |
| Acetone | <20.0 | ug/L | 08/15/2001 | 3488 | $<20.0$ | mrh | SW 8260A |
| Benzene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW 8260A |
| tert-Butylbenzene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW 8260A |
| sec-Butylbenzene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW 8260A |
| n-Butylbenzene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW 8260A |
| Bromochloromethane | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW 8260A |
| Bromodichloromethane | <1.0 | ug/L | 08/15/2001 | 3488 | $<1.0$ | $m \mathrm{mh}$ | SW 8260A |
| Bromoform | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mash | SW 8260A |
| Bromobenzene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW 8260A |
| 2-Butanone (MEK) | <12.5 | ug/L | 08/15/2001 | 3488 | $<12.5$ | mrh | SW 8260A |
| Carbon disulfide | <1.0 | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW 8260A |
| Carbon tetrachloride | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW 8260A |
| Chlorobenzene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW 8260A |
| Chloroethane | $<5.0$ | ug/L | 08/15/2001 | 3488 | <5.0 | mrh | SW 8260A |
| 2-Chlorotoluene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW 8260A |
| 4-Chlorotoluene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW 8260A |
| Chloroform | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW 8260A |
| Chloromethane | < 5.0 | ug/L | 08/15/2001 | 3488 | $<5.0$ | mrh | SW 8260A |
| Dibromochloromethane | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW 8260A |
| Dibromomethane | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW 8260A |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 08/15/2001 | 3488 | $<5.0$ | mrh | SW 8260A |
| 1,2-Dichlorobenzene | <1.0 | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 1,1-Dichloroethane | <1.0 | ug/L | 08/15/2001 | 3488 | $<1.0$ | mre | SW | 8260A |
| 1,2-Dichloroethane | <1.0 | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 08/15/2001 | 3488 | <1.0 | mrh | SW | 8260A |
| trans-1,3-Dichloropropene | <1.0 | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| Ethylbenzene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| Hexachlorobutadiene | $<5.0$ | ug/L | 08/15/2001 | 3488 | $<5.0$ | mrh | SW | 8260A |
| n-Hexane | $<5.0$ | ug/L | 08/15/2001 | 3488 | <5.0 | mrh | SW | 8260A |
| 2-Hexanone | <12.5 | ug/L | 08/15/2001 | 3488 | $<12.5$ | mrh | SW | 8260A |
| Isopropylbenzene (Cumene) | <1.0 | ug/L | 08/15/2001 | 3488 | $<1.0$ | $m \times \mathrm{h}$ | SW | 8260A |
| p-Isopropyltoluene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| Bromomethane | $<5.0$ | ug/L | 08/15/2001 | 3488 | $<5.0$ | mrh | SW | 8260A |
| Methylene Chloride | $<5.0$ | ug/L | 08/15/2001 | 3488 | $<5.0$ | mrh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 08/15/2001 | 3488 | < 5.0 | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 08/15/2001 | 3488 | $<12.5$ | mrh | SW | 8260A |
| n-Propylbenzene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| Styrene | <1.0 | ug/L | 08/15/2001 | 3488 | <1.0 | mrh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
08/29/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBIO02

SAMPLE NO. SAMPLE DESCRIPTION
700089

DATE/TIME TAKEN 700089

SBI002:TB-1:W081401 08/14/2001

| - -phthalene | <5.0 | ug/L | 08/15/2001 | 3488 | <5.0 | mrh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | <1.0 | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| Tetrachloroethene | $<1.0$ | ug/L | 08/15/2001 | 3488 | <1.0 | mrh | SW | 8260A |
| Toluene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 08/15/2001 | 3488 | $<5.0$ | mrh | SW | 8260A |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| Trichloroethene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| Trichlorofluoromethane | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 08/15/2001 | 3488 | $<5.0$ | mrh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| Vinyl Acetate | $<5.0$ | ug/L | 08/15/2001 | 3488 | $<5.0$ | mrh | SW | 8260A |
| Vinyl Chloride | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| Xylenes | $<1.0$ | ug/L | 08/15/2001 | 3488 | $<1.0$ | mrh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 99 | $\%$ | 08/15/2001 | 3488 |  | mrh | SW | 8260A |
| Dibromofluoromethane (surr) | 98 | \% | 08/15/2001 | 3488 |  | mrh | SW | 8260A |
| ds-Toluene (surr) | 101 | \% | 08/15/2001 | 3488 |  | mrh | SW | 8260A |
| Bromofluorobenzene (surr) | 104 | 8 | 08/15/2001 | 3488 |  | mrh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
08/29/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002



## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

08/29/2001

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch Reporting Analyst | Analyzed | Number | Number Limit | Initials Method Reference |


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 700090 | SBIOO2:HMW25S:S210230:412 |


| -romoform | $<5.5$ | $u g / \mathrm{kg}$ dw | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bromobenzene | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| 2-Butanone (MEK) | $<55$ | ug/kg dw | 08/16/2001 | 1468 | $<55$ | bmh | SW | 8260A |
| Carbon disulfide | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| Carbon tetrachloride | <5.5 | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| Chlorobenzene | <5.5 | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| Chloroethane | $<11.0$ | ug/kg dw | 08/16/2001 | 1468 | $<11.0$ | bmh | SW | 8260A |
| 2-Chlorotoluene | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| 4-Chlorotoluene | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | buh | SW | 8260A |
| Chloroform | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| Chloromethane | $<11.0$ | ug/kg dw | 08/16/2001 | 1468 | <11.0 | bmh | SW | 8260A |
| Dibromochloromethane | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| Dibromomethane | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | <5.5 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.5$ | $u g / \mathrm{kg}$ dw | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<5.5$ | ug/ kg dw | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| 1،2-Dichloroethane | $<5.5$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| Cis-1,2-Dichloroethene | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | < 5.5 | bmh | SW | 8260A |
| 1,2-Dichloropropane | <5.5 | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| 1,3-Dichloropropane | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/29/2001

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units |  | Date | Batch | Batch | Reporting | Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |  |  |

DATE/TIME TAKEN 08/10/2001 09:40

| 2,2-Dichloropropane | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1-Dichloropropene | <5.5 | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | bmin | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| Ethylbenzene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| n -Hexane | $<22.0$ | ug/kg dw | 08/16/2001 | 1468 | $<22.0$ | brah | SW | 8260A |
| 2-Hexanone | $<54.9$ | ug/kg dw | 08/16/2001 | 1468 | $<54.9$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | <5.5 | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| p-Isopropyltoluene | $<5.5$ | $u g / \mathrm{kg}$ dw | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| Bromomethane | $<11.0$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<11.0$ | bmh | SW | 8260A |
| Methylene Chloride | $<11.0$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <11.0 | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<54.9$ | ug/kg dw | 08/16/2001 | 1468 | $<54.9$ | bmh | SW | 8260A |
| n-Propylbenzene | <5.5 | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| Styrene | <5.5 | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| Naphthalene | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| Tetrachloroethene | $<5.5$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/16/2001 | 1468 | < 5.5 | bmh | SW | 8260A |
| Toluene | <5.5 | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | <5.5 | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | bmh | SW | 8260A |
| Trichloroethene | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


| .ichlorofluoromethane | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmh | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,3-Trichloropropane | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | < 5.5 | bmh | SW 8250A |
| 1,2,4-Trimethylbenzene | <5.5 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 1468 | <5.5 | bmh | SW 8260A |
| 1,3,5-Trimethylbenzene | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | $<5.5$ | bmh | SW 8260A |
| Vinyl Acetate | $<5.5$ | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmh | SW 8260A |
| Vinyl Chloride | $<2.2$ | $u g / \mathrm{kg}$ dw | 08/16/2001 | 1468 | <2.2 | bmh | SW 8260A |
| Xylenes, Total | <5.5 | ug/kg dw | 08/16/2001 | 1468 | <5.5 | bmh | SW 8260A |
| d4-1,2-Dichloroethane (surr) | 88 | 8 | 08/16/2001 | 1468 |  | bmh | SW 8260A |
| Dibromofluoromethane (surr) | 92 | \% | 08/16/2001 | 1468 |  | bmh | SW 8260A |
| d8-Toluene (surr) | 91 | \% | 08/16/2001 | 1468 |  | bmh | SW 8260A |
| Bromofluorobenzene (surr) | 93 | 4 | 08/16/2001 | 1468 |  | bmh | SW 8260A |

BASE NEUT. COMPS. - 8270 Non-aq

| Acenaphthene | $<363$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<363$ | dmg | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | <363 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/20/2001 | 949 | 1465 | <363 | dmg | SW 8270C |
| Anthracene | $<363$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/20/2001 | 949 | 1465 | <363 | dmg | SW 8270C |
| Benzo (a) anthracene | <363 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | <363 | dmg | SW 8270C |
| Benzo (b) fluoranthene | $<363$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<363$ | dmg | SW 8270C |
| Benzo ( $k$ ) fluoranthene | $<363$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | <363 | dmg | SW 8270C |
| Benzo (a) pyrene | $<181$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<181$ | dmg | SW 8270C |
| Benzyl alcohol | $<363$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<363$ | dmg | SW 8270C |
| Benzyl butyl phthalate | $<363$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<363$ | dmg | SW 8270C |
| Bis (2-chloroethyl) ether | $<363$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | <363 | dimg | SW 8270C |
| Bis (2-chloroethoxy) methane | $<363$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | <363 | dmg | SW 8270C |
| Bis(2-ethylhexyl) phthalate | <363 | ug/kg dw | 08/20/2001 | 949 | 1465 | <363 | dmg | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULI \& ASSOC. (Dublin)<br>08/29/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


| 2,2'-oxybis (1-Chloropropane) | <363 | ug/kg dw | 08/20/2001 | 949 | 1465 | <363 | dmg | SK | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Bromophenyl phenyl ether | <363 | ug/kg dw | 08/20/2001 | 949 | 1465 | $<363$ | dmg | SW | 8270 C |
| 4-Chloroaniline | <363 | $u g / \mathrm{kg}$ dw | 08/20/2001 | 949 | 1465 | <363 | dmg | SW | 82700 |
| 2-Chloronaphthalene | $<363$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<363$ | ding | SW | 8270 C |
| Chrysene | $<363$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<363$ | dmg | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<181$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<181$ | dimg | SW | 8270 C |
| Dibenzofuran | <363 | ug/kg dw | 08/20/2001 | 949 | 1465 | $<363$ | dmg | SW | 8270 C |
| 1,2-Dichlorobenzene | <363 | ug/kg dw | 08/20/2001 | 949 | 1465 | <363 | ding | SW | 8270 C |
| 1,3-Dichlorobenzene | <363 | ug/kg dw | 08/20/2001 | 949 | 1465 | $<363$ | dmg | SW | 8270 C |
| 1,4-Dichlorobenzene | $<363$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<363$ | dmg | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<725$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<725$ | dmg | SW | 8270 C |
| Diethyl phthalate | $<363$ | ug/kg dw | 08/20/2001 | 949 | 1465 | <363 | dimg | SW | 8270 C |
| Dimethyl phthalate | $<363$ | $u g / \mathrm{kg}$ dw | 08/20/2001 | 949 | 1465 | $<363$ | dmg | SW | 8270C |
| 2,4-Dinitrotoluene | <363 | ug/kg dw | 08/20/2001 | 949 | 1465 | <363 | dmg | Sw | 8270 C |
| 2,6-Dinitrotoluene | <363 | ug/kg dw | 08/20/2001 | 949 | 1465 | $<363$ | dmg | SW | 8270 C |
| Di-n-octylphthalate | $<363$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<363$ | dmg | SW | 8270 C |
| Fluoranthene | $<363$ | ug/kg dw | 08/20/2001 | 949 | 1465 | <363 | ding | SW | 8270 C |
| Fluorene | $<363$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<363$ | dmg | SW | 8270 C |
| Hexachlorobenzene | <363 | ug/kg dw | 08/20/2001 | 949 | 1465 | <363 | dmg | SW | 8270 C |
| Hexachloro-1, 3-butadiene | <363 | ug/kg dw | 08/20/2001 | 949 | 1465 | $<363$ | ding | SW | 8270 C |
| Hexachlorocyclopentadiene | $<725$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<725$ | dmg | SW | 8270 C |
| Hexachloroethane | <363 | ug/kg dw | 08/20/2001 | 949 | 1465 | <363 | dmg | SW | 8270 C |
| Indeno (1, 2, 3-cd) pyrene | <363 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<363$ | dmg | SW | 8270 C |
| Isophorone | <363 | ug/kg dw | 08/20/2001 | 949 | 1465 | <363 | dmg | SW | 8270 C |
| Naphthalene | <363 | ug/kg dw | 08/20/2001 | 949 | 1465 | <363 | dimg | SW | 8270C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
$08 / 29 / 2001$
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


| $\begin{aligned} & \text { SAMPLE NO. } \\ & 700090 \end{aligned}$ | SAMPLE DESCRIPTION <br> SBIO02:HMW25S:S210230:412 |  |  |  |  |  | $\begin{aligned} & \text { DATE/TIME } \\ & 08 / 10 / 200 \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| .vitrobenzene | $<363$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | <363 | dmg | sw | 8270C |
| N -Nitrosodi-n-propylamine | $<363$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<363$ | dmg | sw | 8270 C |
| Phenanthrene | $<363$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<363$ | dmg | SW | 8270C |
| Pyrene | $<363$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<363$ | dmg | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<363$ | ug/kg dw | 08/20/2001 | 949 | 1465 | <363 | dmg | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 73 | \% | 08/20/2001 | 949 | 1465 |  | dmg | SW | 82700 |
| Surrogate: 2-Fluorobiphenyl | 80 | \% | 08/20/2001 | 949 | 1465 |  | dmg | SW | 8270 C |
| Surrogate: d14-Terphenyl | 92 | 8 | 08/20/2001 | 949 | 1465 |  | dmg | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,810$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | <1,810 | dmg | SW | 8270C |
| 4-Chloro-3-methylphenol | $<363$ | ug/kg dw | 08/20/2001 | 949 | 1465 | <363 | dmg | SW | 8270 C |
| 2-Chlorophenol | $<363$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<363$ | dmg | SW | 8270 C |
| 2,4-Dichlorophenol | $<363$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<363$ | dmg | Sw | 8270C |
| 2,4-Dimethylphenol | $<363$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<363$ | ding | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<363$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<363$ | dmg | SW | 8270C |
| 2-Methylphenol | $<363$ | $u g / \mathrm{kg}$ dw | 08/20/2001 | 949 | 1465 | $<363$ | dimg | SW | 8270C |
| meta \& para-Methyiphenol | $<363$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<363$ | ding | SW | 8270 C |
| 2-Nitrophenol | $<363$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/20/2001 | 949 | 1465 | $<363$ | dmg | SW | 8270C |
| Pentachlorophenol | $<363$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | $<363$ | dmg | SW | 8270 C |
| Phenol | $<363$ | ug/kg dw | 08/20/2001 | 949 | 1465 | $<363$ | dmg | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<363$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 949 | 1465 | <363 | dimg | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<363$ | ug/kg dw | 08/20/2001 | 949 | 1465 | <363 | dmg | SW | 8270C |
| Surrogate: d6-Phenol | 66 | 8 | 08/20/2001 | 949 | 1465 |  | dmg | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 58 | 8 | 08/20/2001 | 949 | 1465 |  | dmg | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULI \& ASSOC. (Dublin)<br>08/29/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14706
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 700090 SBIO02:HMW25S:S210230:412

DATE/TIME TAKEN

| Surrogate: Tribromophenol | 79 | $\%$ | 08/20/2001 | 949 | 1465 |  | dimg | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PCB' ${ }^{\text {m }} 8082$, Non-Aq |  |  |  |  |  |  |  |  |  |
| Aroclor 1016 | $<0.55$ | mg/kg dw | 08/20/2001 | 105 | 187 | $<0.55$ | jdc | SW | 8082 |
| Aroclor 1221 | $<0.55$ | mg/kg dw | 08/20/2001 | 105 | 187 | $<0.55$ | jdc | SW | 8082 |
| Aroclor 1232 | $<0.55$ | $\mathrm{mg} / \mathrm{kg}$ dw | 08/20/2001 | 105 | 187 | $<0.55$ | jdc | SW | 8082 |
| Aroclor 1242 | $<0.55$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 105 | 187 | $<0.55$ | jdc | SW | 8082 |
| Aroclor 1248 | $<0.55$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 105 | 187 | $<0.55$ | jdc | SW | 8082 |
| Aroclor 1254 | $<0.55$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 105 | 187 | $<0.55$ | jdc | SW | 8082 |
| Aroclor 1260 | $<0.55$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 105 | 187 | $<0.55$ | jdc | SW | 8082 |
| Surrogate:TCX/DCB | 81/82 | 4 | 08/20/2001 | 105 | 187 |  | jdc | SW | 8082 |
| TPH - FTIR Non-aq | <55 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 594 | 626 | <55 | 110 |  |  |

## QUALITY CONTROL FLAG DEFINITIONS

Job Number: 01.14706
(*) Indicates an out-of-control QC. The analytical data was reported based on other supporting quality control information.
(Note) Indicates to review the notes and comments section of the analytical report as there is additional information concerning this analytical result.
(MS) Indicates that the Matrix Spike (MS) was out of statistical advisory limits.
(MSD) Indicates that the Matrix Spike Duplicate (MSD) was out of statistical advisory limits.
(RPD) Indicates that the Relative Percent Difference (RPD) for the MS/MSD pair was outside of statistical advisory limits.
(SS) Indicates that the MS and MSD were out of statistical advisory limits.
(SSR) Indicates that the MS, MSD and RPD were out of statistical advisory limits.
(MSR) Indicates that the MS and RPD were out of statistical advisory limits.
(MSDR) Indicates that the MSD and RPD were out of statistical advisory limits.
(DL) Indicates that the MS and MSD were diluted out and the percent recoveries of the spikes could not be calculated.
(LS) Indicates that statistical accuracy and precision data is not available for spike concentrations which are $<1 / 4$ of the sample amount. Care should be used in interpreting this data.
(J) Indicates estimated concentration due to internal standard areas or surrogate recoveries outside of control limits. A sample matrix effect is usually indicated.
(DW) Indicates Dry Weight.
Analytical Reporting Limits
The reporting limits listed for non-aqueous samples in the analytical report section are Practical Quantitation Limits (PQLs). These PQLs are based upon a typical standard weight used for a non-aqueous sample. The reporting limit for a sample may be different from the PQL listed depending upon the actual weight of sample used, the samples moisture content and any dilutions used during the analysis.

## NOTES AND COMMENTS

TestAmerica Job Number: 1.14706
Sample Number: 700080
Analysis: 8260 - Volatiles
Elevated reporting limits due to dilution for matrixinterference.
Sample Number:700078
Analysis:8082 Soil Pcbs
The MB , for this sample was accidently spiked with the LCSspike instead of the Surrogate spike. No Arochlors, above thereporting limits, were detected in the sample.
Sample Number: ..... 700082
Analysis: 8270 soils
Recovery of acid surrogate $2-F l u o r o p h e n o l$ was below ..... therecommended $25-127 \%$ range. Surrogate recoveries for theremaining five surrogates were in control.

NOTES AND COMMENTS

TestAmerica Job Number: 1.14706
Sample Number: 700080
Analysis: 8260 - Volatiles
Elevated reporting limits due to dilution for matrix interference.

Sample Number: 700078
Analysis: 8082 Soil Pcbs
The $M B$,for this sample was accidently spiked with the LCS spike instead of the Surrogate spike. No Arochlors, above the reporting limits, were detected in the sample.

Sample Number: 700082
Analysis: 8270 soils
Recovery of acid surrogate 2 -Fluorophenol was below the recommended $25-127 \%$ range. Surrogate recoveries for the remaining five surrogates were in control.

Sample Number: 700080, 700081
Analysis: 8270 soils
Due to matrix interference, recovery of internal standard d12-Perylene was below the recommended $50-200 \%$ range. Results reported for the following compounds should be considered estimates due to the compromised internal standard result: Benzo(k)fluoranthene, Indeno(1,2,3-c,d)pyrene, and Dibenz ( $a, h$ ) anthracene.
$700071-90 \quad 14706$ CHAIN OF CUSTODY RECORD Hull \&

##  REPORT TO: LENIN WildMAT

client: South BrND
Site: AtreA A OITST
Project\#: SBIOOZ
Samplers: M.
$\begin{array}{cc}\begin{array}{c}\text { PROJECT } \\ \text { NO. }\end{array} & \begin{array}{c}\text { SAMPLE } \\ \text { LOCATION }\end{array}\end{array}$
S8Joo2: Hmw25s: S010025
SBT002:Hmw 25s: S210230
S8I002: $\mathrm{Hmw} 27 \mathrm{~s}: S_{000015}$
SBLOOR : Hmw/8s:S000010 S8To02 : Hmwi8s: S230250
S8E002: Hmw345:S000010
SBT002:FB-1:W081401
$5 B T 002: T B-1: \omega 08 / 401$
..
$\therefore \quad$ : $\quad$ -

Vlanal dox/are
RELINQUISHED BY:
COOLER TEMPERATURE
AS RECEIVED ${ }^{~}{ }^{C}$ :



## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/30/2001
J.Ob Number: 01.15083
Enclosed is the analytical report for the following samples
submitted to the Dayton Division of TestAmerica, Inc. for
analysis:

| Sample <br> Number | Sample Description | Date <br> Taken | Date <br> Received |
| :--- | :---: | :---: | :---: |
| 701236 | SBI002:HMW9I:S005020:428 | $08 / 20 / 2001$ | $08 / 21 / 2001$ |
| 701237 | SBI002:TB1:W082001:428 | $08 / 20 / 2001$ | $08 / 21 / 2001$ |

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted only in its entirety.

Enclosure


## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/30/2001

Job Number: 01.15083
Client Project ID: South Bend Indiana SBI002

|  |  | Reault | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method R | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | SCRI | PTIO |  |  |  |  | DAT | /TIME | TAKEN |
| 701236 |  | SBI002: HM | N9I: | S00502 | : 428 |  |  |  | 08/ | 0/2001 | 1 10:15 |



## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/30/2001

Job Number: 01.15083
Client Project ID: South Bend Indiana SBI002


DATE/TIME TAKEN 08/20/2001 10:15

| Dichlorodifluoromethane | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/22/2001 | 1478 | $<5.6$ | dmg | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dibromo-3-chloropropane | $<5.6$ | ug/kg dw | 08/22/2001 | 1478 | <5.6 | dmg | SW | 8260A |
| 1,2-Dichlorobenzene | < 5.6 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/22/2001 | 1478 | $<5.6$ | dmg | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.6$ | ug/kg dw | 08/22/2001 | 1478 | $<5.6$ | ding | SW | 8260A |
| 1,4-Dichlorobenzene | <5.6 | ug/kg dw | 08/22/2001 | 1478 | $<5.6$ | dmg | SW | 8260A |
| 1,1-Dichloroethane | $<5.6$ | ug/kg dw | 08/22/2001 | 1478 | $<5.6$ | dmg | SW | 8260A |
| 1,2-Dichloroethane | $<5.6$ | ug/kg dw | 08/22/2001 | 1478 | <5.6 | dmg | SW | 8260A |
| 1,1-Dichloroethene | $<5.6$ | ug/kg dw | 08/22/2001 | 1478 | $<5.6$ | dmg | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.6$ | ug/kg dw | 08/22/2001 | 1478 | $<5.6$ | dmg | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.6$ | ug/kg dw | 08/22/2001 | 1478 | <5.6 | dmg | SW | 8260A |
| 1,2-Dichloropropane | $<5.6$ | ug/kg dw | 08/22/2001 | 1478 | $<5.6$ | dmg | SW | 8260A |
| 1,3-Dichloropropane | $<5.6$ | ug/kg dw | 08/22/2001 | 1478 | $<5.6$ | dmg | SW | 8260A |
| 2,2-Dichloropropane | <5.6 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/22/2001 | 1478 | <5.6 | dmg | sw | 8260A |
| 1,1-Dichloropropene | $<5.6$ | ug/kg dw | 08/22/2001 | 1478 | $<5.6$ | dmg | Sw | 8260A |
| cis-1,3-Dichloropropene | $<5.6$ | ug/kg dw | 08/22/2001 | 1478 | $<5.6$ | dmg | Sw | 8260A |
| trans-1,3-Dichloropropene | $<5.6$ | ug/kg dw | 08/22/2001 | 1478 | <5.6 | dmg | SW | 8260A |
| Ethylbenzene | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/22/2001 | 1478 | $<5.6$ | dmg | SW | 8260A |
| Hexachlorobutadiene | <5.6 | ug/kg dw | 08/22/2001 | 1478 | $<5.6$ | dmg | SW | 8260A |
| n -Hexane | $<22.5$ | ug/kg dw | 08/22/2001 | 1478 | $<22.5$ | dmg | SW | 8260A |
| 2-Hexanone | <56.4 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/22/2001 | 1478 | $<56.4$ | dmg | SW | 8260A |
| Isopropylbenzene (Cumene) | <5.6 | ug/kg dw | 08/22/2001 | 1478 | $<5.6$ | ding | SW | 8260A |
| p-Isopropyltoluene | $<5.6$ | ug/kg dw | 08/22/2001 | 1478 | $<5.6$ | dmg | SW | 8260A |
| Bromomethane | $<11.3$ | ug/kg dw | 08/22/20.01 | 1478 | $<11.3$ | dmg | SW | 8260A |
| Methylene Chloride | $<11.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/22/2001 | 1478 | $<11.3$ | dmg | SW | 8260A |
| Methyl t-butyl ether (MTBE) | <5.6 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/22/2001 | 1478 | <5.6 | dmg | Sw | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15083
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 701236

SAMPLE DESCRIPTION
SBIO 02 :HMW9I:S005020:428

08/30/2001

Aporing Analyst
Initials Method Reference

DATE/TIME TAKEN
08/20/2001 10:15

| 4-Methyl-2-pentanone (MIBK) | $<56.4$ |  | ug/kg dw | 08/22/2001 | 1478 | $<56.4$ | dmg | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n-Propylbenzene | <5.6 |  | ug/kg dw | 08/22/2001 | 1478 | $<5.6$ | dmg | SW | 8260A |
| Styrene | $<5.6$ |  | ug/kg dw | 08/22/2001 | 1478 | <5.6 | dmg | SW | 8260A |
| Naphthalene | $<5.6$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/22/2001 | 1478 | $<5.6$ | dmg | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | <5.6 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/22/2001 | 1478 | < 5.6 | dmg | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.6$ |  | ug/kg dw | 08/22/2001 | 1478 | $<5.6$ | dmg | SW | 8260A |
| Tetrachloroethene | 4.740 |  | ug/kg dw | 08/23/2001 | 1482 | <282 | eap | SW | 8260A |
| Toluene | $<5.6$ |  | ug/kg dw | 08/22/2001 | 1478 | $<5.6$ | dmg | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.6$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/22/2001 | 1478 | $<5.6$ | dmg | SW | 8260A |
| 1,1,1-Trichloroethane | <5.6 |  | ug/kg dw | 08/22/2001 | 1478 | $<5.6$ | dmg | SW | 8260A |
| 1,1,2-Trichloroethane | <5.6 |  | $u g / \mathrm{kg}$ dw | 08/22/2001 | 1478 | $<5.6$ | dmg | SW | 8260A |
| Trichloroethene | $<5.6$ |  | ug/kg dw | 08/22/2001 | 1478 | <5.6 | drng | SW | 8260A |
| Trichlorofluoromethane | $<5.6$ |  | ug/kg dw | 08/22/2001 | 1478 | $<5.6$ | ding | SW | 8260A |
| 1,2,3-Trichloropropane | <5.6 |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/22/2001 | 1478 | <5.6 | dmg | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.6$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/22/2001 | 1478 | <5.6 | dmg | SW | 8260A |
| 1,3,5-Trimethylbenzene | <5.6 |  | $u g / \mathrm{kg}$ dw | 08/22/2001 | 1478 | <5.6 | ding | SW | 8260A |
| Vinyl Acetate | <5.6 |  | ug/kg dw | 08/22/2001 | 1478 | <5.6 | dmg | SW | 8260A |
| Vinyl Chloride | $<2.3$ |  | ug/kg dw | 08/22/2001 | 1478 | $<2.3$ | ding | SW | 8260A |
| Xylenes, Total | $<5.6$ |  | ug/kg dw | 08/22/2001 | 1478 | <5.6 | dmg | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 104 |  | \% | 08/22/2001 | 1478 |  | dimg | SW | 8260A |
| Dibromofluoromethane (surr) | 105 |  | $\%$ | 08/22/2001 | 1478 |  | ding | SW | 8260A |
| ds-Toluene (surr) | 116 |  | \% | 08/22/2001 | 1478 |  | ding | SW | 8260A |
| Bromofluorobenzene (surr) | 126 | Note | 8 | 08/22/2001 | 1478 |  | ding | SW | 8260A |

BASE NEUT. COMPS.-8270 NOR-aq

## ANALYTICAL REPORT

Kevin Wildman<br>HULT \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.15083<br>Client Project ID: South Bend Indiana SBI002

$08 / 30 / 2001$

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 701236 |  | SBI002: HM | 91: | 005 | : 428 |  |  |  | 08/ | 0/2001 | 10:15 |


| inaphthene | $<372$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | $<372$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| Anthracene | $<372$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <372 | jrw | SW 8270C |
| Benzo (a)anthracene | 746 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| Benzo (b) Eluoranthene | 989 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<372$ | jıw | SW 8270C |
| Benzo (k) fluoranthene | $<372$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| Benzo (a) pyrene | 613 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<186$ | jrw | SW 8270C |
| Benzyl alcohol | $<372$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| Benzyl butyl phthalate | $<372$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| Bis (2-chloroethyl) ether | $<372$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| Bis (2-chloroethoxy) methane | $<372$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <372 | jrw | SW 8270C |
| Bis (2-ethylhexyl) phthalate | $<372$ | $u g / \mathrm{kg}$ dw | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| 2,2'-oxybis(1-Chloropropane) | $<372$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <372 | jrw | SW 8270C |
| 4-Bromophenyl phenyl ether | $<372$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| 4-Chloroaniline | $<372$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| 2-Chloronaphthalene | $<372$ | $u \mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| Chrysene | 743 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<186$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<186$ | jrw | SW 8270C |
| Dibenzofuran | $<372$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| 1,2-Dichlorobenzene | $<372$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| 1,3-Dichlorobenzene | $<372$ | $u \mathrm{l} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| 1,4-Dichlorobenzene | $<372$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| 3,3'-Dichlorobenzidine | $<744$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<744$ | jrw | SW 8270C |
| Diethyl phthalate | $<372$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| Dimethyl phthalate | $<372$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)

08/30/2001
6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.15083
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy |  | Number | Number | Limit | Initials Method Reference |

SAMPLE NO. 701236

SAMPLE DESCRIPTION SBI002:HMW9I:S005020:428

DATE/TIME TAKEN 08/20/2001 10:15

| 2,4-Dinitrotoluene | $<372$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,6-Dinitrotoluene | $<372$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| Di-n-octylphthalate | $<372$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <372 | jrw | SW 8270C |
| Fluoranthene | 1,590 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| Fluorene | <372 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <372 | jıw | SW 82700 |
| Hexachlorobenzene | $<372$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| Hexachloro-1,3-butadiene | $<372$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| Hexachlorocyclopentadiene | $<744$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<744$ | jrw | SW 8270 C |
| Hexachloroethane | $<372$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270 C |
| Indeno (1, 2, 3-cd) pyrene | $<372$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| Isophorone | $<372$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270 C |
| Naphthalene | $<372$ | $u g / \mathrm{kg}$ dw | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| Nitrobenzene | <372 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$. | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| N-Nitrosodi-n-propylamine | <372 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270 C |
| Phenanthrene | 2,020 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| Pyrene | 1,310 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270 C |
| 1,2,4-Trichlorobenzene | <372 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| Surrogate: d5-Nitrobenzene | 74 | $\%$ | 08/24/2001 | 952 | 1473 |  | jrw | SW 8270 C |
| Surrogate: 2-Fluorobiphenyl | 82 | $\%$ | 08/24/2001 | 952 | 1473 |  | jrw | SW 8270C |
| Surrogate: di4-Terphenyl | 67 | $\%$ | 08/24/2001 | 952 | 1473 |  | jrw | SW 8270C |
|  |  |  |  |  |  |  |  |  |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,860$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<1,860$ | jrw | SW 8270 C |
| 4-Chloro-3-methylphenol | $<372$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| 2-Chlorophenol | $<372$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <372 | jrw | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15083
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION

 701236 SBIOO2:HMW9I:S005020:428| 4,4-Dichlorophenol | $<372$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dimethylphenol | $<372$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<372$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| 2-Methylphenol | $<372$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| meta \& para-Methylphenol | $<372$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| 2-Nitrophenol | <372 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| Pentachlorophenol | $<372$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <372 | jrw | SW 8270C |
| Phenol | <372 | $u g / \mathrm{kg}$ dw | 08/24/2001 | 952 | 1473 | <372 | jrw | SW 8270C |
| 2,4,5-Trichlorophenol | $<372$ | $u g / \mathrm{kg}$ dw | 08/24/2001 | 952 | 1473 | $<372$ | jrw | Sw 8270C |
| 2,4,6-Trichlorophenol | <372 | ug/kg aw | 08/24/2001 | 952 | 1473 | $<372$ | jrw | SW 8270C |
| Surrogate: d6-Phenol | 46 | $\%$ | 08/24/2001 | 952 | 1473 |  | jrw | SW 8270C |
| Surrogate: 2-Fluorophenol | 33 | \% | 08/24/2001 | 952 | 1473 |  | jrw | SW 8270C |
| Surrogate: Tribromophenol | 51 | 8 | 08/24/2001 | 952 | 1473 |  | jrw | SW 8270C |
| TPH - GRO (Non-Aqueous) | <6 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 |  | 248 | <6 | meb | SW 8015M |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/30/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.15083
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |
| Analyed | Number | Number | Limit | Initials Method Reference |  |  |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 701237 | SBIOO2:TB1:W082001:428 | $08 / 20 / 2001$ |



## ANALYTICAL REPORT

## Kevin Wildman

HULI \& ASSOC. (Dublin)
08/30/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15083
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 701237 | SBIOO2:TB1:W082001:428 |

DATE/TIME TAKEN 08/20/2001

| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW | 8260A |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Ethylbenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Hexachlorobutadiene | $<5.0$ | ug/L | 08/22/2001 | 3513 | <5.0 | eap | SW | 8260A |
| n-Hexane | $<5.0$ | ug/L | 08/22/2001 | 3513 | <5.0 | eap | SW | 8260A |
| 2-Hexanone | $<12.5$ | ug/L | 08/22/2001 | 3513 | $<12.5$ | eap | SW | 8260A |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| p-Isopropyltoluene | <1.0 | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Bromomethane | $<5.0$ | ug/L | 08/22/2001 | 3513 | < 5.0 | eap | SW | 8260A |
| Methylene Chloride | $<5.0$ | ug/L | 08/22/2001 | 3513 | $<5.0$ | eap | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 08/22/2001 | 3513 | $<5.0$ | eap | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 08/22/2001 | 3513 | $<12.5$ | eap | SW | 8260A |
| $n$-Propylbenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| styrene | $<1.0$ | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/30/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.15083
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 701237 | SBIOO2:TB1:W082001:428 | $08 / 20 / 2001$ |


| Naphthalene | $<5.0$ | ug/L | 08/22/2001 | 3513 | $<5.0$ | eap | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | <1.0 | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | <1.0 | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | Sw | 8260A |
| Tetrachloroethene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Toluene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 08/22/2001 | 3513 | < 5.0 | eap | SW | 8260A |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8250A |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| .Trichloroethene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Trichlorofluoromethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,2,3-Trichloropropane | <5.0 | ug/L | 08/22/2001 | 3513 | <5.0 | eap | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Vinyl Acetate | $<5.0$ | ug/L | 08/22/2001 | 3513 | <5.0 | eap | SW | 8260A |
| Vinyl Chloride | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Xylenes | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 105 | 8 | 08/22/2001 | 3513 |  | eap | SW | 8260A |
| Dibromofluoromethane (surr) | 105 | 8 | 08/22/2001 | 3513 |  | eap | SW | 8260A |
| d8-Toluene (surr) | 92 | 8 | 08/22/2001 | 3513 |  | eap | SW | 8260A |
| Bromofluorobenzene (surr) | 97 | $\%$ | 08/22/2001 | 3513 |  | eap | SW | 8260A |

## QUALITY CONTROL FLAG DEFINITIONS <br> PAGE 11 of 12

Job Number: 01.15083
(*) Indicates an out-of-control QC. The analytical data was reported based on other supporting quality control information.
(Note) Indicates to review the notes and comments section of the analytical report as there is additional information concerning this analytical result.
(MS) Indicates that the Matrix Spike (MS) was out of statistical advisory limits.
(MSD) Indicates that the Matrix Spike Duplicate (MSD) was out of statistical advisory limits.
(RPD) Indicates that the Relative Percent Difference (RPD) for the MS/MSD pair was outside of statistical advisory limits.
(SS) Indicates that the MS and MSD were out of statistical advisory limits.
(SSR) Indicates that the MS, MSD and RPD were out of statistical advisory limits.
(MSR) Indicates that the MS and RPD were out of statistical advisory limits.
(MSDR) Indicates that the MSD and RPD were out of statistical advisory limits.
(DL) Indicates that the MS and MSD were diluted out and the percent recoveries of the spikes could not be calculated.
(LS) Indicates that statistical accuracy and precision data is not available for spike concentrations which are < 1/4 of the sample amount. Care should be used in interpreting this data.
(J) Indicates estimated concentration due to internal standard areas or surrogate recoveries outside of control limits. A sample matrix effect is usually indicated.
(DW) Indicates Dry Weight.
Analytical Reporting Limits
The reporting limits listed for non-aqueous samples in the analytical report section are Practical Quantitation Limits (PQLs). These PQLs are based upon a typical standard weight used for a non-aqueous sample. The reporting limit for a sample may be different from the PQL listed depending upon the actual weight of sample used, the samples moisture content and any dilutions used during the analysis.

## NOTES AND COMMENTS

## TestAmerica Job Number: 1.15083

Sample Number: 701236
Analysis: 8260 soil
Recovery of internal standard 1,4-Dichlorobenzene-d4 was below the recommended $50-200 \%$ range. Results were confirmed with a replicate analysis. No detections were reported from this run.


## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/30/2001
6130 Wilcox Rd.
Dublin, OH 43016

08/30/2001
Job Number: 01.14810

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

## Sample Number

700405
700406
700407
700408
700409
700410
700411
700412 700413

SBI001:HMW-14S:S010015:412
SBI001:HMW-14SD:S010015:412
SBI001:HMW-14S:S040050:412
SBI001:HMW-14S:SI90210:412
SBI001:HMW-14S:S210230:412
SBI002:HMW-9D:S000020:505
SBI002:HMW-9DD:S000020:505
SBI002:FB1:W081501:505
SBI002:TBI:W081501

Date Taken

08/15/2001
08/15/2001
08/15/2001
08/15/2001
08/15/2001
08/15/2001
08/15/2001
08/15/2001
08/15/2001

Date Received

08/16/2001
08/16/2001
08/16/2001
08/16/2001
08/16/2001
08/16/2001
08/16/2001
08/16/2001
08/16/2001

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted only in its entirety.

Enclosure


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/30/2001

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 700405 | SBIOO1:HMW-14S:SO10015:412 |

DATE/TIME TAKEN 08/15/2001 08:35


## ANALYTICAL REPORT

## Kevin Wildman

HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
08/30/2001

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batch Reporting Analyst |  |  |  |
|  | Analyzed | Number | Number Limit | Initials Method Reference |  |

## SAMPLE NO. SAMPLE DESCRIPTION 700405 <br> SBI001: HMW-14S:S010015:412

DATE/TIME TAKEN 08/15/2001 08:35

| Dibromochloromethane | $<5.4$ |  | ug/kg dw | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibromomethane | $<5.4$ |  | ug/kg dw | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<5.4$ |  | ug/kg dw | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.4$ |  | ug/kg dw | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.4$ |  | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.4$ |  | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmb | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.4$ |  | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<5.4$ |  | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<5.4$ |  | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.4$ |  | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| Cis-1,2-Dichloroethene | $<5.4$ |  | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| trans-1.2-Dichloroethene | $<5.4$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<5.4$ |  | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.4$ |  | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.4$ |  | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<5.4$ |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/17/2001 | 1471 | $<5.4$ | bmh | Sw | 8260A |
| cis-1,3-Dichloropropene | <5.4 |  | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | Sw | 8260A |
| trans-1,3-Dichloropropene | $<5.4$ |  | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| Ethylbenzene | $<5.4$ | ss | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.4$ |  | $u g / \mathrm{kg}$ dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| n-Hexane | $<21.4$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<21.4$ | bmh | SW | 8260A |
| 2-Hexanone | $<53.6$ |  | $u \mathrm{f} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<53.6$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.4$ |  | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| p-Isopropyltoluene | $<5.4$ |  | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| Bromomethane | $<10.7$ |  | ug/kg dw | 08/17/2001 | 1471 | $<10.7$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)

08/30/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBIO02


## SAMPLE NO. 700405

SAMPLE DESCRIPTION
SBI001:HMW-14S:S010015:412

DATE/TIME TAKEN 08/15/2001 08:35
Methylene Chloride
Methyl t-butyl ether (MTBE)
4-Methyl-2-pentanone (MIBK)
n-Propylbenzene
Styrene
Naphthalene
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethene
Toluene
1,2,4-Trichlorobenzene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
Trichlorofluoromethane
1,2,3-Trichloropropane
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
Vinyl Acetate
Vinyl Chloride
Xylenes, Total
d4-1,2-Dichloroethane(surr)
Dibromofluoromethane(surr)
d8-Toluene(surr)
Bromofluorobenzene(surr)
$<10.7$
$<5.4$
$<53.6$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<2.1$
$<5.4$
89
91
100
105

| ug/kg dw | 08/17/2001 | 1471 | $<10.7$ | bmh | Sw | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ug/kg dw | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<53.6$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | <5.4 | bmh | Sw | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1.471 | <5.4 | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.4$ | bmh | Sw | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<2.1$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| $\%$ | 08/17/2001 | 1471 |  | bmh | SW | 8260A |
| \% | 08/17/2001 | 1471 |  | bmh | Sw | 8260A |
| $\%$ | 08/17/2001 | 1471 |  | bmh | SW | 8260A |
| \% | 08/17/2001 | 1471 |  | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman HULI \& ASSOC. (Dublin) 6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14810

## Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |

SAMPLE NO. SAMPLE DESCRIPTION
700405. SBIOO1:HMW-14S:SO10015:412

DATE/TIME TAKEN 08/15/2001 08:35

| BASE NEUT. COMPS. -8270 Non-aq |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthene | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW 8270C |
| Acenaphthylene | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW 8270C |
| Anthracene | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW 8270C |
| Benzo (a) anthracene | 1,220 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <354 | jrw | SW 8270C |
| Benzo (b) fluoranthene | 1,700 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW 8270C |
| Benzo(k) fluoranthene | 626 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW 8270C |
| Benzo (a) pyrene | 1.390 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<177$ | jrw | SW 8270C |
| Benzyl alcohol | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| Benzyl butyl phthalate | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| Bis (2-chloroethyl) ether | $<354$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <354 | jrw | SW 8270C |
| Bis (2-chloroethoxy) methane | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| Bis(2-ethylhexyl) phthalate | <354 | $u g / \mathrm{kg}$ dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <354 | jrw | ŞW 8270C |
| 4-Bromophenyl phenyl ether | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| 4-Chloroaniline | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| 2-Chloronaphthalene | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| Chrysene | 1.160 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| Dibenzo(a, h) anthracene | $<177$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<177$ | jrw | SW 8270C |
| Dibenzofuran | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| 1,2-Dichlorobenzene | <354 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| 1,3-Dichlorobenzene | $<354$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| 1,4-Dichlorobenzene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| 3,3'-Dichlorobenzidine | $<707$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<707$ | jrw | SW 8270C |
| Diethyl phthalate | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <354 | jrw | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 700405

## SAMPLE DESCRIPTION

SBIO01:HMW-14S:S010015:412

08/30/2001

Initials Method Reference

| <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | Sw | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | sw | 8270C |
| <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | sw | 82700 |
| <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270 C |
| 1,790 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | Sw | 8270C |
| <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | sw | 8270 C |
| <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <354 | jrw | Sw | 8270C |
| <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jxw | Sw | 8270 C |
| $<707$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<707$ | jrw | Sw | 8270C |
| <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <354 | jxw | Sw | 8270 C |
| 484 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | Sw | 8270 C |
| <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | Sw | 8270 C |
| <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | Sw | 8270 C |
| <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | Sw | 8270 C |
| <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | Sw | 8270C |
| 509 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | Sw | 8270 C |
| 1,550 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | Sw | 82700 |
| <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | Sw | 8270 C |
| 90 | \% | 08/24/2001 | 952 | 1473 |  | jrw | Sw | 8270C |
| 100 | \% | 08/24/2001 | 952 | 1473 |  | jrw | SW | 8270C |
| 78 | 8 | 08/24/2001 | 952 | 1473 |  | jrw | Sw | 8270 C |
| <1,770 | ug/kg dw | 08/24/2001 | 952 | 1473 | <1,770 | jrw | Sw | 8270 C |
| <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | Sw | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$08 / 30 / 2001$

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002


SAMPLE NO.
SAMPLE DESCRIPTION 700405

SBI001:HMW-14S:S010015:412


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002

|  |  | $\because$ | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. |  | LE D | SCRI | PTIO1 |  |  |  |  | DAT | /TIME | TAKEN |
| 700406 |  |  | 01: HM | -14 | SD: SO | 015:41 |  |  |  | $08 /$ | 5/2001 | 1 08:35 |


| Dry Weight | 93.3 | * | 08/24/2001 |  | 1484 |  | mhg | SM 2540 G . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prep, PCBE Non-Aq 8082 | Complete |  | 08/20/2001 | 105 |  | Complete | 1 mc | SW 3540C; SW 3545 |
| Prep, bNA Non-Aq | Complete |  | 08/21/2001 | 952 |  | Complete | rec | EPA 625; SW 3540C; Sw 3545 |
| Prep, TPH 418.1 Nonaq | COMPLETE |  | 08/21/2001 | 595 |  | Complete | sub | SW 9071 |
| Volatile Compounds-8260 Non-Aq |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/17/2001 |  | 1471 | Complete | bmh |  |
| Acetone | $<107$ | ug/kg dw | 08/17/2001 |  | 1471 | $<107$ | bmh | SW 8260A |
| Benzene | $<5.4$ | ug/kg dw | 08/17/2001 |  | 1471 | <5.4 | bmh | Sw 8260A |
| tert-Butylbenzene | <5.4 | ug/kg dw | 08/17/2001 |  | 1471 | <5.4 | bmh | sw 8260A |
| sec-Butylbenzene | <5.4 | ug/kg dw | 08/17/2001 |  | 1471 | <5.4 | bmh | SW 8260A |
| n-Butylbenzene | <5.4 | ug/kg dw | 08/17/2001 |  | 1471 | <5.4 | bmh | Sw 8260A |
| Bromochloromethane | <5.4 | ug/kg dw | 08/17/2001 |  | 1471 | <5.4 | bmh | SW 8260A |
| Bromodichloromethane | <5.4 | ug/kg dw | 08/17/2001 |  | 1471 | <5.4 | bmh | Sw 8260A |
| Bromoform | <5.4 | ug/kg dw | 08/17/2001 |  | 1471 | <5.4 | bmh | sw 8260A |
| Bromobenzene | <5.4 | ug/kg dw | 08/17/2001 |  | 1471 | <5.4 | bmh | SW 8260A |
| 2-Butanone (MEK) | <54 | ug/kg dw | 08/17/2001 |  | 1471 | <54 | bmh | Sw 8260A |
| Carbon disulfide | <5.4 | ug/kg dw | 08/17/2001 |  | 1471 | <5.4 | bmh | SW 8260A |
| Carbon tetrachloride | <5.4 | ug/kg dw | 08/17/2001 |  | 1471 | <5.4 | bmh | Sw 8260A |
| Chiorobenzene | <5.4 | ug/kg dw | 08/17/2001 |  | 1471 | <5.4 | bmh | SW 8260A |
| Chloroethane | $<10.7$ | ug/kg dw | 08/17/2001 |  | 1471 | $<10.7$ | brh | SW 8260A |
| 2-Chlorotoluene | $<5.4$ | ug/kg dw | 08/17/2001 |  | 1471 | $<5.4$ | bmh | SW 8260A |
| 4-Chlorotoluene | <5.4 | ug/kg dw | 08/17/2001 |  | 1471 | <5.4 | bmh | SW 8260A |
| Chloroform | $<5.4$ | ug/kg dw | 08/17/2001 |  | 1471 | <5.4 | bmh | SW 8260A |
| Chloromethane | <10.7 | ug/kg dw | 08/17/2001 |  | 1471 | <10.7 | bmh | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/30/2001

Job Number: 01.14810

## Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION
700406

DATE/TIME TAKEN 08/15/2001 08:35

| Dibromochloromethane | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibromomethane | <5.4 | ug/kg dw | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<5.4$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A. |
| 1,2-Dibromo-3-chloropropane | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| 1,1-Dichloroethane | <5.4 | ug/kg dw | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.4$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | Sh | 8260A |
| 1,3-Dichloropropane | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | Sw | 8260A |
| 2,2-Dichloropropane | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.4$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| Ethylbenzene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| n -Hexane | $<21.4$ | ug/kg dw | 08/17/2001 | 1471 | $<21.4$ | bmh | SW | 8260A |
| 2-Hexanone | $<53.6$ | ug/kg dw | 08/17/2001 | 1471 | $<53.6$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| p-Isopropyltoluene | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| Bromomethane | $<10.7$ | ug/kg dw | 08/17/2001 | 1471 | $<10.7$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 700406

SAMPLE DESCRIPTION
SBIO01:HMW-14SD:S010015:412

08/30/2001
$<10.7$
$<5.4$
$<53.6$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<5.4$
$<2.1$
$<5.4$
90
96

| ug/kg dw | 08/17/2001 | 1471 | $<10.7$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<53.6$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | <2.1 | bmh | SW | 8260A |
| ug/kg dw | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| \% | 08/17/2001 | 1471 |  | bmh | SW | 8260A |
| \% | 08/17/2001 | 1471 |  | bmh | SW | 8260A |
| $\%$ | 08/17/2001 | 1471 |  | bmh | SW | 8260A |
| \% | 08/17/2001 | 1471 |  | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/30/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE $700406$ | NO. | SAMPLE DE SBT001•HM | SCRI | IIO |  |  |  |  | DAT | /TIME | TAKEN |
| $700406$ |  | SBIOO1: HM | -14 | S : S | $015: 4$ |  |  |  | 08/ | $5 / 2001$ | $108: 35$ |


| Acenaphthene | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| Anthracene | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | . 1473 | $<354$ | j5w | SW 8270C |
| Benzo (a) anthracene | 906 | ug/ kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| Benzo (b) fluoranthene | 1,410 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <354 | jrw | SW 8270C |
| Benzo (k) fluoranthene | 420 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| Benzo (a) pyrene | 988 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<177$ | jrw | SW 8270C |
| Benzyl alcohol | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| Benzyl butyl phthalate | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| Bis (2-chloroethyl)ether | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | juw | SW 8270C |
| Bis (2-chloroethoxy) methane | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW 8270C |
| Bis (2-ethylhexyl) phthalate | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | Sw 8270C |
| 4-Bromophenyl phenyl ether | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| 4-Chloroaniline | <354 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| 2-Chloronaphthalene | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 82700 |
| Chrysene | 839 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| Dibenzo (a, h) anthracene | $<177$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<177$ | jrw | SW 8270C |
| Dibenzofuran | $<354$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| 1,2-Dichlorobenzene | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| 1,3-Dichlorobenzene | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW 8270C |
| 1,4-Dichlorobenzene | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW 8270C |
| 3,3'-Dichlorobenzidine | $<707$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<707$ | jrw | SW 8270C |
| Diethyl phthalate | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | juw | SW 8270C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/30/2001

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002


| Dimethyl phthalate | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dinitrotoluene | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW | 8270C |
| 2,6-Dinitrotoluene | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| Di-n-octylphthalate | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW | 8270C |
| Fluoranthene | 1,340 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| Fluorene | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jxw | SW | 8270 C |
| Hexachlorobenzene | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270 C |
| Hexachloro-1, 3-butadiene | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW | 8270C |
| Hexachlorocyclopentadiene | $<707$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<707$ | jrw | SW | 8270 C |
| Hexachloroethane | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| Indeno (1,2,3-cd) pyrene | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| Isophorone | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| Naphthalene | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| Nitrobenzene | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| N -Nitrosodi-n-propylamine | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| Phenanthrene | 406 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW | 8270 C |
| Pyrene | 1,240 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270 C |
| 1,2,4-Trichlorobenzene | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 94 | 7 | 08/24/2001 | 952 | 1473 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 102 | 8 | 08/24/2001 | 952 | 1473 |  | jrw | SW | 8270 C |
| Surrogate: dl4-Terphenyl | 86 | 8 | 08/24/2001 | 952 | 1473 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,770$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<1,770$ | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002

|  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE NO. | SAMPLE D | CR | PION |  |  |  |  | DAT | /TIME | TAKEN |
| 700406 | SBI001: HM | -14 | S : SO1 | 0015:41 |  |  |  | 08/ | 5/2001 | 1 08:35 |


| 2-Chlorophenol | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dichlorophenol | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| 2,4-Dimethylphenol | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270 C |
| 2-Methylphenol | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| meta \& para-Methylphenol | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| 2-Nitrophenol | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| Pentachlorophenol | $<354$ | $u g / \mathrm{kg} \mathrm{d} w$ | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| Phenol | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| 2,4,5-Trichlorophenol | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| 2,4,6-Trichlorophenol | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| Surrogate: d6-Phenol | 85 | $\%$ | 08/24/2001 | 952 | 1473 |  | jrw | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 74 | $\%$ | 08/24/2001 | 952 | 1473 |  | jrw | SW | 8270C |
| Surrogate: Tribromophenol | 50 | \% | 08/24/2001 | 952 | 1473 |  | jrw | SW | 8270 C |
| PCB's M 8082, Non-Aq |  |  |  |  |  |  |  |  |  |
| Arocior 1016 | $<0.54$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 105 | 190 | $<0.54$ | jdc | SW | 8082 |
| Aroclor 1221 | $<0.54$ | $\mathrm{mg} / \mathrm{kg} \mathrm{d} w$ | 08/21/2001 | 105 | 190 | $<0.54$ | jac | SW | 8082 |
| Aroclor 1232 | $<0.54$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 105 | 190 | $<0.54$ | jdc | SW | 8082 |
| Aroclor 1242 | $<0.54$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 105 | 190 | $<0.54$ | jdc | sw | 8082 |
| Aroclor 1248 | $<0.54$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 105 | 190 | $<0.54$ | jac | SW | 8082 |
| Aroclor 1254 | $<0.54$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 105 | 190 | $<0.54$ | jdc | SW | 8082 |
| Aroclor 1260 | $<0.54$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 105 | 190 | $<0.54$ | jdc | SW | 8082 |
| Surrogate: TCX/DCB | 66/56 | 8 | 08/21/2001 | 105 | 190 |  | jdc | SW | 8082 |
| TPH - FTIR Non-aq | 1,500 | mg/kg dw | 08/22/2001 | 595 | 627 | <54 | 260 | 418 |  |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016
$08 / 30 / 2001$

Job Number: 01.14810


SAMPLE NO. SAMPLE DESCRIPTION
700407 SBIO01:HMW-14S:S040050:412.

DATE/TIME TAKEN 08/15/2001 09:14

| Dry Weight | 90.5 | 4 | 08/24/2001 |  | 1484 |  | mhg | SM 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prep, PCBs Non-Aq 8082 | Complete |  | 08/20/2001 | 105 |  | Complete | Imc | SW 3540C; SW 3545 |
| Prep, BNA Non-Aq | Complete |  | 08/21/2001 | 952 |  | Complete | rec | EPA 625; SW 3540C; SW 3545 |
| Prep, TPH 418.1 Nonaq | COMPLETE |  | 08/21/2001 | 595 |  | Complete | sub | SW 9071 |
| VOLATILE COMPOUNDS-8260 Non-Aq |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/20/2001 |  | 1473 |  | bmh |  |
| Acetone | <221 | ug/kg dw | 08/20/2001 |  | 1473 | <221 | bmh | SW 8260A |
| Benzene | $<11$ | ug/kg dw | 08/20/2001 |  | 1473 | $<11$ | bmh | SW 8260A |
| tert-Butylbenzene | $<11$ | ug/kg dw | 08/20/2001 |  | 1473 | $<11$ | bmh | SW 8260A |
| sec-Butylbenzene | $<11$ | ug/kg dw | 08/20/2001 |  | 1473 | $<11$ | bmh | SW 8260A |
| n-Butylbenzene | $<11$ | ug/kg dw | 08/20/2001 |  | 1473 | $<11$ | bmh | SW 8260A |
| Bromochloromethane | $<11$ | ug/kg dw | 08/20/2001 |  | 1473 | $<11$ | bmh | SW 8260A |
| Bromodichloromethane | <11 | ug/kg dw | 08/20/2001 |  | 1473 | $<11$ | bmh | SW 8260A |
| Bromoform | $<11$ | ug/kg dw | 08/20/2001 |  | 1473 | $<11$ | bmh | SW 8260A |
| Bromobenzene | $<11$ | ug/kg dw | 08/20/2001 |  | 1473 | $<11$ | bmh | SW 8260A |
| 2-Butanone (MEK) | $<110$ | ug/kg dw | 08/20/2001 |  | 1473 | $<110$ | bmh | SW 8260A |
| Carbon disulfide | $<11$ | ug/kg dw | 08/20/2001 |  | 1473 | <11 | bmh | SW 8260A |
| Carbon tetrachloride | $<11$ | ug/kg dw | 08/20/2001 |  | 1473 | $<11$ | bmh | SW 8260A |
| Chlorobenzene | $<11$ | ug/kg dw | 08/20/2001 |  | 1473 | $<11$ | bmh | SW 8260A |
| Chloroethane | $<22$ | ug/kg dw | 08/20/2001 |  | 1473 | <22 | bmh | SW 8260A |
| 2-Chlorotoluene | $<11$ | ug/kg dw | 08/20/2001 |  | 1473 | $<11$ | bmh | SW 8260A |
| 4-Chlorotoluene | <11 | ug/kg dw | 08/20/2001 |  | 1473 | $<11$ | bmh | SW 8260A |
| Chloroform | $<11$ | ug/kg dw | 08/20/2001 |  | 1473 | $<11$ | bah | SW 8260A |
| Chloromethane | $<22$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 |  | 1473 | <22 | bmh | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION DATE/TIME TAKEN 700407 SBI001:HMW-14S:S040050:412

| Dibromochloromethane | $<11$ | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibromomethane | $<11$ | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| Dichlorodifluoromethane | <I1 | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | Sw | 8260A |
| 1,2-Dibromo-3-chloropropane | $<11$ | ug/kg dw | 08/20/2001 | 1473 | <11 | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $<11$ | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<11$ | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<11$ | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<11$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<11$ | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<11$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | $<11$ | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | Sw | 8260A |
| trans-1,2-Dichloroethene | $<11$ | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| 1,2-Dichloropropane | <11 | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| 1.3-Dichloropropane | <11 | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<11$ | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<11$ | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| cis-1,3-Dichloropropene | $<11$ | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | <11 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| Ethylbenzene | <11 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| Hexachlorobutadiene | $<11$ | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| n -Hexane | $<44$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/20/2001 | 1473 | <44 | bmh | SW | 8260A |
| 2-Hexanone | <110 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<110$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<11$ | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| p-Isopropyltoluene | $<11$ | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| Bromomethane | $<22$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<22$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/30/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 700407 | SBIOO1:HMW-14S:S040050:412 |

DATE/TIME TAKEN
08/15/2001 09:14

| Methylene Chloride | <22 |  | ug/kg dw | 08/20/2001 | 1473 | $<22$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Methyl t-butyl ether (MTBE) | $<11$ |  | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<110$ |  | ug/kg dw | 08/20/2001 | 1473 | $<110$ | bmh | SW | 8260A |
| n-Propylbenzene | $<11$ |  | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| Styrene | $<11$ |  | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| Naphthalene | $<11$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<11$ |  | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<11$ |  | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| Tetrachloroethene | $<11$ |  | ug/kg dw | 08/20/2001 | 1473 | $<11$ | brnh | SW | 8260A |
| Toluene | $<11$ |  | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<11$ |  | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | <11 |  | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | <11 |  | ug/kg dw | 08/20/2001 | 1473 | <11 | bmh | Sh | 8260A |
| Trichloroethene | $<11$ |  | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| Trichlorofluoromethane | <11 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<11$ | bmh | S* | 8260A |
| 1,2,3-Trichloropropane | <11 |  | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | <11 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001. | 1473 | $<11$ | bmh | Sh | 8260A |
| 1,3,5-Trimethylbenzene | $<11$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| Vinyl Acetate | $<11$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| Vinyl Chloride | <4.4 |  | ug/kg dw | 08/20/2001 | 1473 | <4.4 | bmh | SW | 8260A |
| Xylenes, Total | $<11$ |  | ug/kg dw | 08/20/2001 | 1473 | $<11$ | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 89 |  | $\%$ | 08/20/2001 | 1473 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 89 |  | 8 | 08/20/2001 | 1473 |  | brah | SW | 8260A |
| d8-Toluene (surr) | 106 |  | \% | 08/20/2001 | 1473 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 124 | Note | 8 | 08/20/2001 | 1473 |  | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULI \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.14810<br>Client Project ID: South Bend Indiana SBI002



| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 700407 | SBIOO1:HMW-14S:S040050:412 | $08 / 15 / 200109: 14$ |


| Acenaphthene | $<365$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | <365 | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270 C |
| Anthracene | 396 | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270 C |
| Benzo (a)anthracene | 1,100 | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270 C |
| Benzo (b) fluoranthene | 1,910 | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270C |
| Benzo (k) fluoranthene | 533 | ug/kg dw | 08/24/2001 | 952 | 14.73 | <365 | jrw | SW | 8270 C |
| Benzo(a) pyrene | 1,020 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<182$ | jrw | SW | 82700 |
| Benzyl alcohol | <365 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 82700 |
| Benzyl butyl phthalate | $<365$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270 C |
| Bis (2-chloroethyl) ether | $<365$ | $u g / \mathrm{kg}$ dw | 08/24/2001 | 952 | 1473 | $<365$ | jrw | SW | 8270 C |
| Bis (2-chloroethoxy)methane | $<365$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 82700 |
| Bis (2-ethylhexyl) phthalate | <365 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | $<365$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<365$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270 C |
| 4-Chloroaniline | <365 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<365$ | jrw | SW | 8270 C |
| 2-Chloronaphthalene | <365 | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | Sw | 8270 C |
| Chrysene | 1,060 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270 C |
| Dibenzo(a, h) anthracene | $<182$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<182$ | jrw | SW | 8270 C |
| Dibenzofuran | - <365 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270C |
| 1,2-Dichlorobenzene | <365 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270 C |
| 1,3-Dichlorobenzene | $<365$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270 C |
| 1,4-Dichlorobenzene | $<365$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<729$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <729 | jrw | SW | 8270 C |
| Diethyl phthalate | <365 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270 C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002

08/30/2001

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |  |
| Analyzed | Number | Number | Limit | Initials Method Reference |  |  |  |

## SAMPLE NO. 700407

SAMPLE DESCRIPTION
SBI001:HMW-14S:S040050:412

DATE/TIME TAKEN
08/15/2001 09:14

| Dimethyl phthalate | $<365$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<365$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dinitrotoluene | $<365$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270 C |
| 2,6-Dinitrotoluene | $<365$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<365$ | jrw | SW | 8270C |
| Di-n-octylphthalate | $<365$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270C |
| Fluoranthene | 2,800 | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270 C |
| Fluorene | <365 | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270 C |
| Hexachlorobenzene | <365 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<365$ | jrw | SW | 8270C |
| Hexachloro-1,3-butadiene | <365 | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270C |
| . Hexachlorocyclopentadiene | $<729$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<729$ | jrw | SW | 8270 C |
| Hexachloroethane | <365 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<365$ | jrw | SW | 8270 C |
| Indeno (1,2,3-cd) pyrene | <365 | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270 C |
| Isophorone | <365 | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270C |
| Naphthalene | <365 | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270C |
| Nitrobenzene | <365 | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270 C |
| N-Nitrosodi-n-propylamine | <365 | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270C |
| Phenanthrene | 1,570 | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270 C |
| Pyrene | 1,730 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<365$ | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | <365 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<365$ | jrw | S | 8270C |
| Surrogate: d5-Nitrobenzene | 89 | 8 | 08/24/2001 | 952 | 1473 |  | j5w | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 98 | 4 | 08/24/2001 | 952 | 1473 |  | jrw | SW | 8270C |
| Surrogate: d14-Terphenyl | 65 | $\%$ | 08/24/2001 | 952 | 1473 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,820 | ug/kg dw | 08/24/2001 | 952 | 1473 | <1,820 | jrw | SW | 82700 |
| 4-Chloro-3-methylphenol | <365 | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW | 8270C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
08/30/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14810

## Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |  |

SAMPLE NO. 700407

SAMPLE DESCRIPTION
DATE/TIME TAKEN
SBI001:HMW-14S:S040050:412

| 2-Cblorophenol | $<365$ |  | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dichlorophenol | $<365$ |  | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW 8270C |
| 2,4-Dimethylphenol | $<365$ |  | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<365$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<365$ | jrw | SW 8270C |
| 2-Methylphenol | $<365$ |  | ug/kg dw | 08/24/2001 | 952 | 1473 | $<365$ | jrw | SW 8270C |
| meta \& para-Methylphenol | $<365$ |  | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW 8270C |
| 2-Nitrophenol | $<365$ |  | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW 8270C |
| Pentachlorophenol | $<365$ |  | $u g / \mathrm{kg}$ dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW 8270C |
| Phenol | $<365$ |  | ug/kg dw | 08/24/2001 | 952 | 1473 | <365 | jrw | SW 8270C |
| 2,4,5-Trichlorophenol | $<365$ |  | ug/kg dw | 08/24/2001 | 952 | 1473 | $<365$ | jrw | SW 8270C |
| 2,4,6-Trichlorophenol | <365 |  | ug/kg dw | 08/24/2001 | 952 | 1473 | $<365$ | jrw | SW 8270C |
| Surrogate: d6-Phenol | 85 |  | 8 | 08/24/2001 | 952 | 1473 |  | jrw | SW 8270C |
| Surrogate: 2-Fluorophenol | 77 |  | \% | 08/24/2001 | 952 | 1473 |  | jrw | SW 8270 C |
| Surrogate: Tribromophenol | 103 | note | \% | 08/24/2001 | 952 | 1473 |  | jrw | SW 8270C |
| PCB's M 8082, Non-Aq |  |  |  |  |  |  |  |  |  |
| Aroclor 1016 | $<0.55$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 105 | 190 | $<0.55$ | jde | SW 8082 |
| Aroclor 1221 | <0.55 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 105 | 190 | $<0.55$ | jdc | SW 8082 |
| Aroclor 1232 | $<0.55$ |  | $\mathrm{mg} / \mathrm{kg}$ dw | 08/21/2001 | 105 | 190 | $<0.55$ | jdc | SW 8082 |
| Aroclor 1242 | $<0.55$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 105 | 190 | $<0.55$ | jdc | SW 8082 |
| Aroclor 1248 | $<0.55$ |  | mg/kg dw | 08/21/2001 | 105 | 190 | $<0.55$ | jdc | SW 8082 |
| Aroclor 1254 | $<0.55$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 105 | 190 | $<0.55$ | jdc | SW 8082 |
| Aroclor 1260 | $<0.55$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 105 | 190 | $<0.55$ | jdc | SW 8082 |
| Surrogate:TCX/DCB | 83/77 |  | $\%$ | 08/21/2001 | 105 | 190 |  | jdic | SW 8082 |
| TPH - FTIR Non-aq | 1,660 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/22/2001 | 595 | 627 | $<55$ | 260 | 418.1 |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002

08/30/2001

Prep Run


DATE/TIME TAKEN
08/15/2001 10:00

| Dry Weight | 95.6 | 4 | 08/24/2001 |  | 1484 |  | mhg | SM 2540 G . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prep, PCBs Non-Aq 8082 | Complete |  | 08/20/2001 | 105 |  | Complete | Ime | SW 3540C; SW 3545 |
| Prep, BNa Non-Aq | Complete |  | 08/21/2001 | 952 |  | Complete | rec | EPA 625; SW 3540C; SW 3545 |
| Prep, TPH 418.1 Nonaq | COMPLETE |  | 08/21/2001 | 595 |  | Complete | sub | SW 9071 |
| VOLATILE COMPOUNDS-8260 Non-Aq |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/17/2001 |  | 1471 | Complete | bmh |  |
| Acetone | <105 | ug/kg dw | 08/17/2001 |  | 1471 | $<105$ | bmh | SW 8260A |
| Benzene | $<5.2$ | ug/kg dw | 08/17/2001 |  | 1471 | $<5.2$ | bmh | SW 8260A |
| tert-Butylbenzene | $<5.2$ | ug/kg dw | 08/17/2001 |  | 1471 | <5.2 | bmh | SW 8260A |
| sec-Butylbenzene | $<5.2$ | ug/kg dw | 08/17/2001 |  | 1471 | $<5.2$ | bmh | SW 8260A |
| n-Butylbenzene | $<5.2$ | ug/kg dw | 08/17/2001 |  | 1471 | $<5.2$ | bmh | SW 8260A |
| Bromochloromethane | <5.2 | ug/kg dw | 08/17/2001 |  | 1471 | $<5.2$ | bmh | SW 8260A |
| Bromodichloromethane | <5.2 | ug/kg dw | 08/17/2001 |  | 1471 | $<5.2$ | bmh | SW 8260A |
| Bromoform | <5.2 | ug/kg dw | 08/17/2001 |  | 1471 | $<5.2$ | bmh | SW 8260A |
| Bromobenzene | $<5.2$ | ug/kg dw | 08/17/2001 |  | 1471 | $<5.2$ | bmh | SW 8260A |
| 2-Butanone (MEK) | $<52$ | ug/kg dw | 08/17/2001 |  | 1471 | $<52$ | bmh | SW 8260A |
| Carbon disulfide | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 |  | 1471 | <5.2 | bmh | SW 8260A |
| Carbon tetrachloride | <5.2 | ug/kg dw | 08/17/2001 |  | 1471 | <5.2 | bmh | SW 8260A |
| Chlorobenzene | $<5.2$ | ug/kg dw | 08/17/2001 |  | 1471 | $<5.2$ | bmh | SW 8260A |
| Chloroethane | $<10.5$ | ug/kg dw | 08/17/2001 |  | 1471 | $<10.5$ | bmh | SW 8260A |
| 2-Chlorotoluene | $<5.2$ | ug/kg dw | 08/17/2001 |  | 1471 | $<5.2$ | bmh | SW 8260A |
| 4-Chlorotoluene | <5.2 | ug/kg dw | 08/17/2001 |  | 1471 | <5.2 | bmh | SW 8260A |
| Chloroform | <5.2 | ug/kg dw | 08/17/2001 |  | 1471 | < 5.2 | bmh | SW 8260A |
| Chloromethane | <10.5 | ug/kg dw | 08/17/2001 |  | 1471 | $<10.5$ | bmh | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd
Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 700408 | SBIOO1:HMW-14S:S190210:412 |

DATE/TIME TAKEN 08/15/2001 10:00

| Dibromochloromethane | $<5.2$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibromomethane | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | <5.2 | brnh | SW | 8260A |
| Dichlorodifluoromethane | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | <5.2 | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.2 | bmh | sw | 8260A |
| 1,3-Dichlorobenzene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | < 5.2 | bmh | SW | 8260A |
| 1.4-Dichlorobenzene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<5.2$ | ug/kg dw | 08/27/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| 1,2-Dichloropropane | <5.2 | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | <5.2 | ug/kg dw | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| 2,2-Dichloropropane | <5.2 | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | brih | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| Ethylbenzene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| n -Hexane | <20.9 | $u \mathrm{f} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<20.9$ | bmh | SW | 8260A |
| 2-Hexanone | $<52.3$ | ug/kg dw | 08/17/2001 | 1471 | $<52.3$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.2$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| p-Isopropyltoluene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| Bromomethane | $<10.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/17/2001 | 1471 | $<10.5$ | bmh | SW | 8260A. |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION 700408 <br> SBI001: HMW-14S:S190210:412

| Methylene Chloride | $<10.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <10.5 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Methyl t-butyl ether (MTBE) | <5.2 | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<52.3$ | ug/kg dw | 08/17/2001 | 1471 | $<52.3$ | bmh | Sw | 8260A |
| n-Propylbenzene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| Styrene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| Naphthalene | <5.2 | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | <5.2 | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.2$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| Tetrachloroethene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | sw | 8260A |
| Toluene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.2$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | <5.2 | ug/kg dw | 08/17/2001 | 1471 | <5.2 | bmh | Sw | 8260A |
| Trichloroethene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.2$ | bmh | Sw | 8260A |
| Trichlorofluoromethane | <5.2 | ug/kg dw | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | <5.2 | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| Vinyl Acetate | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| Vinyl Chloride | <2.1 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<2.1$ | bmh | Sw | 8260A |
| Xylenes, Total | <5.2 | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 88 | $\%$ | 08/17/2001 | 1471 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 93 | \% | 08/17/2001 | 1471 |  | bmh | SW | 8260A |
| di-Toluene (surr) | 97 | \% | 08/17/2001 | 1471 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 93 | $\%$ | 08/17/2001 | 1471 |  | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |


| SAMPLE NO. | SAMPLE DESCRIPTION |
| :--- | :--- |
| 700408 | SBIOO1:HMW-14S:S190210:412 |

DATE/TIME TAKEN 08/15/2001 10:00

| Acenaphthene | $<345$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<345$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | $<345$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/24/2001 | 952 | 1473 | $<345$ | jrw | SW 8270C |
| Anthracene | $<345$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<345$ | jrw | SW 8270C |
| Benzo (a) anthracene | $<345$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<345$ | jrw | SW 8270C |
| Benzo (b) fluoranthene | $<345$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<345$ | jrw | SW 8270C |
| Benzo (k) fluoranthene | $<345$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<345$ | jrw | SW 8270C |
| Benzo (a) pyrene | $<173$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} \mathbf{w}$ | 08/24/2001 | 952 | 1473 | $<173$ | jrw | SW 8270C |
| Benzyl alcohol | $<345$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<345$ | jrw | SW 8270C |
| Benzyl butyl phthalate | $<345$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <345 | jrw | SW 8270C |
| Bis (2-chloroethyl) ether | $<345$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <345 | jrw | SW 8270C |
| Bis (2-chloroethoxy) methane | $<345$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<345$ | jrw | SW 8270C |
| Bis(2-ethylhexyl) phthalate | $<345$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<345$ | jrw | SW 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<345$ | ug/kg dw | 08/24/2001 | 952 | . 1473 | $<345$ | jrw | SW 8270 C |
| 4-Bromophenyl phenyl ether | $<345$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<345$ | jrw | SW 8270C |
| 4-Chloroaniline | $<345$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<345$ | jrw | SW 8270C |
| 2-Chloronaphthalene | $<345$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<345$ | jrw | SW 8270C |
| Chrysene | $<345$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<345$ | jrw | SW 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<173$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<173$ | jıw | SW 8270C |
| Dibenzofuran | $<345$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<345$ | jrw | SW 8270C |
| 1,2-Dichlorobenzene | $<345$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<345$ | jrw | SW 8270C |
| 1,3-Dichlorobenzene | <345 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<345$ | jrw | SW 8270C |
| 1,4-Dichlorobenzene | $<345$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<345$ | jrw | SW 8270C |
| 3,3'-Dichlorobenzidine | $<690$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<690$ | jrw | SW 8270C |
| Diethyl phthalate | <345 | ug/kg dw | 08/24/2001 | 952 | 1473 | <345 | jrw | SW 8270C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |

SAMPLE DESCRIPTION
SBI001:HMW-14S:S190210:412

SAMPLE NO. 700408
$<345$
Dimethyl phthalat
2,6-Dinitrotoluene Di-n-octylphthalate
Fluoranthene
Fluorene
Hexachlorobenzen
Hexachloro-1,3-butadiene
Hexachlorocyclopentadiene Hexachloroethane Indeno (1, 2,3-cd) pyrene Isophorone Naphthalene Nitrobenzene Phenanthrene Pyrene

1,2,4-Trichlorobenzene Surrogate: d5-Nitrobenzene Surrogate: 2-Fluorobiphenyl Surrogate: d14-Terphenyl

ACID COMPOUNDS - 8270 Non-aq

| Benzoic Acid | $<1,730$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<1,730$ | jxw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Chloro-3-methylphenol | <345 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<345$ | j「w | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/30/2001

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting | Analyst |  |
| Number | Limit | Initials Method Reference |  |  |  |  |  |

## SAMPLE NO. 700408

SAMPLE DESCRIPTION
SBI001:HMW-14S:S190210:412

DATE/TIME TAKEN 08/15/2001 10:00
2-Chlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2-Methyl-4,6-dinitrophenol
2-Methylphenol
meta \& para-Methylphenol
2-Nitrophenol
Pentachlorophenol
Phenol
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
Surrogate: d6-Phenol
Surrogate: 2-Fluorophenol
Surrogate: Tribromophenol
PCB's M 8082, Non-Aq
Aroclor 1016
Aroclor 1221
Aroclor 1232 ,
Aroclor 1242
Aroclor 1248
Aroclor 1254
Aroclor 1260
Surrogate: $5 C X / D C B$
TPH - FTIR Non-aq$<345$<345$<345$<345
$<345$
$<345$
<345
37
19
$<0.52$
$<0.52$
$<0.52$
$<0.52$
<0.52
$<0.52 \quad \mathrm{mg} / \mathrm{kg} \mathrm{dw}$

65/84 08/21/2001 105
<52


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/30/2001

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analyed | Number | Number | Limit | Initials Method Reference |  |

## SAMPLE NO. 700409

SAMPLE DESCRIPTION
SBI001:HMW-14S:S210230:412

DATE/TIME TAKEN
08/15/2001 10:08

| Dry Weight | 96.6 | * | 08/24/2001 |  | 1484 |  | mhg | SM 2540 G . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prep, PCBs Non-Aq 8082 | Complete |  | 08/20/2001 | 105 |  | Complete | 1 mc | SW 3540C; SW 3545 |
| Prep, BNA Non-Aq | Complete |  | 08/21/2001 | 952 |  | Complete | rec | EPA 625; SW 3540C; SW 3545 |
| Prep, TPH 418.1 Nonaq | COMPLETE |  | 08/21/2001 | 595 |  | Complete | sub | SW 9071 |
| VOLATILE COMPOUNDS-8260 Non-Aq |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/17/2001 |  | 1471 | Complete | bmh |  |
| Acetone | $<104$ | ug/kg dw | 08/17/2001 |  | 1471 | <104 | bmh | SW 8260A |
| Benzene | $<5.2$ | ug/kg dw | 08/17/2001 |  | 1471 | < 5.2 | bmh | SW 8260A |
| tert-Butylbenzene | $<5.2$ | ug/kg dw | 08/17/2001 |  | 1471 | <5.2 | bmh | SW 8260A |
| sec-Butylbenzene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 |  | 1471 | $<5.2$ | bmh | SW 8260A |
| n-Butylbenzene | $<5.2$ | ug/kg dw | 08/17/2001 |  | 1471 | <5.2 | bmh | SW 8260A |
| Bromochloromethane | $<5.2$ | ug/kg dw | 08/17/2001 |  | 1471 | $<5.2$ | bmh | SK 8260A |
| Bromodichloromethane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 |  | 1471 | $<5.2$ | bmh | SW 8260A |
| Bromoform | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 |  | 1471 | <5.2 | bmh | SW 8260A |
| Bromobenzene | $<5.2$ | ug/kg dw | 08/17/2001 |  | 1471 | <5.2 | bmh | SW 8260A |
| 2-Butanone (MEK) | $<52$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 |  | 1471 | $<52$ | bmh | SW 8260A |
| Carbon disulfide | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 |  | 1471 | $<5.2$ | bmh | SW 8260A |
| Carbon tetrachloride | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 |  | 1471 | <5.2 | bmh | SW 8260A |
| Chlorobenzene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 |  | 1471 | $<5.2$ | bmh | SW 8260A |
| Chloroethane | $<10.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 |  | 1471 | $<10.4$ | bmh | SW 8260A |
| 2-Chlorotoluene | $<5.2$ | ug/kg dw | 08/17/2001 |  | 1471 | $<5.2$ | bmh | SW 8260A |
| 4-Cnlorotoluene | $<5.2$ | ug/kg dw | 08/17/2001 |  | 1471 | $<5.2$ | bmh | SW 8260A |
| Chloroform | $<5.2$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/17/2001 |  | 1471 | <5.2 | bmh | SW 8260A |
| Chloromethane | $<10.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 |  | 1471 | <10.4 | brh | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/30/2001 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002


| Dibromochloromethane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibromomethane | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| Dichlorodifluoromethane | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.2$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.2$ | bmh | SH | 8260A |
| 1,3-Dichlorobenzene | <5.2 | ug/kg dw | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | <5.2 | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | Sw | 8260A |
| 1,2-Dichloroethane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.2$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.2$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| 1,2-Dichloropropane | <5.2 | ug/kg dw | 08/17/2001 | 1471 | <5.2 | binh | SW | 8260A |
| 1,3-Dichloropropane | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.2$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | <5.2 | binh | SW | 8260A |
| cis-1.3-Dichloropropene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | sw | 8260A |
| trans-1,3-Dichloropropene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.2$ | bmh | Sw | 8260A |
| Ethylbenzene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | <5.2 | bmin | SW | 8260A |
| Hexachlorobutadiene | <5.2 | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| n -Hexane | $<20.7$ | ug/kg dw | 08/17/2001 | 1471 | <20.7 | bmh | SW | 8260A |
| 2-Hexanone | $<51.8$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<51.8$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW. | 8260A |
| p-Isopropyltoluene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| Bromomethane | <10.4 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<10.4$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/30/2001

Job Number: 01.14810


SAMPLE NO. SAMPLE DESCRIPTION
700409
SBI001:HMW-14S:S210230:412

| Methylene Chloride | $<10.4$ | ug/kg dw | 08/17/2001 | 1471 | $<10.4$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Methyl t-butyl ether (MTBE) | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<51.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <51.8 | bmh | SW | 8260A |
| n-Propylbenzene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| Styrene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| Naphthalene | <5.2 | ug/kg dw | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| Tetrachloroethene | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| Toluene | <5.2 | ug/kg dw | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | <5.2 | bmh | Sw | 8260A |
| 1,1,1-Trichloroethane | < 5.2 | ug/kg dw | 08/17/2001 | 1471 | < 5.2 | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | <5.2 | ug/kg dw | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| Trichloroethene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| Trichlorofluoromethane | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | < 5.2 | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | $<5.2$ | bmb | SW | 8260A |
| Vinyl Acetate | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.2$ | bmh | SW | 8260A |
| Vinyl Chloride | $<2.1$ | ug/kg dw | 08/17/2001 | 1471 | $<2.1$ | bmh | SW | 8260A |
| Xylenes, Total | $<5.2$ | ug/kg dw | 08/17/2001 | 1471 | <5.2 | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 90 | \% | 08/17/2001 | 1471 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 92 | \% | 08/17/2001 | 1471 |  | bmh | SW | 8260A |
| d8-Toluene (surr) | 97 | \% | 08/17/2001 | 1471 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 92 | 4 | 08/17/2001 | 1471 |  | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002

|  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | Prep | Run |  |  |
| Result Flag Units | Analyzed | Batch | Batch | Reporting Analyst |  |  |
| Number | Number | Limit | Initials Method Reference |  |  |  |

## SAMPLE NO. 700409

SAMPLE DESCRIPTION
SBI001:HMW-14S:S210230:412

08/30/2001

DATE/TIME TAKEN
08/15/2001 10:08

| Acenaphthene | $<342$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | $<342$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270C |
| Anthracene | $<342$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270C |
| Benzo (a)anthracene | $<342$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | $8270 C^{\text {c }}$ |
| Benzo (b) fluoranthene | <342 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<342$ | jıw | SW | $8270{ }^{\text {c }}$ |
| Benzo (k) fluoranthene | $<342$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<342$ | jıw | SW | 8270C |
| Benzo(a) pyrene | $<171$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<171$ | jrw | SW | 8270C |
| Benzyl alcohol | $<342$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Benzyl butyl phthalate | $<342$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270 C |
| Bis (2-chloroethyl) ether | $<342$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <342 | jrw | SW | 8270C |
| Bis (2-chloroethoxy) methane | $<342$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270 C |
| Bis (2-ethylhexyl)phthalate | $<342$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270C |
| 2,2'-oxybis(1-Chloropropane) | $<342$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270C |
| 4-Bromophenyl phenyl ether | <342 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270C |
| 4-Chloroaniline | $<342$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270C |
| 2-Chloronaphthalene | $<342$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270C |
| Chrysene | $<342$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270C |
| Dibenzo (a, h) anthracene | $<171$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<171$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Dibenzofuran | $<342$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270 C |
| 1,2-Dichlorobenzene | <342 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270 C |
| 1,3-Dichlorobenzene | $<342$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270 C |
| 1,4-Dichlorobenzene | $<342$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<683$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<683$ | jrw | SW | 8270 C |
| Diethyl phthalate | $<342$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <342 | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002

|  |  | $\because$ | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. |  | SAMPLE DE | SCRI | PTIO |  |  |  |  | DA | /TIME | TAKEN |
| 700409 |  |  | SBI001: HM | -14 | : S21 | 230:412 |  |  |  | 08/ | 5/2001 | 1 10:08 |


| Dimethyl phthalate | $<342$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <342 | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dinitrotoluene | $<342$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <342 | jrw | SW | 8270C |
| 2,6-Dinitrotoluene | <342 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270 C |
| Di-n-octylphthalate | $<342$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270C |
| Fluoranthene | $<342$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <342 | jrw | SW | 8270C |
| Fluorene | $<342$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 82700 |
| Hexachlorobenzene | <342 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<342$ | j5w | SW | 8270C |
| Hexachloro-1,3-butadiene | $<342$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270C |
| :Hexachlorocyclopentadiene | $<683$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<683$ | jrw | SW | 8270C |
| Hexachloroethane | $<342$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270 C |
| Indeno (1,2,3-cd) pyrene | $<342$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270 C |
| Isophorone | <342 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <342 | jrw | SW | 8270C |
| Naphthalene | <342 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 2473 | $<342$ | jrw | SW | 8270C |
| Nitrobenzene | <342 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<342$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270C |
| Phenanthrene | $<342$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270C |
| Pyrene | <342 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | <342 | ug/kg dw | 08/24/2001 | 952 | 1473 | <342 | jxw | SW | 82700 |
| Surrogate: d5-Nitrobenzene | 94 | $\%$ | 08/24/2001 | 952 | 1473 |  | jrw | SW | 82700 |
| Surrogate: 2-Fluorobiphenyl | 101 | $\%$ | 08/24/2001 | 952 | 1473 |  | jrw | SW | 8270C |
| Surrogate: di4-Terphenyl | 102 | 8 | 08/24/2001 | 952 | 1473 |  | jrw | SW | 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,710 | ug/kg dw | 08/24/2001 | 952 | 1473 | <1,710 | jrw | SW | 82700 |
| 4-Chloro-3-methylphenol | <342 | ug/kg dw | 08/24/2001 | 952 | 1473 | <342 | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Eatch | Batch | Reporting Analyst |  |  |
| Analyzed | Number | Number | Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 700409

SBI001: HMW-14S : S210230: 412
DATE/TIME TAKEN 08/15/2001 10:08

| 4 -Chlorophenol | $<342$ | $u g / \mathrm{kg} d w$ | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dichlorophenol | <342 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <342 | jrw | SW 8270C |
| 2,4-Dimethylphenol | $<342$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <342 | jrw | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<342$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW 8270C |
| 2-Methylphenol | $<342$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <342 | jrw | SW 8270C |
| meta \& para-Methylphenol | <342 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW 8270C |
| 2-Nitrophenol | $<342$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW 8270C |
| Pentachlorophenol | $<342$ | ug/kg dw | 08/24/2001 | 952 | 14.73 | $<342$ | jrw | SW 8270C |
| Phenol | <342 | $u g / \mathrm{kg}$ dw | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW 8270C |
| 2,4,5-Trichlorophenol | $<342$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<342$ | jrw | SW 8270C |
| 2,4,6-Trichlorophenol | <342 | ug/kg dw | 08/24/2001 | 952 | 1473 | <342 | jrw | SW 8270C |
| Surrogate: d6-Phenol | 82 | \% | 08/24/2001 | 952 | 1473 |  | jrw | SW 8270C |
| Surrogate: 2-Fluorophenol | 73 | $t$ | 08/24/2001 | 952 | 1473 |  | jrw | SW 8270C |
| Surrogate: Tribromophenol | 86 | $\%$ | 08/24/2001 | 952 | 1473 |  | jrw | SW 8270C |
| PCB's M 8082, Non-Aq |  |  |  |  |  |  |  |  |
| Aroclor 1016 | $<0.52$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 105 | 190 | $<0.52$ | jdc | SW 8082 |
| Aroclor 1221 | $<0.52$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 105 | 190 | $<0.52$ | jdc | SW 8082 |
| Aroclor 1232 | $<0.52$ | $\mathrm{mg} / \mathrm{kg} \mathrm{d} w$ | 08/21/2001 | 105 | 190 | $<0.52$ | jdc | SW 8082 |
| Aroclor 1242 | $<0.52$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 105 | 190 | $<0.52$ | jdc | SW 8082 |
| Aroclor 1248 | <0.52 | $\mathrm{mg} / \mathrm{kg} \mathrm{d} w$ | 08/21/2001 | 105 | 190 | $<0.52$ | jdc | SW 8082 |
| Aroclor 1254 | $<0.52$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 105 | 190 | $<0.52$ | jdc | SW 8082 |
| Aroclor 1260 | $<0.52$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/21/2001 | 105 | 190 | $<0.52$ | jdc | SW 8082 |
| Surrogate:TCX/DCB | 68/80 | 8 | 08/21/2001 | 105 | 190 |  | jdc | SW 8082 |
| TPH - FTIR Non-aq | $<52$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/22/2001 | 595 | 627 | <52 | 260 | 418.1 |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/30/2001

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 700410

SAMPLE DESCRIPTION
SBIO02:HMW-9D:S000020:505

DATE/TIME TAKEN 08/15/2001 16:35


## ANALYTICAL REPORT

Kevin Wildman<br>HULI \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01. 14810<br>Client Project ID: South Bend Indiana SBI002

08/30/2001

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |

SAMPLE NO. 700410

SAMPLE DESCRIPTION
SBIO02:HMW-9D:S000020:505

DATE/TIME TAKEN 08/15/2001 16:35

| Carbon disulfide | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | sw | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carbon tetrachloride | $<5.4$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| Chlorobenzene | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| Chloroethane | $<10.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<10.7$ | bmh | SW | 8260A |
| 2-Chlorotoluene | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| 4-Chlorotoluene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| Chloroform | <5.4 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| Chloromethane | $<10.7$ | ug/kg dw | 08/17/2001 | 1471 | $<10.7$ | bmh | SW | 8260A |
| Dibromochloromethane | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| Dibromomethane | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | sw | 8260A |
| 1,2-Dichlorobenzene | <5.4 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.4$ | bmh | sw | 8260A |
| 1,3-Dichlorobenzene | <5.4 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | <5.4 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | <5.4 | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| 1,1-Dichloroethene | <5.4 | ug/kg dw | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| Cis-1,2-Dichloroethene | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.4$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.4 | bmich | SW | 8260A |
| 1,1-Dichloropropene | <5.4 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.4 | bmh | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.4$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
08/30/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units |  | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION
700410 SBI002:HMW-9D:S000020:505

DATE/TIME TAKEN 08/15/2001 16:35

| trans-1,3-Dichloropropene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | $08 / 17 / 2001$ | 1471 | $<5.4$ | bmh | SW |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Ethylbenzene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | $08 / 17 / 2001$ | 1471 | $<5.4$ | bmh | SW |
| Hexachlorobutadiene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | $08 / 17 / 2001$ | 1471 | $<5.4$ | bmh | SW |
| R |  |  |  |  |  |  |  |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd
Dublin, OH 43016

08/30/2001

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 700410

SBI002:HMW-9D:S000020:505

DATE/TIME TAKEN 08/15/2001 16:35

| 1,3,5-Trimethylbenzene | $<5.4$ | ug/kg dw | 08/17/2001 | 1471 | < 5.4 | bmh | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Acetate | <5.4 | ug/kg dw | 08/17/2001 | 1471 | <5.4 | bmin | SW 8260A |
| Vinyl Chloride | $<2.1$ | ug/kg dw | 08/17/2001 | 1471 | $<2.1$ | bmh | SW 8260A |
| Xylenes, Total | <5.4 | ug/kg dw | 08/17/2001 | 1471 | <5.4 | bmh | SN 8260A |
| d4-1,2-Dichloroethane(surr) | 90 | \% | 08/17/2001 | 1471 |  | bmh | SW 8260A |
| Dibromofluoromethane (surr) | 95 | \% | 08/17/2001 | 1471 |  | bmh | SW 8260A |
| d8-Toluene (surr) | 96 | \% | 08/17/2001 | 1471 |  | bmh | SW 8260A |
| Bromofluorobenzene (surr) | 97 | \% | 08/17/2001 | 1471 |  | bmh | SW 8260A |

$\begin{array}{ll}\text { SAMPLE NO. SAMPLE DESCRIPTION } \\ 700411 & \text { SBIO02:HMW-9DD:S000020:505 }\end{array}$
DATE/TIME TAKEN 08/15/2001 16:35

| Dry Weight | 94.0 | * | 08/24/2001 |  | 1484 |  | mhg | SM | 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/23/2001 |  | 1245 | Complete | end | SW | 6010B |
| Arsenic, ICP | 4.8 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 908 | 2975 | $<3.5$ | emd | SW | 6010B |
| Barium, ICP | 47.3 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 908 | 2906 | $<0.70$ | emd | SW | 60108 |
| Cadmium, ICP | $<1.1$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 908 | 2888 | $<1.1$ | emd | SW | 6010B |
| Chromium, ICP | 5.0 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 908 | 2876 | <1.4 | emd | SW | 6010B |
| Lead, ICP | 47.3 | $\mathrm{mg} / \mathrm{kg} \mathrm{d} \mathrm{w}$ | 08/23/2001 | 908 | 2877 | $<2.9$ | emd | SW | 6010日 |
| Mercury cVAA | 0.082 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 613 | 631 | $<0.009$ | epk | SW | 7471A |
| Selenium, ICP | $<3.5$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 908 | 2955 | <3.5 | emd | SW | 6010B |
| Silver, ICP | $<1.4$ | $\mathrm{mg} / \mathrm{kg} . \mathrm{dw}$ | 08/23/2001 | 908 | 2908 | <1.4 | emd | SW | 6010B |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 700411 |  | SBI002: H | -9D | : S00 | $20: 50$ |  |  |  | 08/ | $5 / 2001$ | 16:35 |


| ICP Digestion, Nonaqueous Mercury Digestion, Non-Aq | Complete |  | 08/22/2001 | 908 |  | Complete | mrt | SW | 3050B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Complete |  | 08/24/2001 | 613 |  | Complete | clm | SW | 7471A |
| VOLATILE COMPOUNDS-8260 NOR-Aq |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/17/2001 |  | 1471 | Complete | bmh |  |  |
| Acetone | $<106$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/17/2001 |  | 1471 | <106 | bmh | SW | 8260A |
| Benzene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 |  | 1471 | <5.3 | bmh | SW | 8260A |
| tert-Butylbenzene | <5.3 | ug/kg dw | 08/17/2001 |  | 1471 | <5.3 | bmh | SW | 8260A |
| sec-Butylbenzene | $<5.3$ | ug/kg dw | 08/17/2001 |  | 1471 | <5.3 | bmh | SW | 8260A |
| n-Butylbenzene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 |  | 1471 | $<5.3$ | bmh | SW | 8260A |
| Bromochloromethane | $<5.3$ | ug/kg dw | 08/17/2001 |  | 1471 | $<5.3$ | bmh | SW | 8260A |
| Bromodichloromethane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 |  | 1471 | $<5.3$ | bmh | SW | 8260A |
| Bromoform | $<5.3$ | ug/kg dw | 08/17/2001 |  | 1471 | <5.3 | bmh | SW | 8260A |
| Bromobenzene | $<5.3$ | ug/kg dw | 08/17/2001 |  | 1471 | <5.3 | bmh | SW | 8260A |
| 2-Butanone (MEK) | $<53$ | ug/kg dw | 08/17/2001 |  | 1471 | $<53$ | bmh | SW | 8260A |
| Carbon disulfide | $<5.3$ | ug/kg dw | 08/17/2001 |  | 1471 | $<5.3$ | bmh | SW | 8260A |
| Carbon tetrachloride | $<5.3$ | ug/kg dw | 08/17/2001 |  | 1471 | $<5.3$ | bmh | SW | 8260A |
| Chlorobenzene | $<5.3$ | ug/kg dw | 08/17/2001 |  | 1471 | <5.3 | bmh | SW | 8260A |
| Chloroethane | <10.6 | ug/kg dw | 08/17/2001 |  | 1471 | $<10.6$ | bmh | SW | 8260A |
| 2-Chlorotoluene | $<5.3$ | ug/kg dw | 08/17/2001 |  | 1471 | <5.3 | bmh | SW | 8260A |
| 4-Chlorotoluene | $<5.3$ | ug/kg dw | 08/17/2001 |  | 1471 | $<5.3$ | bmh | SW | 8260A |
| Chloroform | $<5.3$ | ug/kg dw | 08/17/2001 |  | 1471 | $<5.3$ | bmh | SW | 8260A |
| Chloromethane | <10.6 | ug/kg dw | 08/17/2001 |  | 1471 | $<10.6$ | bmh | SW | 8260A |
| Dibromochloromethane | <5.3 | ug/kg dw | 08/17/2001 |  | 1471 | <5.3 | bmh | SW | 8260A |
| Dibromomethane | <5.3 | ug/kg dw | 08/17/2001 |  | 1471 | <5.3 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/30/2001

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting | Analyst |  |  |
| Analyed | Number | Number | Limit | Initials Method Reference |  |  |  |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 700411 | SBIOO2:HMW-9DD:S000020:505 | $08 / 15 / 2001$ 16:35 |

1

| Dichlorodifluoromethane | < 5.3 | ug/kg dw | 08/17/2001 | 1471 | $<5.3$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dibromo-3-chloropropane | <5.3 | $u g / \mathrm{kg}$ dw | 08/17/2001 | 1471 | <5.3 | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.3 | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.3$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/17/2001 | 1471 | <5.3 | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.3 | bmh | Sw | 8260A |
| 1,1-Dichloroethane | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.3$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.3 | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.3$ | ug/kg dw | 08/17/2001 | 1471 | $<5.3$ | bmh | SW | 8260A |
| Cis-1,2-Dichloroethene | $<5.3$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.3$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.3$ | ug/kg dw | 08/17/2001 | 1471 | <5.3 | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.3 | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.3$ | ug/kg dw | 08/17/2001 | 1471 | <5.3 | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.3$ | ug/kg dw | 08/17/2001 | 1471 | <5.3 | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<5.3$ | ug/kg dw | 08/17/2001 | 1471 | $<5.3$ | bmh | SW | 8260A |
| Cis-1,3-Dichloropropene | $<5.3$ | ug/kg dw | 08/17/2001 | 1471 | $<5.3$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.3$ | bmh | SW | 8260A |
| Ethylbenzene | $<5.3$ | ug/kg dw | 08/17/2001 | 1471 | $<5.3$ | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.3$ | ug/kg dw | 08/17/2001 | 1471 | $<5.3$ | bmh | SW | 8260A |
| n -Hexane | $<21.3$ | ug/kg dw | 08/17/2001 | 1471 | $<21.3$ | bmh | SW | 8260A |
| 2-Hexanone | $<53.2$ | ug/kg dw | 08/17/2001 | 1471 | $<53.2$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.3$ | bmh | SW | 8260A |
| p-Isopropyltoluene | $<5.3$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | <5.3 | bmh | SW | 8260A |
| Bromomethane | $<10.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<10.6$ | bmh | SW | 8260A |
| Methylene Chloride | $<10.6$ | ug/kg dw | 08/17/2001 | 1471 | $<10.6$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.3$ | ug/kg dw | 08/17/2001 | 1471 | $<5.3$ | bmh | Sw | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002


| 4-Methyl-2-pentanone (MIBK) | <53.2 | ug/kg dw | 08/17/2001 | 1471 | <53.2 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n-Propylbenzene | $<5.3$ | $u \mathrm{~F} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.3$ | bmh | SW | 8260A |
| Styrene | $<5.3$ | ug/kg dw | 08/17/2001 | 1471 | $<5.3$ | bmh | SW | 8260A |
| Naphthalene | $<5.3$ | ug/kg dw | 08/17/2001 | 1471 | <5.3 | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.3$ | ug/kg dw | 08/17/2001 | 1471 | $<5.3$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | <5.3 | ug/kg dw | 08/17/2001 | 1471 | $<5.3$ | bmin | SW | 8260A |
| Tetrachloroethene | 83.9 | ug/kg dw | 08/17/2001 | 1471 | $<5.3$ | bmh | SW | 8260A |
| Toluene | <5.3 | ug/kg dw | 08/17/2001 | 1471 | <5.3 | bmh | Sw | 8260A |
| 1,2,4-Trichlorobenzene | $<5.3$ | ug/kg dw | 08/17/2001 | 1471 | $<5.3$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.3$ | ug/kg dw | 08/17/2001 | 1471 | $<5.3$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | <5.3 | ug/kg dw | 08/17/2001 | 1471 | <5.3 | bmh | SW | 8260A |
| Trichloroethene | <5.3 | ug/kg dw | 08/17/2001 | 1471 | $<5.3$ | bmh | SW | 8260A |
| Trichlorofluoromethane | <5.3 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/17/2001 | 1471 | $<5.3$ | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | <5.3 | ug/kg dw | 08/17/2001 | 1471 | $<5.3$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | <5.3 | ug/kg dw | 08/17/2001 | 1471 | $<5.3$ | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.3$ | bmh | SW | 8260A |
| Vinyl Acetate | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<5.3$ | bmh | SW | 8260A |
| Vinyl Chloride | $<2.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 1471 | $<2.1$ | bmh | SW | 8260A |
| Xylenes, Total | <5.3 | ug/kg dw | 08/17/2001 | 1471 | <5.3 | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 89 | $\%$ | 08/17/2001 | 1471 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 93 | $\%$ | 08/17/2001 | 1471 |  | bmh | SW | 8260A |
| d8-Toluene (surr) | 96 | \% | 08/17/2001 | 1471 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 101 | \% | 08/17/2001 | 1471 |  | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting | Analyst |  |
| Number | Limit | Initials Method Reference |  |  |  |  |  |

## SAMPLE NO. SAMPLE DESCRIPTION

700412 SBI002:FB1:W081501:505
DATE/TIME TAKEN 08/15/2001 17:00


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
08/30/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION

 700412SBI002:FBI:W081501:505

| Bromodichloromethane | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bromoform | <1.0 | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260 B |
| Bromobenzene | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 82608 |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 08/16/2001 | 3490 | $<12.5$ | mrh | SW | 8260 B |
| Carbon disulfide | $<1.0$ | ug/L | 08/16/2001 | 3490 | <1.0 | mrh | SW | 8260B |
| Carbon tetrachloride | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 82608 |
| Chlorobenzene | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | $m \times h$ | SW | 8260B |
| Chloroethane | < 5.0 | ug/L | 08/16/2001 | 3490 | $<5.0$ | mrh | SW | 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 82608 |
| 4-Chlorotoluene | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| Chloroform | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | $m \mathrm{mh}$ | SW | 8260B |
| Chloromethane | $<5.0$ | ug/L | 08/16/2001 | 3490 | <5.0 | mrh | SW | 8260日 |
| Dibromochloromethane | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| Dibromomethane | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | Sw | 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | <5.0 | ug/L | 08/16/2001 | 3490 | < 5.0 | mrh | SW | 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| 1,1-Dichloroethene | <1.0 | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| trans-1,2-Dichloroethene | <1.0 | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |

# ANALYTICAL REPORT 

Kevin Wildman<br>HULL \＆ASSOC．（Dublin）<br>6130 Wilcox Rd．<br>Dublin，OH 43016<br>Job Number： 01.14810<br>Client Project ID：South Bend Indiana SBI002

08／30／2001


| SAMPLE NO．SAMPLE DESCRIPTION | DATE／TIME TAREN |  |
| :--- | :--- | :--- |
| 700412 | SBIOO2：FB1：W081501：505 | $08 / 15 / 200117: 00$ |


| ．3－Dichloropropane | $<1.0$ | ug／L | 08／16／2001 | 34.90 | $<1.0$ | mrh | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 08／16／2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| 1，1－Dichloropropene | ＜1．0 | ug／L | 08／16／2001 | 3490 | ＜1．0 | mrh | SW | 8260B |
| Cis－1，3－Dichloropropene | $<1.0$ | ug／L | 08／16／2001 | 3490 | ＜1．0 | mrh | SW | 82608 |
| trans－1，3－Dichloropropene | $<1.0$ | ug／L | 08／16／2001 | 3490 | ＜1．0 | mrh | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug／L | 08／16／2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| Hexachlorobutadiene | $<5.0$ | ug／L | 08／16／2001 | 3490 | $<5.0$ | mrh | SW | 82608 |
| n －Hexane | ＜5．0 | ug／L | 08／16／2001 | 3490 | ＜ 5.0 | mrh | SW | 82608 |
| 2－Hexanone | $<12.5$ | ug／L | 08／16／2001 | 3490 | $<12.5$ | mrh | SW | 8260B |
| Isopropylbenzene（Cumene） | $<1.0$ | ug／L | 08／16／2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| p－Isopropyltoluene | $<1.0$ | ug／L | 08／16／2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| Bromomethane | ＜ 5.0 | ug／L | 08／16／2001 | 3490 | ＜5．0 | mrh | SW | 8260日 |
| Methylene Chloride | $<5.0$ | ug／L | 08／16／2001 | 3490 | ＜5．0 | mrh | SW | 8260日 |
| Methyl t－butyl ether（MTBE） | $<5.0$ | ug／L | 08／16／2001 | 3490 | ＜5．0 | mrh | SW | 8260B |
| 4－Methyl－2－pentanone（MIBK） | $<12.5$ | ug／L | 08／16／2001 | 3490 | $<12.5$ | mrh | SW | 8260日 |
| n－Propylbenzene | $<1.0$ | ug／L | 08／16／2001 | 3490 | $<1.0$ | mrh | SW | 8260日 |
| Styrene | $<1.0$ | ug／L | 08／16／2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| Naphthalene | $<5.0$ | ug／L | 08／16／2001 | 3490 | ＜5．0 | mrh | SW | 8260B |
| 1，1，1，2－Tetrachloroethane | $<1.0$ | ug／L | 08／16／2001 | 3490 | $<1.0$ | mrh | SW | 8260日 |
| 1，1，2，2－Tetrachloroethane | $<1.0$ | ug／L | 08／16／2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| Tetrachloroethene | $<1.0$ | ug／L | 08／16／2001 | 3490 | $<1.0$ | mra | SW | 8260B |
| Toluene | $<1.0$ | ug／L | 08／16／2001 | 3490 | $<1.0$ | mrh | SW | 82608 |
| 1，2，4－Trichlorobenzene | $<5.0$ | ug／L | 08／16／2001 | 3490 | $<5.0$ | mrh | SW | 8260B |
| 1，1，1－Trichloroethane | $<1.0$ | ug／L | 08／16／2001 | 3490 | $<1.0$ | mrh | Sw | 8260B |
| 1，1，2－Trichloroethane | ＜1．0 | ug／L | 08／16／2001 | 3490 | ＜1．0 | mrh | SW | 8260b |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/30/2001

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 700412

SAMPLE DESCRIPTION SBIOO2:FB1:W081501:505

| Trichloroethene | $<1.0$ | ug/L | 08/16/2001 |  | 3490 | $<1.0$ | mrh | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Trichlorofluoromethane | $<1.0$ | ug/L | 08/16/2001 |  | 3490 | $<1.0$ | mrh | SW | 82608 |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 08/16/2001 |  | 3490 | <5.0 | mrh | SW | 8260日 |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 08/16/2001 |  | 3490 | $<1.0$ | mrh | SW | 82608 |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 08/16/2001 |  | 3490 | <1.0 | mich | Sw | 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 08/16/2001 |  | 3490 | <5.0 | mrh | SW | 82608 |
| Vinyl Chloride | $<1.0$ | ug/L | 08/16/2001 |  | 3490 | $<1.0$ | mrh | SW | 8260日 |
| Xylenes | $<1.0$ | ug/L | 08/16/2001 |  | 3490 | <1.0 | mrh | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 107 | $\%$ | 08/16/2001 |  | 3490 |  | mrh | SW | 82608 |
| Dibromofluoromethane (surr) | 106 | 8 | 08/16/2001 |  | 3490 |  | mrh | SW | 8260B |
| ds-Toluene (surr) | 100 | \% | 08/16/2001 |  | 3490 |  | mrh | SW | 82608 |
| Bromofluorobenzene (surr) | 108 | \% | 08/16/2001 |  | 3490 |  | mrh | SW | 8260B |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW | 827.0 C |
| Acenaphthylene | $<10$ | ug/L | 08/27/2001 | 1258 | 2665 | $<10$ | jcs | SW | 8270 C |
| Anthracene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW | 82700 |
| Benzo (a) anthracene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW | 82700 |
| Benzo(b) fluoranthene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270C |
| Benzo(k) fluoranthene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 82700 |
| Benzo (a) pyrene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270C |
| Benzyl alcohol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW | 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW | 82700 |
| bis(2-Chloroethyl) ether | <10 | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW | 82700 |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 82700 |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/30/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 700412

SBI002:FB1:W081501:505

DATE/TIME TAKEN 08/15/2001 17:00

| 3(2-Ethylhexyl) phthalate | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW 8270C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | Sw 8270C |
| 2-Chloronaphthalene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW 8270C |
| Chrysene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jсs | SW 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW 8270C |
| Dibenzofuran | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | Sw 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 08/27/2001 | 1258 | 2666 | $<50$ | jes | SW 8270C |
| Diethyl phthalate | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW 8270C |
| 2,6-Dinitrotoluene | <10 | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW 8270C |
| Fluoranthene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW 8270C |
| Fluorene | $<10$ | ug/L | 08/27/2001 | 125B | 2666 | <10 | jcs | SW 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW 8270C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 08/27/2001 | 1258 | 2666 | $<20$ | jcs | SW 8270C |
| Hexachloroethane | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW 8270C |
| Indeno (1,2,3-cd) pyrene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW 8270C |
| Isophorone | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman
$\begin{array}{ll}\text { HULL \& ASSOC. (Dublin) } & \text { 08/30/2001 } \\ \text { 6130 Wilcox Rd. } & \end{array}$
Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting | Analyst |  |
| Number | Number | Limit | Initials Method Reference |  |  |  |  |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |
| :--- | :--- | :--- |
| 700412 | SBI002:FB1:W081501:505 |


| Naphthalene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nitrobenzene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW | 8270C |
| Phenanthrene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW | 8270 C |
| Pyrene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 94 | \% | 08/27/2001 | 1258 | 2666 |  | jes | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 100 | \% | 08/27/2001 | 1258 | 2666 |  | jes | SW | 8270C |
| Surrogate: d14-Terphenyl | 108 | \% | 08/27/2001 | 1258 | 2666 |  | jes | SW | 8270 C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 08/27/2001 | 1258 | 2666 | $<50$ | jes | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270C |
| 2-Chlorophenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270C |
| 2.4-Dichlorophenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270 C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2665 | $<10$ | jes | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270 C |
| 2-Methylphenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW | 8270 C |
| meta \& para-Methylphenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270C |
| 2-Nitrophenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270C |
| Pentachlorophenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270C |
| Phenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW | 8270C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270C |
| Surrogate: d6-Phenol | 84 | \% | 08/27/2001 | 1258 | 2666 |  | jcs | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HUL工 \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002

08/30/2001
Prep Run

Date Batch Batch Reporting Analyat
Result Flag Units Analyzed Number Number Limit Initials Method Reference

## SAMPLE DESCRIPTION

SBI002:FB1:W081501:505

DATE/TIME TAKEN 08/15/2001 17:00


## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) 08/30/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 700413 | SBI002:TB1:W081501 | $08 / 15 / 2001$ 17:00 |



## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$08 / 30 / 2001$

Job Number: 01.14810
Client Project ID: South Bend Indiana SBI002

|  |  |  |  | Prep | Run |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Date | Batch | Batch | Reporting | Analyst |  |
| Result | Flag | Units | Analyzed | Number | Number | Limit | Initials | Method Reference |

SAMPLE NO. SAMPLE DESCRIPTION
700413

DATE/TIME TAKEN 08/15/2001 17:00

| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260 B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 82608 |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 08/16/2001 | 3490 | <1.0 | mrh | SW | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 08/エ6/2001 | 3490 | <1.0 | mrh | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 08/16/2001 | 3490 | <1.0 | mrh | SW | 8260B |
| trans-1,2-Dichloroethene | <1.0 | ug/L | 08/16/2001 | 3490 | <1.0 | mrh | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 82608 |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | Sw | 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8250 B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | Sw | 8260B |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 08/16/2001 | 3490 | $<5.0$ | mrh | SW | 82608 |
| n -Hexane | $<5.0$ | ug/L | 08/16/2001 | 3490 | < 5.0 | mrh | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 08/16/2001 | 3490 | $<12.5$ | mrh | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260日 |
| p-Isopropyltoluene | $<1.0$ | ug/I | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 08/16/2001 | 3490 | $<5.0$ | mrh | SW | 8260B |
| Methylene Chloride | <5.0 | ug/L | 08/16/2001 | 3490 | $<5.0$ | mrh | SW | 82608 |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 08/16/2001 | 3490 | $<5.0$ | bmh | SW | 8260 B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 08/16/2001 | 3490 | $<12.5$ | mrh | SW | 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 82608 |
| Styrene | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/30/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14810

## Client Project ID: South Bend Indiana SBIO02

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |
| Analyzed | Number | Number | Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION
DATE/TIME TAKEN 08/15/2001 17:00

| Naphthalene | $<5.0$ | ug/L | 08/16/2001 | 3490 | < 5.0 | mrh | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 08/16/2001 | 3490 | <1.0 | mrh | SW | 8260B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| Tetrachloroethene | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 82608 |
| Toluene | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 82608 |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 08/16/2001 | 3490 | $<5.0$ | mrin | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 82608 |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| Trichloroethene | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 82608 |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 08/16/2001 | 3490 | <5.0 | mrh | SW | 8260 B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 82608 |
| Vinyl Acetate | $<5.0$ | ug/L | 08/16/2001 | 3490 | $<5.0$ | mrh | SW | 82608 |
| Vinyl Chloride | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 8260 B |
| xylenes | $<1.0$ | ug/L | 08/16/2001 | 3490 | $<1.0$ | mrh | SW | 82608 |
| d4-1,2-Dichloroethane (surr) | 110 | \% | 08/16/2001 | 3490 |  | mrh | SW | 8260B |
| Dibromofluoromethane (surr) | 109 | \% | 08/16/2001 | 3490 |  | mrh | SW | 8260 B |
| d8-Toluene (surr) | 99 | \% | 08/16/2001 | 3490 |  | mrh | SW | 8260 B |
| Bromofluorobenzene (surr) | 107 | \% | 08/16/2001 | 3490 |  | mrh | SW | 8260 B |

## QUALITY CONTROL FLAG DEFINITIONS

Job Number: 01.14810
(*) Indicates an out-of-control QC. The analytical data was reported based on other supporting quality control information.
(Note) Indicates to review the notes and comments section of the analytical report as there is additional information concerning this analytical result.
(MS) Indicates that the Matrix Spike (MS) was out of statistical advisory limits.
(MSD) Indicates that the Matrix Spike Duplicate (MSD) was out of statistical advisory limits.
(RPD) Indicates that the Relative Percent Difference (RPD) for the MS/MSD pair was outside of statistical advisory limits.
(SS) Indicates that the MS and MSD were out of statistical advisory limits.
(SSR) Indicates that the MS, MSD and RPD were out of statistical advisory limits.
(MSR) Indicates that the MS and RPD were out of statistical advisory limits.
(MSDR) Indicates that the MSD and RPD were out of statistical advisory limits.
(DL) Indicates that the MS and MSD were diluted out and the percent recoveries of the spikes could not be calculated.
(LS) Indicates that statistical accuracy and precision data is not available for spike concentrations which are $<1 / 4$ of the sample amount. Care should be used in interpreting this data.
(J) Indicates estimated concentration due to internal standard areas or surrogate recoveries outside of control limits. A sample matrix effect is usually indicated.
(DW) Indicates Dry Weight.
Analytical Reporting Limits
The reporting limits listed for non-aqueous samples in the analytical report section are Practical Quantitation Limits (PQLs). These PQLs are based upon a typical standard weight used for a non-aqueous sample. The reporting limit for a sample may be different from the PQL listed depending upon the actual weight of sample used, the samples moisture content and any dilutions used during the analysis.

## NOTES AND COMMENTS

TestAmerica Job Number: 1.14810
Sample Number: 700407
Analysis: 8260 - Volatiles
Elevated reporting limits due to dilution for matrix interference. Internal standard response for d4-1,2-dichloroethane was below recommended response limits. No hits were reported for compounds quantitated using the internal standard. Surrogate recovery of bromofluorobenzene was above recommended recovery limits of 74-121\%. Results were confirmed by repeat analysis.

Sample Number: 700407
Analysis: 8270 BNA
Response for internal standard d12-chrysene was above the recommended level. Results for compounds quantitated from it should be considered estimated. These include pyrene, benzo(a) anthracene and chrysene.

Sample Number: 700408
Analysis: 8270 BNA
Recovery of surrogate 2 -fluorophenol was below the recommended level. All other surrogate recoveries were acceptable.
CHAIN , OF CUSTODY RECORD

## A Associates, inc.

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 REPORT TO: LEVN W:IDMAv
Client: Sonth $B$ Rrod
Site: AR\&A. A Project\#: $S B S 002$ Phase: 01.1 I Samplers: M, Coon FARE

$$
\begin{aligned}
& \text { Deliver To: SAmple } R_{\text {cceuring }} \text { FED Ex } \\
& \text { Method of Delivery: } \frac{\text { EED }}{} \text { Airbill Number: } \$ 26265968006
\end{aligned}
$$

R


$$
\begin{aligned}
& \begin{array}{ccc}
\text { ROJJCT } & \text { SAMPLE } & \text { SAMPLE } \\
\text { NO. } & \text { LOCATION } & \text { TYPE }
\end{array} \\
& \text { SBTOOL : Hmw-14s: S010015 } \\
& \text { SBIoo1 Hmw-14sD So10015 } \\
& \text { SBIool :Hmw-14s: So40050 } \\
& \text { SBIOO : Hmw-14s: S190210 } \\
& \text { SBI001: flmwil4: S } 210230
\end{aligned}
$$



## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016
Job Number: 01.14452

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

Sample
Number
Sample Description

Date Taken

08/08/2001
08/08/2001
08/08/2001
08/08/2001
08/08/2001
08/08/2001
08/08/2001
08/08/2001
08/08/2001
08/09/2001
08/09/2001
08/09/2001
08/09/2001
08/09/2001
08/09/2001
08/09/2001
08/09/2001
08/09/2001

Date Received

699297 SBI002:GB-14:S015025:412
699298 SBIO02:GB-5:S015025:412
699299 SBI002:SB-5:S000015:412
699300
699301
699302
699303 699304 699305 699306 699307 699308 699309 699310 699311 699312 699313 699314

SBI002:GB-8:S000015:412
SBI002:GB-13:S010020:412
SBI002:GB-3:S005020:412
SBI002:GB-3D:S005020:412
SBI002:GB-32:S000015:412
SBI002:GB-19:S000010:412
SBI002:GB-1:S000010:412
SBI002:GB-1D:S000010:412
SBI 002: GB-2:S010015:412
SBIO02:GB-9:S000020:412
SBI002:GB-10:S000020:412
SBI002:GB-12:S000020:412
SBIO02: HMW26S:S015025:412
SBI002:FB-1:W080901:412
SBI002:TB-1:W080901:412

08/10/2001
08/10/2001
08/10/2001
08/10/2001
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08/10/2001
08/10/2001
08/10/2001
08/10/2001

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted only in its entirety.


Approved By

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>08/27/2001

## Job Number: 01.14452

## Client Project ID: South Bend Indiana SBI002



SAMPLE NO. SAMPLE DESCRIPTION
699297 SBIOO2:GB-14:S015025:412

Limit Initials Method Reference


## ANALYTICAL REPORT

Kevin Wildman HULIL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01. 14452
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |

SAMPLE NO. 699297

SAMPLE DESCRIPTION
SBI002:GB-14:S015025:412

DATE/TIME TAKEN 08/08/2001 15:20

| Eis (2-chloroethoxy) methane | <366 | ug/kg dw | 08/17/2001 | 947 | 1461 | <366 | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bis (2-ethylhexyl) phthalate | <366 | ug/kg dw | 08/17/2001 | 947 | 1461 | <366 | jrw | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | $<366$ | ug/ikg dw | 08/17/2001 | 947 | 1461 | $<366$ | jıw | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<366$ | $u g / \mathrm{kg} d w$ | 08/17/2001 | 947 | 1461 | $<366$ | j5w | SW | 8270C |
| 4-Chloroaniline | $<366$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<366$ | jrw | SW | 827.0C |
| 2-Chloronaphthalene | $<366$ | $\underline{u g / k g ~ d w ~}$ | 08/17/2001 | 947 | 1461 | $<366$ | jrw | Sw | 8270C |
| Chrysene | <366 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<366$ | jrw | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<183$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<183$ | jrw | SW | 8270 C |
| Dibenzofuran | <366 | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<366$ | jıw | SW | 8270C |
| 1,2-Dichlorobenzene | $<366$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<366$ | j2w | SW | 8270C |
| 1,3-Dichlorobenzene | $<366$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <366 | juw | SW | 8270 C |
| 1,4-Dichlorobenzene | $<366$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<366$ | jrw | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<733$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<733$ | jrw | SW | 8270C |
| Diethyl phthalate | $<366$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<366$ | jrw | SW | 8270 C |
| Dimethyl phthalate | $<366$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<366$ | jrw | SW | $8270{ }^{\text {c }}$ |
| 2,4-Dinitrotoluene | $<366$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <366 | jrw | SW | 8270C |
| 2,6-Dinitrotoluene | $<366$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<366$ | jrw | SW | 8270 C |
| Di-n-octylphthalate | $<366$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<366$ | jrw | SW | 82700 |
| Fluoranthene | $<366$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <366 | jrw | SW | 8270 C |
| Fluorene | $<366$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<366$ | jrw | SW | 82700 |
| Hexachlorobenzene | $<366$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}^{\text {d }}$ | 08/17/2001 | 947 | 1461 | $<366$ | jrw | SW | 82700 |
| Hexachloro-1,3-butadiene | $<366$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <366 | jrw | SW | 8270 C |
| Hexachlorocyclopentadiene | $<733$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<733$ | jrw | SW | 8270C |
| Hexachloroethane | $<366$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <366 | jrw | SW | 8270C |
| Indeno (1, 2, 3-cd) pyrene | $<366$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <365 | jrw | sw | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION
699297 SBIO02:GB-14:S015025:412

| Isophorone | $<366$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<366$ | jrw | Sw | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Naphthalene | <366 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <366 | jrw | SW | 8270C |
| Nitrobenzene | <366 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<366$ | jrw | SW | 82700 |
| N-Nitrosodi-n-propylamine | <366 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<366$ | jrw | SW | 8270 C |
| Phenanthrene | <366 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<366$ | jrw | SW | 8270 C |
| Pyrene | $<366$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<366$ | jxw | SW | 8270 C |
| 1,2,4-Trichlorobenzene | <366 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <366 | jıw | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 80 |  | \% | 08/17/2001 | 947 | 1461 |  | jTw | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 91 |  | $\%$ | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |
| Surrogate: di4-Terphenyl | 132 | Note | 4 | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,830$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <1,830 | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | <366 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <366 | jrw | SW | 82700 |
| 2-Chlorophenol | <366 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<366$ | jxw | SW | 8270 C |
| 2,4-Dichlorophenol | $<366$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<366$ | jrw | SW | 8270 C |
| 2,4-Dimethylphenol | <366 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <366 | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | <366 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <366 | jrw | SW | 8270 C |
| 2-Methylphenol | $<366$ |  | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | <366 | jrw | SW | 8270C |
| meta \& para-Methylphenol | $<366$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <366 | jrw | SW | 8270C |
| 2-Nitrophenol | $<366$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <366 | jrw | SW | 8270 C |
| Pentachlorophenol | $<366$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<366$ | jrw | SW | 8270 C |
| Phenol | $<366$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1462 | <366 | jrw | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<366$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <366 | jrw | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<356$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<366$ | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$08 / 27 / 2001$

Job Number: 01.14452
Client Project ID: South Bend Indiana SBIO02

|  | Prep Run |
| :--- | :--- |
| Date Batch Batch Reporting Analyst |  |

Result Flag Units Analyzed Number Number Limit Initials Method Reference

## SAMPLE NO. SAMPLE DESCRIPTION 699297 SBI002:GB-14:S015025:412

| Surrogate: d | d6-Phenol | 79 | $t$ | 08/17/2001 | 947 | 1461 | jrw | SW | 8270C |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2 | 2-Fluorophenol | 68 | 4 | 08/17/2001 | 947 | 1461 | jrw | SW | 8270C |  |
| Surrogate: T | Tribromophenol | 82 | 4 | 08/17/2001 | 947 | 1461 | jrw | SW | 8270C |  |
| SAMPLE | NO. | SAMPLE | T |  |  |  |  |  | TIME | TAKEN |
| 699298 |  | SBI002 |  | 412 |  |  |  |  | /2001 | 15:45 |



DATE/TIME TAKEN 08/08/2001 15:20

DATE/TIME TAKEN 08/08/2001 15:45

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.14452<br>Client Project ID: South Bend Indiana SBI002

$08 / 27 / 2001$

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | $C R I$ | IIO |  |  |  |  | DA | /TIME | TAKEN |
| 699298 |  | SBI002: GB | -5: | 150 | 412 |  |  |  | 08/ | 8/2001 | 1 15:45 |


| Acenaphthene | $<350$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270 C |
| Anthracene | $<350$ | ug/kg.dw | 08/17/2001 | 947 | 1461 | $<350$ | jirw | SW | 8270 C |
| Benzo (a) anthracene | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |
| Benzo(b) Eluoranthene | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |
| Benzo (k) fluoranthene | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jxw | SW | 8270 C |
| Benzo(a) pyrene | $<175$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<175$ | jrw | SW | 82700 |
| Benzyl alcohol | <350 | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270 C |
| Benzyl butyl phthalate | $<350$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |
| Bis (2-chloroethyl) ether | - 350 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 82700 |
| Bis (2-chloroethoxy) methane | <350 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| Bis (2-ethylhexyl)phthalate | $<350$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| 4-Chloroaniline | <350 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 82700 |
| 2-Chloronaphthalene | <350 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 82700 |
| Chrysene | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<175$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<175$ | jrw | SW | 8270 C |
| Dibenzofuran | $<350$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 2461 | <350 | jrw | SW | 8270 C |
| 1,2-Dichlorobenzene | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| 1,3-Dichlorobenzene | $<350$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| 1,4-Dichlorobenzene | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<700$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<700$ | jrw | SW | 8270 C |
| Diethyl phthalate | $<350$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<350$ | jıw | SW | 8270 C |
| Dimethyl phthalate | <350 | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01. 14452
Client Project ID: South Bend Indiana SBIOO2

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyat <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 699298 |  | SBIO02: GB | -5: | 1502 | 412 |  |  |  | 08/ | 8/2001 | 1 15:45 |


| 2,4-Dinitrotoluene | $<350$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,6-Dinitrotoluene | $<350$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| Di-n-octylphthalate | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| Fluoranthene | <350 | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| Fluorene | <350 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| Hexachlorobenzene | <350 | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<350$ | JTw | SW | 8270C |
| Hexachloro-1, 3-butadiene | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 82700 |
| Hexachlorocyclopentadiene | $<700$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<700$ | jrw | Sw | 8270C |
| Hexachloroethane | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |
| Indeno(1,2,3-cd) pyrene | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| Isophorone | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Naphthalene | $<350$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |
| Nitrobenzene | <350 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<350$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| Phenanthrene | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| Pyrene | $<350$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<350$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 69 | 8 | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 79 | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270 C |
| Surrogate: di4-Terphenyl | 86 | 8 | 08/17/2001 | 947 | 1461 |  | jww | Sw | 82700 |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,750 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <1.750 | jrw | Sw | 8270C |
| 4-Chloro-3-methylphenol | <350 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jxw | SW | 8270 C |
| 2-Chlorophenol | $<350$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting | Analyst |  |
| Number | Limit | Initials Method Reference |  |  |  |  |  |

## SAMPLE NO. SAMPLE DESCRIPTION

 699298SBI002:GB-5:S015025:412

DATE/TIME TAKEN 08/08/2001 15:45

| 2,4-Dichlorophenol | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dimethylphenol | $<350$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | <350 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| 2-Methylphenol | <350 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| meta \& para-Methylphenol | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| 2-Nitrophenol | <350 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| Pentachlorophenol | <350 | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| Phenol | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| 2,4,5-Trichlorophenol | $<350$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| 2,4,6-Trichlorophenol | <350 | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| Surrogate: d6-Phenol | 70 | $\%$ | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorophenol | 64 | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270 C |
| Surrogate: Tribromophenol | 86 | 4 | 08/17/2001 | 947 | 1461 |  | jTw | SH | 8270 C |

SAMPLE NO. SAMPLE DESCRIPTION
699299
SBI002:SB-5:S000015:412

## DATE/TIME TAKEN

 08/08/2001 11:45| Dry Weight | 98.6 | $\%$ | 08/16/2001 |  | 1478 |  | mhg | SM | 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/16/2001 |  | 1229 | Complete | emd | SW | 5010B |
| Arsenic, ICP | 57.1 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2956 | $<3.3$ | emd | SW | 6010B |
| Barium, ICP | 124 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2887 | $<0.68$ | emd | SW | 6010B |
| Cadmium, ICP | <1.0 | mg/kg dw | 08/16/2001 | 901 | 2869 | <1.0 | emd | SW | 60108 |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Regult Flag Units | Date | Analyzed | Butch | Batch | Reporting Analyst |  |
| Number | Limit | Initials Method Reference |  |  |  |  |

## SAMPLE NO.

SAMPLE DESCRIPTION 699299

SBI002:SB-5:S000015:412

DATE/TIME TAKEN 08/08/2001 11:45

| Chromium, ICP | 16.2 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2857 | $<1.3$ | emd | SW | 6010 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lead, ICP | 122 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2858 | <2.7 | emd | SW | 6010 B |
| Mercury, CVAA | 0.092 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 607 | 624 | $<0.008$ | epk | SW | 7471A |
| Selenium, ICP | $<3.3$ | $\mathrm{mg} / \mathrm{kg}$ dw | 08/16/2001 | 901 | 2936 | $<3.3$ | emd | SW | 6010日 |
| Silver, ICP | <1.3 | $\mathrm{mg} / \mathrm{kg} \mathrm{d} w$ | 08/16/2001 | 901 | 2889 | <1.3 | emd | SW | 6010B |
| ICP Digestion, Nonaqueous | Complete |  | 08/15/2001 | 901 |  | Complete | mrt | SW | 3050E |
| Mercury Digestion, Non-Aq | Complete |  | 08/14/2001 | 607 |  | Complete | epk | SW | 7471A |
| Prep, BNA Non-Aq | Complete |  | 08/14/2001 | 947 |  | Complete | mlx |  | 625; |
| Prep, TPH 418.i Nonaq | COMPLETE |  | 08/15/2001 | 589 |  | Complete | 110 | SW | 9071 |
| VOLATILE COMPOUNDS-8260 Non-Aq |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/14/2001 |  | 1462 | Complete | bmh |  |  |
| Acetone | $<101$ | ug/kg dw | 08/14/2001 |  | 1462 | $<101$ | bmh | SW | 8260A |
| Benzene | <5.1 | ug/kg dw | 08/14/2001 |  | 1462 | <5.1 | bmh | SW | 8260A |
| tert-Butylbenzene | $<5.1$ | ug/kg dw | 08/14/2001 |  | 1462 | $<5.1$ | bmh | SW | 8260A |
| sec-Butylbenzene | $<5.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | <5.1 | bmh | SW | 82601 |
| n -Butylbenzene | <5.1 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | $<5.1$ | bmh | SW | 82601 |
| Bromochloromethane | $<5.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | $<5.1$ | bmh | SW | 82602 |
| Bromodichloromethane | $<5.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | <5.1 | bmh | SW | 8260A |
| Bromoform | $<5.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | <5.1 | bmh | SW | 8260A |
| Bromobenzene | <5.1 | ug/kg dw | 08/14/2001 |  | 1462 | $<5.1$ | bmh | SW | 8260A |
| 2-Butanone (MEK) | $<51$ | ug/kg dw | 08/14/2001 |  | 1462 | $<51$ | bmh | SW | 82601 |
| Carbon disulfide | $<5.1$ | ug/kg dw | 08/14/2001 |  | 1462 | $<5.1$ | bmh | SW | 82601 |
| Carbon tetrachloride | <5.1 | ug/kg dw | 08/14/2001 |  | 1462 | <5.1 | bmh | SW | 82601 |
| Chlorobenzene | $<5.1$ | ug/kg dw | 08/14/2001 |  | 1462 | <5.1 | bmh | sw | 82601 |

## ANALYTICAL REPORT

Kevin Wildman
HUL工 \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 699299

DATE/TIME TAKEN 08/08/2001 11:45

| Chloroethane | $<10.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <10.1 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Chlorotoluene | <5.1 | ug/kg dw | 08/14/2001 | 1462 | <5.1 | bmh | SW | 8260A |
| 4-Chlorotoluene | <5.1 | ug/kg dw | 08/14/2001 | 1462 | $<5.1$ | bmh | SW | 8260A |
| Chloroform | <5.1 | ug/kg dw | 08/14/2001 | 1462 | $<5.1$ | bmh | SW | 8260A |
| Chloromethane | $<10.1$ | ug/kg dw | 08/14/2001 | 1462 | $<10.1$ | bmh | SW | 8260A |
| Dibromochloromethane | $<5.1$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/14/2001 | 1462 | <5.1 | bmh | SW | 8260A |
| Dibromomethane | $<5.1$ | ug/kg dw | 08/14/2001 | 1462 | <5.1 | broh | SW | 8260A |
| Dichlorodifluoromethane | $<5.1$ | ug/kg dw | 08/14/2001 | 1462 | <5.1 | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.1$ | ug/kg dw | 08/14/2001 | 1462 | $<5.1$ | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $\leqslant 5.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.1$ | bmin | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.1$ | ug/kg dw | 08/14/2001 | 1462 | $<5.1$ | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | <5.1 | ug/kg dw | 08/14/2001 | 1462 | <5.1 | bmh | SW | 8260A |
| 1,1-Dichloroethane | <5.1 | ug/kg dw | 08/14/2001 | 1462 | <5.1 | brah | SW | 8260A |
| 1,2-Dichloroethane | <5.1 | ug/kg dw | 08/14/2001 | 1462 | $<5.1$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.1$ | ug/kg dw | 08/14/2001 | 1462 | $<5.1$ | bmh | SW | 8260A |
| Cis-1,2-Dichloroethene | $<5.1$ | ug/kg dw | 08/14/2001 | 1462 | $<5.1$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.1$ | ug/kg dw | 08/14/2001 | 1462 | <5.1 | buh | SW | 8260A |
| 1,2-Dichloropropane | $<5.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.1$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | <5.1 | ug/kg dw | 08/14/2001 | 1462 | <5.1 | bmh | SH | 8260A |
| 2,2-Dichloropropane | $<5.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.1$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | <5.1 | ug/kg dw | 08/14/2001 | 1462 | <5.1 | bmh | SW | 8260A |
| Cis-1,3-Dichloropropene | $<5.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.1$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | <5.1 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/14/2001 | 1462 | $<5.1$ | bmh | SW | 8260A |
| Ethylbenzene | <5.1 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.1 | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.1 | bmh | SW | 8260A |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>$08 / 27 / 2001$

6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01. 14452
Client Project ID: South Bend Indiana SBI002


SAMPLE NO.
699299
SAMPLE DESCRIPTION
SBI002:SB-5:S000015:412

DATE/TIME TAKEN 08/08/2001 11:45

| n-Hexane | $<20.3$ | ug/kg dw | 08/14/2001 | 1462 | $<20.3$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Hexanone | $<50.7$ | $u \mathrm{f} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<50.7$ | bmin | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.1$ | ug/kg dw | 08/14/2001 | 1462 | $<5.1$ | bmh | SW | 8260A |
| p-Isopropyltoluene | <5.1 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.1$ | bmh | SW | 8260A |
| Bromomethane | $<10.1$ | ug/kg dw | 08/14/2001 | 1462 | $<10.1$ | bmh | SW | 8260A |
| Methylene Chloride | $<10.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/14/2001 | 1462 | $<10.1$ | brah | SW | B260A |
| Methyl t-butyl ether (MTBE) | $<5.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/1.4/2001 | 1462 | <5.1 | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<50.7$ | ug/kg dw | 08/14/2001 | 1462 | $<50.7$ | bmh | SW | 8260A |
| n-Propylbenzene | $<5.1$ | ug/kg dw | 08/14/2001 | 1462 | $<5.1$ | bmh | SW | 8260A |
| Styrene | <5.1 | ug/kg dw | 08/14/2001 | 1462 | $<5.1$ | bmh | SW | 8260A |
| Naphthalene | $<5.1$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.1$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachlorcethane | $<5.1$ | $u g / \mathrm{kg}$ dw | 08/14/2001 | 1462 | $<5.1$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | <5.1 | ug/kg dw | 08/14/2001 | 1462 | <5.1 | bmh | SW | 8260A |
| Tetrachloroethene | $<5.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.1 | bmh | sw | 8260A |
| Toluene | $<5.1$ | $u g / \mathrm{kg}$ dw | 08/14/2001 | 1462 | $<5.1$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.1$ | ug/kg dw | 08/14/2001 | 1462 | <5.1 | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | <5.1 | ug/kg dw | 08/14/2001 | 1462 | $<5.1$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | <5.1 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.1$ | bmh | SW | 8260A |
| Trichloroethene | $<5.1$ | ug/kg dw | 08/14/2001 | 1462 | $<5.1$ | bmh | SW | 8260A |
| Trichlorofluoromethane | <5.1 | ug/kg dw | 08/14/2001 | 1462 | <5.1 | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | <5.1 | ug/kg dw | 08/14/2001 | 1462 | $<5.1$ | brh | SW | 8260A |
| 1,2,4-Trimethylbenzene | <5.1 | ug/kg dw | 08/14/2001 | 1462 | $<5.1$ | bmb | SW | 8260A |
| 1,3,5-Trimethylbenzene | <5.1 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001. | 1462 | $<5.1$ | bmh | SW | 8260A |
| Vinyl Acetate | $<5.1$ | ug/kg dw | 08/14/2001 | 1462 | $<5.1$ | bmh | SW | 8260A |
| Vinyl Chloride | $<2.0$ | ug/kg dw | 08/14/2001 | 1462 | $<2.0$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Ra.
Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION <br> SAMOO DESCRIMON

 699299SBI002:SB-5:S000015:412

DATE/TIME TAKEN
08/08/2001 11:45

| Xylenes, Total | $<5.1$ | ug/kg dw | 08/14/2001 |  | 1462 | <5.1 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d4-1,2-Dichloroethane (surr) | 109 | \% | 08/14/2001 |  | 1462 |  | brih | SW | 8260A |
| Dibromofluoromethane (surr) | 102 | \% | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| d8-Toluene (surr) | 94 | \% | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 94 | $\%$ | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| EASE NEUT. COMPS. -8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | <335 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<335$ | jrw | SW | 8270 C |
| Acenaphthylene | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jrw | SW | 8270C |
| Anthracene | $<335$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<335$ | jrw | SW | 8270 C |
| Benzo (a) anthracene | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<335$ | jxw | SW | 8270 C |
| Benzo (b) fluoranthene | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<335$ | jrw | SW | 8270C |
| Benzo(k) fluoranthene | <335 | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | <335 | jrw | Sw | 8270C |
| Benzo (a) pyrene | $<167$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<167$ | jrw | SW | 8270 C |
| Benzyl alcohol | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jrw | SW | 8270C |
| Benzyl butyl phthalate | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jrw | SW | 8270C |
| Bis(2-chloroethyl) ether | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jrw | SW | 8270 C |
| Bis (2-chloroethoxy) methane | <335 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <335 | jrw | SW | 8270C |
| Bis (2-ethylhexyl) phthalate | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jrw | SW | 8270 C |
| 2,2'-oxybis(1-Chloropropane) | <335 | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jxw | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jrw | SW | 8270 C |
| 4-Chloroaniline | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<335$ | jrw | SW | 8270C |
| 2-Chloronaphthalene | <335 | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jrw | SW | 8270 C |
| Chrysene | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jxw | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<167$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<167$ | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
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Job Number: 01. 14452
Client Project ID: South Bend Indiana SBI002


| Dibenzofuran | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichlorobenzene | $<335$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<335$ | jrw | SW | 8270C |
| 1,3-Dichlorobenzene | $<335$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<335$ | jrw | SW | 8270C |
| 1,4-Dichlorobenzene | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jrw | SW | 8270 C |
| 3,3.'-Dichlorobenzidine | $<669$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<669$ | jxw | SW | 8270C |
| Diethyl phthalate | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jrw | SW | 8270 C |
| Dimethyl phthalate | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<335$ | jww | SW | 8270C |
| 2,4-Dinitrotoluene | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jrw | SW | 82700 |
| 2,6-Dinitrotoluene | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jTw | SW | 8270C |
| Di-n-octylphthalate | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<335$ | jrw | SW | 8270C |
| Fluoranthene | $<335$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<335$ | jrw | SW | 8270C |
| Fluorene | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jrw | SW | 8270C |
| Hexachlorobenzene | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<335$ | jrw | SW | 8270C |
| Hexachloro-1, 3-butadiene | $<335$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<335$ | jrw | SW | 8270C |
| Hexachlorocyclopentadiene | $<669$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <669 | jrw | SW | 82700 |
| Hexachloroethane | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<335$ | jrw | SW | 8270C |
| Indeno (1,2,3-cd) pyrene | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jxw | SW | 8270C |
| Isophorone | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<335$ | jrw | SW | 8270C |
| Naphthalene | <335 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<335$ | jrw | SW | 8270C |
| Nitrobenzene | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<335$ | jrw | Sw | 8270C |
| Phenanthrene | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<335$ | jrw | SW | 8270C |
| Pyrene | $<335$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<335$ | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<335$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jrw | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 58 | $\%$ | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
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6130 Wilcox Rd.
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08/27/2001

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 699299 | SBI002:SB-5:S000015:412 | $08 / 08 / 200111: 45$ |


| Surrogate: 2-Fluorobiphenyl <br> Surrogate: d14-Terphenyl | 51 65 | Note | $\frac{f}{f}$ | $\begin{aligned} & 08 / 17 / 2001 \\ & 08 / 17 / 2001 \end{aligned}$ | $\begin{aligned} & 947 \\ & 947 \end{aligned}$ | 1461 |  | $\begin{aligned} & \text { jrw } \\ & \text { jrw } \end{aligned}$ | SW | $\begin{aligned} & 8270 \mathrm{C} \\ & 8270 \mathrm{C} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,670$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <1,670 | jrw | SW | 8270C |
| 4-Chloro-3-methylphenol | <335 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jrw | SW | 8270C |
| 2-Chlorophenol | $<335$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <335 | jrw | SW | 8270 C |
| 2,4-Dichlorophenol | <335 |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <335 | jxw | SW | 8270 C |
| 2,4-Dimethylphenol | $<335$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<335$ | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | <335 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<335$ | jrw | SW | 8270C |
| 2-Methylphenol | $<335$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jrw | SW | 8270C |
| meta \& para-Methylphenol | $<335$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jrw | SW | 8270C |
| 2-Nitrophenol | <335 |  | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | <335 | jrw | SW | 8270 C |
| Pentachlorophenol | $<335$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jrw | SW | 8270 C |
| Phenol | $<335$ |  | ug/kg dw | 08/17/2001 | 947 | 1462 | <335 | jrw | SW | 8270C |
| 2,4,5-Trichlorophenol | $<335$ |  | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<335$ | jrw | SW | 8270C |
| 2,4,6-Trichlorophenol | <335 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <335 | jrw | SW | 8270 C |
| Surrogate: d6-Phenol | 75 |  | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 61 |  | 8 | 08/17/2001 | 947 | 1461 |  | jrw | S* | 8270 C |
| Surrogate: Tribromophenol | 58 |  | $\%$ | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270 C |
| TPH - GRO (Non-Aqueous) | $<5$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 |  | 246 | $<5$ | meb | SW | 8015M |
| TPH - FTIR Non-aq | <51 |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 589 | 621 | $<51$ | 110 |  |  |

## ANALYTICAL REPORT

Kevin Wildman
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$08 / 27 / 2001$
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 699300

SBIO02:GB-8:S000015:412

DATE/TIME TAKEN 08/08/2001 10:55


## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


| Bromobenzene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | B260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Butanone (MEK) | <52 | ug/kg dw | 08/14/2001 | 1462 | $<52$ | bmh | SW | 8260A |
| Carbon disulfide | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| Carbon tetrachloride | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | < 5.2 | bmh | SW | 8260A |
| Chlorobenzene | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| Chloroethane | $<10.4$ | ug/kg dw | 08/14/2001 | 1462 | <10.4 | bmh | SW | 8260A |
| 2-Chlorotoluene | <5.2 | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| 4-Chlorotoluene | <5.2 | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| Chloroform | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| Chloromethane | $<10.4$ | ug/kg dw | 08/14/2001 | 1462 | $<10.4$ | bmh | SW | 8260A |
| Dibromochloromethane | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| Dibromomethane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | <5.2 | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.2$ | ug/ kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmin | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | Sw | 8260A |
| 1,1-Dichloroethene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmis | SW | 8260A |
| trans-1,2-Dichloroethene | <5.2 | ug/kg dw | 08/14/2001 | 1462 | <5.2 | brah | SW | 8260A |
| 1,2-Dichloropropane | <5.2 | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin) 08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002

|  |  |  | . | Prep | Run |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Date | Batch | Batch | Reporting | Analyst |  |
| Result | Flag | Units | Analyzed | Number | Number | Limit | Initials | Method Reference |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 699300 | SBIOO2:GB-8:S000015:412 | $08 / 08 / 2001$ I0:55 |


| 1,1-Dichloropropene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| cis-1,3-Dichloropropene | <5.2 | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.2$ | $u g / \mathrm{kg}$ dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| Ethylbenzene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| Hexachlorobutadiene | < 5.2 | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| n -Hexane | <20.8 | ug/kg dw | 08/14/2001 | 1462 | <20.8 | bmh | SW | 8260A |
| 2-Hexanone | $<52.1$ | ug/kg dw | 08/14/2001 | 1462 | $<52.1$ | bmh | S* | B260A |
| Isopropylbenzene (Cumene) | < 5.2 | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| p-Isopropyltoluene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| Bromomethane | $<10.4$ | ug/kg dw | 08/14/2001 | 1462 | <10.4 | bmh | SW | 8260A |
| Methylene Chloride | $<10.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<10.4$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | <5.2 | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<52.1$ | ug/kg dw | 08/14/2001 | 1462 | $<52.1$ | bmb | SW | 8260A |
| n-Propylbenzene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| Styrene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| Naphthalene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | Sw | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SN | 8260A |
| ,Tetrachioroethene | <5.2 | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| Toluene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmb | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| Trichloroethene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| Trichlorofluoromethane | <5.2 | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) 08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.14452<br>Client Project ID: South Bend Indiana SBI002



SAMPLE NO. 699300

SAMPLE DESCRIPTION SBI002:GB-8:S000015:412

DATE/TIME TAKEN 08/08/2001 10:55

| 1,2,3-Trichloropropane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | <5.2 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,4-Trimethylbenzene | <5.2 | ug/kg dw | 08/14/2001 |  | 1462 | <5.2 | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.2$ | ug/kg dw | 08/14/2001 |  | 1462 | <5.2 | bmh | SW | 8260A |
| Vinyl Acetate | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | <5.2 | bmh | SW | 8260A |
| Vinyl Chloride | <2.1 | ug/kg dw | 08/14/2001 |  | 1462 | $<2.1$ | bmh | SW | 8260A |
| Xylenes, Total | <5.2 | ug/kg dw | 08/14/2001 |  | 1462 | <5.2 | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 106 | 8 | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 100 | \% | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| ds-Toluene (gurr) | 93 | \% | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 95 | $\%$ | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| BASE NEUT. COMPS. 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<344$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<344$ | jrw | SW | 8270 C |
| Acenaphthylene | $<344$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270 C |
| Anthracene | $<344$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270C |
| Benzo (a) anthracene | $<344$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270C |
| Benzo (b) fluoranthene | $<344$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<344$ | jrw. | SW | 8270C |
| Benzo(k) fluoranthene | $<344$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270C |
| Benzo (a) pyrene | $<172$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<172$ | jrw | SW | 8270C |
| Benzyl alcohol | $<344$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<344$ | jrw | SW | 8270 C |
| Benzyl butyl phthalate | $<344$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270C |
| Bis (2-chloroethyl)ether | $<344$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270C |
| Bis (2-chloroethoxy) methane | $<344$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270C |
| Bis (2-ethylhexyl) phthalate | $<344$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270 C |
| 2,2'-oxybis(1-Chloropropane) | $<344$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<344$ | jrw | SW | 8270 C |

# ANALYTICAL REPORT 

Kevin Wildman
HULI \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

08/27/2001

## Job Number: 01.14452

Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 699300 | SBIOO2:GB-8:SOOOO15:412 |


| 4-Bromophenyl phenyl ether | $<344$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<344$ | jrw | SW | 8270c |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Chloroaniline | $<344$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270C |
| 2-Chloronaphthalene | $<344$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<344$ | jrw | Sw | 82700 |
| Chrysene | $<344$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | jıw | SW | 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<172$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<172$ | jıw | SW | 82700 |
| Dibenzofuran | <344 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<344$ | j5w | Sw | 8270 C |
| 1,2-Dichlorobenzene | $<344$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<344$ | jrw | SW | 8270C |
| 1,3-Dichlorobenzene | $<344$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270C |
| 1,4-Dichlorobenzene | $<344$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<688$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<688$ | jrw | Sw | 8270 C |
| Diethyl phthalate | <344 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<344$ | jrw | SW | 8270C |
| Dimethyl phthalate | $<344$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270C |
| 2,4-Dinitrotoluene | <344 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<344$ | jrw | SW | 8270 C |
| 2,6-Dinitrotoluene | <344 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<344$ | jıw | SW | 8270C |
| Di-n-octylphthalate | <344 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<344$ | jTW | SW | 8270 C |
| Fluoranthene | <344 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <344 | jıw | SW | 8270C |
| Fluorene | $<344$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | j5w | SW | 8270 C |
| Hexachlorobenzene | $<344$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<344$ | jrw | SW | 8270C |
| Hexachloro-1,3-butadiene | $<344$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<344$ | jrw | SW | 8270 C |
| Hexachlorocyclopentadiene | $<688$ | ug/kg dw | 08/27/2001 | 947 | 1461 | <688 | jrw | SW | 8270C |
| Hexachloroethane | $<344$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<344$ | jrw | SW | 8270C |
| Indeno(1,2,3-cd) pyrene | <344 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<344$ | jiw | SW | 8270C |
| Isophorone | $<344$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270 C |
| Naphthalene | $<344$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <344 | jxw | SW | 8270C |
| Nitrobenzene | <344 | ug/kg dw | 08/17/2001 | 947. | 1461 | <344 | jxw | SW | $8270{ }^{\text {c }}$ |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch <br> Number | Run <br> Batch <br> Number | Reporting Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CR | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 699300 |  | SBI002:G | -8: | 0001 | : 412 |  |  |  | 08/ | 8/2001 | 1 10:55 |


| N-Nitrosodi-n-propylamine | <344 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<344$ | jrw | sw | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Phenanthrene | $<344$ |  | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270C |
| Pyrene | <344 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | jiw | SW | 8270C |
| 1,2,4-Trichlorobenzene | <344 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 73 |  | 4 | 08/17/2001 | 947 | 1461 |  | jrw | SW | 82700 |
| Surrogate: 2-Fluorobiphenyl | 92 |  | 4 | 08/17/2001 | 947 | 1461 |  | jrw | SW | 82700 |
| Surrogate: d14-Terphenyl | 133 | Note | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW | $8270{ }^{\circ}$ |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,720$ |  | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<1.720$ | jrw | Sw | 8270C |
| 4-Chloro-3-methylphenol | $<344$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270C |
| 2-Chlorophenol | $<344$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270C |
| 2,4-Dichlorophenol | $<344$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<344$ | jxw | SW | 8270 C |
| 2,4-Dimethylphenol | $<344$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | <344 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270C |
| 2-Methylphenol | <344 | - | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270 C |
| meta \& para-Methylphenol | <344 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270 C |
| 2-Nitrophenol | <344 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270C |
| Pentachlorophenol | $<344$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<344$ | jrw | SW | 82700 |
| Phenol | <344 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<344$ | jrw | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<344$ |  | $4 \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <344 | jrw | SW | 8270C |
| 2,4,6-Trichlorophenol | <344 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<344$ | jrw | SW | 8270 C |
| Surrogate: d6-Phenol | 82 |  | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 74 |  | 8 | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |
| Surrogate: Tribromophenol | 73 |  | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002



## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 699301

SAMPLE DESCRIPTION
DATE/TIME TAKEN
08/08/2001 10:30

| Anthracene | <349 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benzo (a)anthracene | 712 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1451 | $<349$ | jrw | SW 8270C |
| Benzo (b) fluoranthene | 1,130 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW 8270C |
| Benzo(k) fluoranthene | 378 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jıw | SW 8270C |
| Benzo (a) pyrene | 668 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<174$ | jıw | SW 8270C |
| Benzyl alcohol | $<349$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<349$ | jTw | SW 8270C |
| Benzyl butyl phthalate | $<349$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | sw 8270C |
| Bis (2-chloroethyl) ether | $<349$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW 8270C |
| Bis (2-chloroethoxy) methane | $<349$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jıw | SW 8270C |
| Bis (2-ethylhexyl) phthalate | $<349$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW 8270C |
| 2,2'-oxybis(1-Chloropropane) | $<349$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW 8270C |
| 4-Bromophenyl phenyl ether | $<349$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW 8270C |
| 4-Chloroaniline | $<349$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW 8270C |
| 2-Chloronaphthalene | $<349$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW 8270C |
| Chrysene | 712 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jıw | SW 8270C |
| Dibenzo (a, h) anthracene | $<174$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<174$ | jrw | SW 8270C |
| Dibenzofuran | $<349$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW 8270C |
| 1,2-Dichlorobenzene | $<349$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | sw 8270C |
| 1,3-Dichlorobenzene | $<349$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW 8270C |
| 1,4-Dichlorobenzene | $<349$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW 8270C |
| 3.3'-Dichlorobenzidine | $<698$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<698$ | jrw | SW 8270C |
| Diethyl phthalate | $<349$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW 8270C |
| Dimethyl phthalate | $<349$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW 8270C |
| 2,4-Dinitrotoluene | $<349$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW 8270C |
| 2,6-Dinitrotoluene | $<349$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jıw | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)

08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy |  | Number | Number | Limit | Initials Method Reference |

SAMPLE NO. SAMPLE DESCRIPTION 699301

SBI 002:GB-13:S010020:412

DATE/TIME TAKEN 08/08/2001 10:30

| Di-n-octylphthalate | $<349$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fluoranthene | 1,300 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW | 82700 |
| Fluorene | $<349$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jxw | SW | 8270C |
| Hexachlorobenzene | $<349$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW | $8270 C$ |
| Hexachloro-1,3-butadiene | <349 |  | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW | 8270C |
| Hexachlorocyclopentadiene | $<698$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <698 | jrw | SW | 8270 C |
| Hexachloroethane | $<349$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW | 8270C |
| Indeno(1,2,3-cd) pyrene | $<349$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<349$ | jrw | S* | 8270C |
| Isophorone | $<349$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <349 | jrw | SW | 8270C |
| Naphthalene | $<349$ |  | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW | 8270C |
| Nitrobenzene | $<349$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<349$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Phenanthrene | 1,450 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW | 8270C |
| Pyrene | 1,990 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | <349 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 66 |  | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 80 |  | * | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |
| Surrogate: dl4-Terphenyl | 114 | Note | 8 | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,740 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<1,740$ | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<349$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jTw | SW | 8270 C |
| 2-Chlorophenol | $<349$ |  | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<349$ | jrw | Sw | 8270C |
| 2,4-Dichlorophenol | $<349$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | SW | 8270C |
| 2,4-Dimethylphenol | $<349$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <349 | jrw | S* | 8270 C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. $\quad$ SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 699301 | SBI002:GB-13:SO10020:412 |


| 2-Methyl-4,6-dinitrophenol | $<349$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <349 | jrw | SW | 82700 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Methylphenol | $<349$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <349 | jrw | w | 8270 C |  |
| meta \& para-Methylphenol | $<349$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jxw | Sw | 8270C |  |
| 2-Nitrophenol | <349 | ug/kg dw | 08/17/2001 | 947 | 1461 | <349 | jrw | SW | 8270 C |  |
| Pentachlorophenol | $<349$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | Sw | 8270 C |  |
| Phenol | <349 | ug/kg dw | 08/17/2001 | 947 | 1461 | <349 | jrw | Sw | $8270{ }^{\text {c }}$ |  |
| 2,4,5-Trichlorophenol | $<349$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <349 | jxw | Sw | 82700 |  |
| 2,4.6-Trichlorophenol | <349 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<349$ | jrw | Sw | 8270 C |  |
| Surrogate: d6-Phenol | 70 | * | 08/17/2001 | 947 | 1461 |  | jrw | Sw | 8270 C |  |
| Surrogate: 2-Fluorophenol | 56 | 7 | 08/17/2001 | 947 | 1461 |  | jrw | Sw | 8270 C |  |
| Surrogate: Tribromophenol | 67 | * | 08/17/2001 | 947 | 1461 |  | jrw | Sw | 82700 |  |
| $\begin{aligned} & \text { SAMPLE NO. } \\ & 699302 \end{aligned}$ | LE2 | TION $05020$ | $: 412$ |  |  |  |  |  | $\begin{aligned} & \text { TIME } \\ & / 2001 \end{aligned}$ | $\begin{aligned} & \text { TAKEN } \\ & 1 \quad 09: 55 \end{aligned}$ |


| Dry Weight | 86.8 | \% | 08/16/2001 |  | 1478 |  | mhg | SM 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/16/2001 |  | 1229 | Complete | emd | SW 6010b |
| Arsenic, ICP | 13.5 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2956 | $<7.6$ | emd | SW 6010B |
| Barium, ICP | 342 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2887 | $<1.5$ | emd | SW 6010B |
| Cadmium, ICP | <2.3 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2869 | $<2.3$ | emd | SW 6010B |
| Chromium, ICP | 32.3 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2857 | $<3.0$ | emd | SW 6010B |
| Lead, ICP | 306 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2858 | <6.1 | emd | SW 6010B |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$08 / 27 / 2001$

Job Number: 01.14452

## Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | PTIO |  |  |  |  | DAT | /TIME | TAKEN |
| 699302 |  | SBI002: | -3: | 050 | . 412 |  |  |  | 08/ | $8 / 2001$ | 1 09:55 |



## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 699302

SBI002:GB-3:S005020:412

DATE/TIME TAKEN 08/08/2001 09:55

| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<190$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<190$ | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzofuran | $<380$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270 C |
| 1,2-Dichlorobenzene | $<380$ | ug/kg dw | 08/17/2001 | 947 | 1451 | $<380$ | jrw | SW | 8270 C |
| 1,3-Dichlorobenzene | $<380$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270 C |
| 1,4-Dichlorobenzene | $<380$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<760$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<760$ | jrw | SW | 8270 C |
| Diethyl phthalate | $<380$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270 C |
| Dimethyl phthalate | $<380$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 82700 |
| 2,4-Dinitrotoluene | $<380$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270 C |
| 2,6-Dinitrotoluene | $<380$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270C |
| Di-n-octylphthalate | $<380$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270 C |
| Fluoranthene | 810 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270 C |
| Fluorene | $<380$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270C |
| Hexachlorobenzene | $<380$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Hexachloro-1,3-butadiene | $<380$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270C |
| Hexachlorocyclopentadiene | $<760$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<760$ | jrw | SW | 8270C |
| Hexachloroethane | $<380$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270 C |
| Indeno (1,2,3-cd) pyrene | $<380$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270 C |
| Isophorone | $<380$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270C |
| Naphthalene | $<380$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270C |
| Nitrobenzene | $<380$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<380$ | $u \mathrm{~g} / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270 C |
| Phenanthrene | 657 | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270 C |
| Pyrene | 1,640 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270 C |
| 1,2,4-Trichlorobenzene | <380 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.14452<br>\section*{Client Project ID: South Bend Indiana SBI002}

08/27/2001

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 699302 |  | SBI002: GB | -3: | 0502 | 412 |  |  |  | .08/ | $8 / 2001$ | 109:55 |


| Surrogate: d5-Nitrobenzene | 73 |  | $t$ | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorobiphenyl | 83 |  | 4 | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270 C |
| Surrogate: d14-Terphenyl | 124 | Note | 8 | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-ag |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,900$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<1,900$ | jrw | SW | 8270C |
| 4-Chioro-3-methylphenol | $<380$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270C |
| 2-Chlorophenol | $<380$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270 C |
| 2,4-Dichlorophenol | $<380$ |  | $u g / \mathrm{kg} \mathrm{d} w$ | 08/17/2001 | 947 | 1461 | $<380$ | jrw | Sw | 82700 |
| 2,4-Dimethylphenol | $<380$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<380$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270C |
| 2-Methylphenol | $<380$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270C |
| meta \& para-Methyiphenol | $<380$ |  | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270 C |
| 2-Nitrophenol | $<380$ |  | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270C |
| Pentachlorophenol | $<380$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Phenol | $<380$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<380$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<380$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<380$ | jrw | SW | 8270 C |
| Surrogate: d6-Phenol | 61 |  | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorophenol | 44 |  | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |
| Surrogate: Tribromophenol | 51 |  | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270 C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPIE DESCRIPTION |  |
| :--- | :--- |
| 699303 | SBIO02:GB-3D:S005020:412 |

DATE/TIME TAKEN 08/08/2001 09:55


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBIO02


DATE/TIME TAKEN 08/08/2001 09:55

| Bis (2-chloroethoxy) methane | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <378 | jxw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bis (2-ethylhexyl) phthalate | $<378$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <378 | jrw | SW 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<378$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW 8270C |
| 4-Bromophenyl phenyl ether | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW 8270C |
| 4-Chloroaniline | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <378 | jrw | SW 8270C |
| 2-Chloronaphthalene | $<378$ | ug/kg aw | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW 8270C |
| Chrysene | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <378 | jrw | SW 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<189$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<189$ | jrw | SW 8270C |
| Dibenzofuran | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW 8270C |
| 1,2-Dichlorobenzene | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW 8270C |
| 1,3-Dichlorobenzene | $<378$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW 8270C |
| 1,4-Dichlorobenzene | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW 8270C |
| 3,3'-Dichlorobenzidine | $<757$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<757$ | jrw | SW 8270C |
| Diethyd phthalate | <378 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW 8270C |
| Dimethyl phthalate | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW 8270C |
| 2,4-Dinitrotoluene | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <378 | jrw | SW 8270C |
| 2,6-Dinitrotoluene | $<378$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<378$ | jxw | SW 8270C |
| Di-n-octylphthalate | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW 8270C |
| Fluoranthene | $<378$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW 8270C |
| Fluorene | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW 8270C |
| Hexachlorobenzene | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | jrw | Sw 82700 |
| Hexachloro-1,3-butadiene | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | j5w | SW 8270C |
| Hexachlorocyclopentadiene | $<757$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<757$ | jrw | SW 8270C |
| Hexachloroethane | $<378$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW 8270 C |
| Indeno (2, 2, 3-cd) pyrene | $<378$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULI \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION

 699303SBI002:GB-3D:S005020:412

| Isophorone | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | juw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Naphthalene | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | jxw | SW | 8270C |
| Nitrobenzene | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW | 8270 C |
| N -Nitrosodi-n-propylamine | <378 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | jrw | sw | 8270 C |
| Phenanthrene | <378 | ug/kg dw | 08/17/2001 | 947 | 1461 | <378 | jrw | SW | 8270 C |
| Pyrene | 596 | ug/kg dw | 08/17/2001 | 947 | 1461 | <378 | jrw | SW | 82700 |
| 1,2,4-Trichlorobenzene | <378 | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | <378 | jrw | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 73 | 4 | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270 C |
| Surrogate: 2-Fluorobipheny1 | 76 | 4 | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270 C |
| Surrogate: d14-Terphenyl | 116 | $\%$ | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,890 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947. | 1461 | <1,890 | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW | 8270 C |
| 2-Chlorophenol | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | jıw | Sw | 8270 C |
| 2,4-Dichlorophenol | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW | 8270 C |
| 2,4-Dimethylphenol | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW | 8270 C |
| 2-Methylphenol | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW | 8270 C |
| meta \& para-Methylphenol | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW | 8270 C |
| 2-Nitrophenol | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW | 8270 C |
| Pentachlorophenol | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW | 8270 C |
| Phenol | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<378$ | jrw | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<378$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <378 | jrw | SW | 82700 |

## ANALYTICAL REPORT

Kevin Wildman HULI \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

08/27/2001

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 699303

## SAMPLE DESCRIPTION

 SBI002: GB-3D:S005020:412DATE/TIME TAKEN
08/08/2001 09:55

| Surrogate: d6-Phenol | 57 |  | $\%$ | 08/17/2001 | 947 | 1461 | jrw | SW | 82700 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorophenol | 38 |  | \% | 08/17/2001 | 947 | 1461 | jrw | SW | 8270C |  |
| Surrogate: Tribromophenol | 37 | Note | \% | 08/17/2001 | 947 | 1461 | jrw | SW | 82700 |  |
| $\begin{aligned} & \text { SAMPLE NO. } \\ & 699304 \end{aligned}$ | SAMPLE SBI002 | $\begin{aligned} & S C R] \\ & -32: \end{aligned}$ |  | $: 412$ |  |  |  |  | TIME <br> /2001 | $\begin{aligned} & \text { TAKEN } \\ & 09: 15 \end{aligned}$ |


| Dry Weight | 95.4 | 4 | 08/17/2001 |  | 1479 |  | mhg |  | 2540 G . |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/17/2001 |  | 1231 | Complete | mhr | SW | 60108 |  |
| Arsenic, ICP | $<14$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 901 | 2958 | $<14$ | mar | S | 6010B |  |
| Barium, ICP | 59.0 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 901 | 2889 | $<2.7$ | mhr | SW | 6010B |  |
| Cadmium, ICP | $<4.2$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 901 | 2871 | <4.2 | mhr | Sh | 6010B |  |
| Chromium, ICP | 6.5 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 901 | 2859 | $<5.6$ | mhr | SW | 6010B |  |
| Lead, ICP | 23 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 901 | 2860 | $<12$ | mhr | S | 6010B |  |
| Mercury, CVAA | 0.014 | $\mathrm{mg} / \mathrm{kg}$ dw | 08/17/2001 | 607 | 624 | <0.008 | epk | Sw | 7471A |  |
| Selenium, ICP | <14 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 901 | 2938 | $<14$ | mhr | Sw | 6010B |  |
| Silver, ICP | $<5.6$ | mg/kg dw | 08/17/2001 | 901 | 2891 | $<5.6$ | mhr | Sw | 6010日 |  |
| ICP Digestion, Nonaqueous | Complete |  | 08/15/2001 | 901 |  | Complete | mrt | St | 30508 |  |
| Mercury Digestion, Non-Aq | Complete |  | 08/14/2001 | 607 |  | Complete | epk |  | 7471A |  |
| Prep, BNA Non-Aq | Complete |  | 08/14/2001 | 947 |  | Complete | mlx |  | A 625; S | 3545 |

BASE NEUT. COMPS. -8270 Non-aq

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

## Job Number: 01.14452

## Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | PTIO1 |  |  |  |  | DAT | /TIME | TAKEN |
| 699304 |  | SBI002: GB | -32: | S0001 | 412 |  |  |  | 08/ | 8/2001 | 09:15 |


| Acenaphthene | 1,950 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | 780 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW 8270C |
| Anthracene | 4,830 | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/18/2001 | 947 | 1462 | <3,460 | jes | SW 8270C |
| Benzo (a) anthracene | 1,960 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW 8270C |
| Benzo (b) fluoranthene | 4,110 | ug/kg dw | 08/18/2001 | 947 | 1462 | $<3,460$ | jes | SW 8270C |
| Benzo(k)fluoranthene | 866 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW 8270C |
| Benzo(a) pyrene | 1,570 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<173$ | jrw | SW 8270C |
| Benzyl alcohol | <346 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW 8270C |
| Benzyl butyl phthalate | $<346$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW 8270C |
| Bis (2-chloroethyl) ether | $<346$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW 8270c |
| Bis (2-chloroethoxy) methane | $<346$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW 8270C |
| Bis (2-ethylhexyl) phthalate | $<346$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | .08/17/2001 | 947 | 1461 | <346 | jrw | SW 8270C |
| 2,2'-oxybis(1-chloropropane) | <346 | ug/kg dw | 08/17/2001 | 947 | 1461 | <346 | jrw | SW 8270C |
| 4-Bromophenyl phenyl ether | $<346$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW 8270C |
| 4-Chloroaniline | $<346$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW 8270C |
| 2-Chloronaphthalene | $<346$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW 8270C |
| Chrysene | 2,340 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <346 | jrw | SW 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<173$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<173$ | jrw | SW 8270C |
| Dibenzofuran | 1,170 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW 8270C |
| 1,2-Dichlorobenzene | $<346$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW 8270C |
| 1,3-Dichlorobenzene | $<346$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <346 | jxw | SW 8270C |
| 1,4-Dichlorobenzene | $<346$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW 8270C |
| 3,3'-Dichlorobenzidine | $<692$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <692 | jıw | SW 8270C |
| Diethyl phthalate | $<346$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <346 | jrw | SW 8270C |
| Dimethyl phthalate | $<346$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | <346 | jrw | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 699304

SAMPLE DESCRIPTION
SBIO02:GB-32:S000015:412

DATE/TIME TAKEN 08/08/2001 09:15

| 2,4-Dinitrotoluene | $<346$ |  | ug/ kg dw | 08/17/2001 | 947 | 1461 | <346 | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,6-Dinitrotoluene | $<346$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <346 | jrw | SW | 8270C |
| Di-n-octylphthalate | <346 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<346$ | jrw | Sw | 8270 C |
| Fluoranthene | 8,610 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/18/2001 | 947 | 1462 | $<3,460$ | jcs | SW | 8270C |
| Fluorene | 2,250 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW | 8270 C |
| Hexachlorobenzene | $<346$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW | 8270C |
| Hexachloro-1,3-butadiene | $<346$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<346$ | jıw | SW | 8270C |
| Hexachlorocyclopentadiene | $<692$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<692$ | jrw | SW | 8270C |
| Hexachloroethane | $<346$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <346 | jrw | SW | 8270C |
| Indeno (1, 2,3-cd) pyrene | $<346$ |  | ug/ kg dw | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW | 8270 C |
| Isophorone | $<346$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW | 8270C |
| Naphthalene | 2,710 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <346 | jrw | SW | 8270C |
| Nitrobenzene | $<346$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW | 8270 C |
| N -Nitrosodi-n-propylamine | <346 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <346 | jrw | SW | 8270 C |
| Phenanthrene | 12,600 |  | ug/kg dw | 08/18/2001 | 947 | 1462 | $<3,460$ | jcs | SW | 8270 C |
| Pyrene | 11,300 |  | ug/kg dw | 08/18/2001 | 947 | 1462 | $<3,460$ | jes | SW | 8270 C |
| 1,2,4-Trichlorobenzene | <346 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<346$ | jıw | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 91 | note | \% | 08/18/2001 | 947 | 1462 |  | jes | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 124 |  | 8 | 08/18/2001 | 947 | 1462 |  | jcs | SW | 8270C |
| Surrogate: d14-Terphenyl | 204 |  | $\%$ | 08/18/2001 | 947 | 1462 |  | jcs | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,730$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <1,730 | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | <346 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW | B270C |
| 2-Chlorophenol | $<346$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <346 | jrw | SW | $8270{ }^{\text {c }}$ |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>\section*{Job Number: 01.14452}<br>Client Project ID: South Bend Indiana SBI002

$08 / 27 / 2001$

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 699304 |  | SBI002: ${ }^{\text {S }}$ | -32: | 0000 | : 412 |  |  |  | 08/ | 8/2001 | 1 09:15 |


| 2,4-Dichlorophenol | $<346$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <346 | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dimethylphenol | $<346$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<346$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <346 | jıw | SW | 8270C |
| 2-Methylphenol | $<346$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW | 8270 C |
| meta $)^{\text {a }}$ para-Methylphenol | $<346$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW | 8270 C |
| 2-Nitrophenol | $<346$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <346 | jrw | SW | 8270C |
| Pentachlorophenol | $<346$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <346 | jrw | SW | 8270C |
| Phenol | $<346$ |  | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<346$ | jrw | SW | 8270C |
| 2,4,5-Trichlorophenol | $<346$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <346 | jrw | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<346$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <346 | jrw | SW | 8270 C |
| Surrogate: d6-Phenol | 67 |  | 8 | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorophenol | 39 |  | 4 | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |
| Surrogate: Tribromophenol | 11 | Note | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |

$\begin{array}{ll}\text { SAMPLE NO. SAMPLE DESCRIPTION } \\ 699305 & \text { SBI002:GB-19:S000010:412 }\end{array}$
DATE/TIME TAKEN
08/08/2001 08:05

| Dry Weight | 88.5 | \% | 08/17/2001 |  | 1479 |  | mhg |  | 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/16/2001 |  | 1229 | Complete | emd | SW | 6010B |
| Arsenic, ICP | 34 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2956 | $<3.6$ | emd | SW | 6010B |
| Barium, ICP | 456 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2887 | $<0.71$ | emd | SW | 6010B |
| Cadmium, ICP | 2.0 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/16/2001 | 901 | 2869 | <1.1 | emd | SW | 6010 B |

## ANALYTICAL REPORT

## Kevin Wildman

$\begin{array}{ll}\text { HULL \& ASSOC. (Dublin) } & 08 / 27 / 2001 \\ \text { 6130 Wilcox Rd. }\end{array}$
Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 699305 | SBIOO2:GB-19:S000010:412 |

DATE/TIME TAKEN 08/08/2001 08:05


| Acenaphthene | $<373$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | $<373$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| Anthracene | $<373$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| Benzo (a) anthracene | $<373$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| Benzo(b) fluoranthene | 993 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jxw | SW 8270C |
| Benzo(k)fluoranthene | $<373$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| Benzo(a) pyrene | 313 | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<186$ | jrw | SW 8270C |
| Eenzyl alcohol | $<373$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | <373 | jrw | SW 8270C |
| Benzyl butyl phthalate | $<373$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| Bis (2-chloroethyl) ether | $<373$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<373$ | jxw | SW 8270C |
| Bis (2-chloroethoxy) methane | $<373$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| Bis (2-ethylhexyl)phthalate | $<373$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<373$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| 4-Bromophenyl phenyl ether | $<373$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jxw | SW 8270C |
| 4-Chloroaniline | $<373$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <373 | jrw | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016
$08 / 27 / 2001$

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002

|  |  | Erep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |

SAMPLE NO. SAMPLE DESCRIPTION 699305

SBI002:GB-19:S000010:412

DATE/TIME TAKEN 08/08/2001 08:05

| 2-Chloronaphthalene | $<373$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<373$ | jıw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chrysene | 527 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| Dibenzo (a, h) anthracene | $<186$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<186$ | jrw | SW 8270C |
| Dibenzofuran | $<373$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| 1,2-Dichlorobenzene | $<373$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | S* 8270C |
| 1,3-Dichlorobenzene | <373 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| 1,4-Dichlorobenzene | $<373$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| 3,3'-Dichlorobenzidine | $<746$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<746$ | jıw | SW 8270C |
| Diethyl phthalate | $<373$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| Dimethyl phthalate | $<373$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| 2,4-Dinitrotoluene | <373 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270 C |
| 2,6-Dinitrotoluene | $<373$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jxw | SW 8270C |
| Di-n-octylphthalate | $<373$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 82700 |
| Fluoranthene | 722 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| Fluorene | <373 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| Hexachlorobenzene | $<373$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| Hexachloro-1,3-butadiene | $<373$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| Hexachlorocyclopentadiene | $<746$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<746$ | jıw | SW 8270C |
| Hexachloroethane | $<373$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| Indeno(1, 2,3-cd) pyrene | $<373$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| Isophorone | $<373$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| Naphthalene | $<373$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| Nitrobenzene | <373 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |
| N-Nitrosodi-n-propylamine | <373 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270c |
| Phenanthrene | 421 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.14452<br>Client Project ID: South Bend Indiana SBI002

08/27/2001

|  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyat <br> Initials | Method Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { SAMPLE NO. } \\ & 699305 \end{aligned}$ | SAMPLE D SBI002: GB | $\begin{aligned} & \text { SCRI } \\ & -19: \end{aligned}$ | $\begin{aligned} & \text { PTION } \\ & 50000 \end{aligned}$ | $0: 412$ |  |  |  | $\begin{aligned} & \text { DAI } \\ & 08 \end{aligned}$ | /TIME TAKEN <br> 8/2001 08:05 |


| Pyrene | 681 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,4-Trichlorobenzene | $<373$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <373 | jrw | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 76 | Note | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 87 |  | $\%$ | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270 C |
| Surrogate: d14-Terphenyl | 82 |  | 8 | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,860 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<1,860$ | jrw | SW | 8270C |
| 4-Chloro-3-methylphenol | $<373$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW | 8270C |
| 2-Chlorophenol | <373 |  | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW | 8270 C |
| 2,4-Dichlorophenol | $<373$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jiw | SW | 8270C |
| 2,4-Dimethylphenol | $<373$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<373$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW | 8270C |
| 2-Methylphenol | $<373$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW | 8270 C |
| meta \& para-Methylphenol | $<373$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW | 8270 C |
| 2-Nitrophenol | $<373$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW | 8270 C |
| Pentachlorophenol | $<373$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | -jrw | SW | 8270C |
| Phenol | <373 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | S | 8270C |
| 2,4,5-Trichlorophenol | $<373$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<373$ | jrw | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<373$ |  | ug/kg dw | 08/27/2001 | 947 | 1461 | <373 | jrw | Sk | 82700 |
| Surrogate: d6-Phenol | 67 |  | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW | 82700 |
| Surrogate: 2-Fluorophenol | 54 |  | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270 C |
| Surrogate: Tribromophenol | 68 |  | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270 C |

## ANALYFICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/27/2001
6130 Wilcox Rd.
Dublin, OH 4301,6

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 699306 | SBIOO2:GB-1:S000010:412 | $08 / 09 / 2001$ 08:05 |



## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


SAMPLE NO.

SAMPLE DESCRIPTION
DATE/TIME TAKEN
08/09/2001 08:05

| Bis (2-chloroethoxy) methane | $<350$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bis (2-ethylhexyl) phthalate | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jxw | SW | 8270C |
| 2,2'-oxybis(1-Chloropropane) | <350 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jıw | SW | 8270 C |
| 4-Eromophenyl phenyl ether | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jxw | SW | 8270C |
| 4-Chloroaniline | $<350$ | ug/kg dw | 08/17/2002 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| 2-Chloronaphthalene | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |
| Chrysene | 1,650 | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<175$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<175$ | jrw | SW | 8270 C |
| Dibenzofuran | $<350$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | Sh | 8270C |
| 1,2-Dichlorobenzene | $<350$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |
| 1,3-Dichlorobenzene | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SN | 82700 |
| 1,4-Dichlorobenzene | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<701$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<701$ | j\%w | SW | 8270 C |
| Diethyl phthalate | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Dimethyl phthalate | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SH | 8270C |
| 2,4-Dinitrotoluene | $<350$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SH | 8270C |
| 2,6-Dinitrotoluene | <350 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Di-n-octylphthalate | <350 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| Fluoranthene | 2,700 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| Fluorene | 455 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| Hexachlorobenzene | $<350$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<350$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 82700 |
| Hexachlorocyclopentadiene | $<701$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<701$ | jrw | SW | 8270 C |
| Hexachloroethane | <350 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | Sh | B270C |
| Indeno(1,2,3-cd) pyrene | <350 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch <br> Number | Run Batch Number | Reporting <br> Limit | Analyst Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | PTION |  |  |  |  | DAT | /TIME | TAKEN |
| 699306 |  | SBI002: GB | -1: S | 00001 | 412 |  |  |  | 08/0 | 9/2001 | 08:05 |


| Isophorone | <350 |  | ug/kg dw | 08/17/2001 | 94.7 | 1461 | <350 | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Naphthalene | 480 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jxw | SW | 8270C |
| Nitrobenzene | <350 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<350$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| Phenanthrene | 4,690 |  | ug/kg dw | 08/18/2001 | 947 | 1462 | $<3.500$ | jes | SW | 8270C |
| Pyrene | 4,530 |  | ug/kg dw | 08/18/2001 | 947 | 1462 | $<3,500$ | jes | SW | $8270{ }^{\text {c }}$ |
| 1,2,4-Trichlorobenzene | <350 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 76 |  | \% | 08/17/2001 | 947 | 1461 |  | jxw | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 89 |  | \% | 08/17/2001 | 947 | 1461 |  | jrw | Sw | 8270 C |
| Surrogate: d14-Terphenyl | 158 | Note | 8 | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,750 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<1.750$ | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | <350 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| 2-Chlorophenol | <350 |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| 2,4-Dichlorophenol | $<350$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| 2,4-Dimethylphenol | $<350$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<350$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |
| 2-Methyiphenol | $<350$. |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |
| meta \& para-Methylphenol | $<350$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | $8270{ }^{\text {c }}$ |
| 2-Nitrophenol | $<350$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 82700 |
| Pentachlorophenol | <350 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jxw | SW | 8270 C |
| Phenol | $<350$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270 C |
| 2,4,5-Trichlorophenol | <350 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jıw | SW | 8270C |
| 2,4,6-Trichlorophenol | <350 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270 C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002

|  |  | Frep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |

## SAMPLE NO. 699306

SAMPLE DESCRIPTION
SBI002:GB-1:S000010:412
DATE/TIME TAKEN 08/09/2001 08:05


| jrw | SW 8270C |
| :--- | :--- |
| jrw | SW 8270C |
| jrw | SW 8270C |

DATE/TIME TAKEN 08/09/2001 08:05


## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin) 08/27/2001
6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.14452

## Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initiala | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 699307 |  | SBI002: GB | -1D: | 0000 | : 412 |  |  |  | 08/ | 9/2001 | 1 08:05 |


| Acenaphthene | <350 | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | $<350$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |
| Anthracene | 783 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| Benzo (a) anthracene | 934 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| Benzo (b) fluoranthene | 2,090 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1.461 | $<350$ | jrw | SW | 8270 C |
| Benzo (k) fluoranthene | 744 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<350$ | jxw | SW | 8270C |
| Benzo (a) pyrene | 299 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<175$ | jrw | SW | 8270C |
| Benzyl alcohol | <350 | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| Benzyl butyl phthalate | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jıw | SW | 8270C |
| Bis(2-chloroethyl) ether | <350 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| Bis (2-chloroethoxy) methane | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| Bis (2-ethylhexyl) phthalate | $<350$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<350$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<350$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 82700 |
| 4-Chloroaniline | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| 2-Chloronaphthalene | <350 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |
| Chrysene | 1,320 | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| Dibenzo (a, h) anthracene | $<175$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<175$ | jrw | SW | 8270C |
| Dibenzofuran | <350 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| 1,2-Dichlorobenzene | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| 1,3-Dichlorobenzene | $<350$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| 1,4-Dichlorobenzene | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<701$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<701$ | jrw | SW | 8270 C |
| Diethyl phthalate | $<350$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| Dimethyl phthalate | <350 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)

08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBIO02


SAMPLE NO. 699307

SAMPLE DESCRIPTION
SBI002:GB-1D:S000010:412

DATE/TIME TAKEN 08/09/2001 08:05

| 2,4-Dinitrotoluene | $<350$ |  | ug/kg dw | 08/17/2001 | 947 | 2461 | $<350$ | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,6-Dinitrotoluene | $<350$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | sw | 8270 C |
| Di-n-octylphthalate | $<350$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| Fluoranthene | 2,170 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Fluorene | <350 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 82700 |
| Hexachlorobenzene | $<350$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<350$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| Hexachlorocyclopentadiene | $<701$ |  | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<701$ | jrw | SW | 82700 |
| Hexachloroethane | <350 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | Sw | 8270C |
| Indeno (1,2,3-cd) pyrene | <350 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | j「w | SW | 8270C |
| Isophorone | $<350$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| Naphthalene | 518 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |
| Nitrobenzene | <350 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<350$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |
| Phenanthrene | 2,530 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| Pyrene | 3,150 |  | ug/kg dw | 08/18/2001 | 947 | 1462 | $<1,750$ | jes | SW | 8270C |
| 1,2,4-Trichlorobenzene | <350 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 81 |  | $\%$ | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |
| Surrogate: 2-Eluorobiphenyl | 82 |  | $t$ | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270 C |
| Surrogate: d14-Terphenyl | 124 | Note | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW | 82700 |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,750$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<1,750$ | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<350$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SH | 8270C |
| 2-Chlorophenol | <350 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)

08/27/2001 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |
| Analyzed | Number | Number | Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 699307

DATE/TIME TAKEN 08/09/2001 08:05

| 2,4-Dichlorophenol | <350 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dimethylphenol | <350 | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<350$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| 2-Methylphenol | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| meta \& para-Methylphenol | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| 2-Nitrophenol | <350 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| Pentachlorophenol | $<350$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| Phenol | <350 | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270C |
| 2,4,5-Trichlorophenol | <350 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<350$ | jrw | SW | 8270 C |
| 2,4,6-Trichlorophenol | <350 | ug/kg dw | 08/17/2001 | 947 | 1461 | <350 | jrw | SW | 8270C |
| Surrogate: d6-Phenol | 84 | * | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorophenol | 76 | 7 | 08/17/2001 | 947 | 1461 |  | jrw | S | 8270C |
| Surrogate: Tribromophenol | 81 | $\%$ | 08/17/2001 | 947 | 1461 |  | jxw | SW | 8270C |

SAMPLE NO. SAMPLE DESCRIPTION
699308 SBIO02:GB-2:S010015:412

## DATE/TIME TAKEN 08/09/2001 08:45

| Dry Weight | 88.0 | \% | 08/17/2001 |  | 1479 |  | mhg | SM | 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/17/2001 |  | 1232 | Complete | emd | SW | 6010B |
| Arsenic, ICP | $<3.6$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 903 | 2960 | $<3.6$ | emd | sw | 60108 |
| Barium, ICP | 191 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 903 | 2891 | $<0.73$ | emd | SW | 60108 |
| Cadmium, ICP | <1. 1 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 903 | 2873 | <1.1 | emd | SW | 6010B |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
08/27/2001
6130 Wilcox Rd.
Dublin, OH 43016

## Job Number: 01. 14452

## Client Project ID: South Bend Indiana SBIOO2


SAMPLE NO. SAMPLE DESCRIPTION
699308 SBIOO2:GB-2:S010015:412

DATE/TIME TAKEN 08/09/2001 08:45

| Chromium, ICP | 9.3 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 903 | 2861 | $<1.5$ | emd | SW 6010B |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lead, ICP | 62.5 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 903 | 2862 | $<3.0$ | emd | SW 6010B |  |
| Mercury, CVAA | 0.278 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 607 | 624 | $<0.009$ | epk | SW 7471A |  |
| Selenium, ICP | <3.6 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 903 | 2940 | <3.6 | emd | SW 6010B |  |
| Silver, ICP | $<1.5$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 903 | 2893 | <1.5 | emd | SW 6010B |  |
| ICP Digestion, Nonaqueous | Complete |  | 08/15/2001 | 903 |  | Complete | mrt | SW 3050B |  |
| Mercury Digestion, Non-Aq | Complete |  | 08/14/2001 | 607 |  | Complete | epk | SW 7471A |  |
| Prep, BNA Non-Aq | Complete |  | 08/14/2001 | 947 |  | Complete | mlr | EPA 625; | W 3545 |


| Acenaphthene | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | <375 | dmg | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SW | 8270 C |
| Anthracene | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SW | 8270C |
| Benzo (a) anthracene | $<375$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SW | 8270C |
| Benzo (b) fluoranthene | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SW | 8270C |
| Benzo(k) fluoranthene | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SW | 8270 C |
| Benzo (a) Pyrene | 195 | ug/kg dw | 08/19/2001 | 947 | 1463 | $<188$ | dmg | SW | 8270 C |
| Benzyl alcohol | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SW | 8270C |
| Benzyl butyl phthalate | $<375$ | $u g / \mathrm{kg} \mathrm{d} w$ | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SW | $8270 C$ |
| Bis (2-chloroethyl) ether | $<375$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SW | 8270 C |
| Bis (2-chloroethoxy) methane | $<375$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SW | 8270 C |
| Bis (2-ethylhexyl) phthalate | $<375$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SW | 8270C |
| 2,2'-oxybis(1-Chloropropane) | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<375$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SW | 8270C |
| 4-Chloroaniline | <375 | ug/kg dw | 08/19/2001 | 947 | 1463 | <375 | dmg | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14452
Client Project ID: South Bend Indiana SBIO02

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 699308 |  | SBI002: ${ }^{\text {S }}$ | -2: | 1001 | : 412 |  |  |  | 08/ | 9/2001 | 1 08:45 |


| 2-Chloronaphthalene | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | <375 | drng | SW | 8270c |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chrysene | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | $<375$ | dmg | Sh | 8270C |
| Dibenzo (a,h)anthracene | $<188$ | ug/kg dw | 08/19/2001 | 947 | 1463 | $<188$ | dmg | SW | 82700 |
| Dibenzofuran | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SW | 8270C |
| 1,2-Dichlorobenzene | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | <375 | dmg | SH | 8270C |
| 1,3-Dichlorobenzene | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | $<375$ | dimg | SW | 8270C |
| 1,4-Dichlorobenzene | $<375$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 947 | 1463 | <375 | dmg | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<750$ | ug/kg dw | 08/19/2001 | 947 | 1463 | $<750$ | dmg | SW | 8270C |
| Diethyl phthalate | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | $<375$ | ding | SW | 8270C |
| Dimethyl phthalate | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | <375 | dmg | SW | 8270c |
| 2,4-Dinitrotoluene | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | <375 | dmg | SW | 8270C |
| 2,6-Dinitrotoluene | $<375$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 947 | 1463 | $<375$ | ding | SW | 8270C |
| Di-n-octylphthalate | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SW | 8270C |
| Fluoranthene | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | <375 | dmg | Sw | 8270 C |
| Fluorene | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SW | 8270C |
| Hexachlorobenzene | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SW | 8270C |
| Hexachloro-1, 3-butadiene | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | <375 | ding | SW | 8270C |
| Hexachlorocyclopentadiene | $<750$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 947 | 1463 | $<750$ | ding | SW | 8270C |
| Hexachloroethane | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | $<375$ | ding | SW | 8270 C |
| Indeno (1, 2,3-cd) pyrene | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | <375 | dmg | SW | 8270 C |
| Isophorone | $<375$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 947 | 1463 | $<375$ | ding | SW | 8270C |
| Naphthalene | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | <375 | dmg | Sw | 8270 C |
| Nitrobenzene | $<375$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SK | 82700 |
| N-Nitrosodi-n-propylamine | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | <375 | dimg | SW | 8270C |
| Phenanthrene | $<375$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 947 | 1463 | <375 | ding | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULI \& ASSOC. (Dublin)<br>$6: 130$ Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. $\quad$ SAMPLE DESCRIPTION
699308

DATE/TIME TAKEN 08/09/2001 08:45

| Pyrene | $<375$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,4-Trichlorobenzene | $<375$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 947 | 1463 | <375 | ding | SW | $8270{ }^{\text {c }}$ |
| Surrogate: d5-Nitrobenzene | 79 | $\%$ | 08/19/2001 | 947 | 1463 |  | dmg | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 86 | 8 | 08/19/2001 | 947 | 1463 |  | dmg | SW | 8270C |
| Surrogate: d14-Terphenyl | 83 | \% | 08/19/2001 | 947 | 1463 |  | dmg | SW | 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,880 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 947 | 1463 | <1,880 | dimg | SW | 8270C |
| 4-Chloro-3-methylphenol | $<375$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 947 | 1463 | $<375$ | dmg | sw | 8270 C |
| 2-Chlorophenol | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | <375 | dmg | SW | 8270C |
| 2,4-Dichlorophenol | $<375$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SW | 8270 C |
| 2,4-Dimethylphenol | $<375$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 947 | 1463 | <375 | dmg | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SW | 8270C |
| 2-Methylphenol | $<375$ | $4 \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SW | 8270C |
| meta \& para-Methylphenol | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | <375 | dimg | SW | 8270 C |
| 2-Nitrophenol | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SW | 8270C |
| Pentachlorophenol | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | <375 | dmg | SW | 8270C |
| Phenol | <375 | $u g / \mathrm{kg}$ dw | 08/19/2001 | 947 | 1463 | <375 | dimg | SW | 8270C |
| 2,4,5-Trichlorophenol | $<375$ | ug/kg dw | 08/19/2001 | 947 | 1463 | $<375$ | dmg | SW | 8270 C |
| 2,4,6-Trichlorophenol | <375 | ug/kg dw | 08/19/2001 | 947 | 1463 | <375 | ding | SW | 8270C |
| Surrogate: d6-Phenol | 75 | 8 | 08/19/2001 | 947 | 1463 |  | dmg | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 58 | 8 | 08/19/2001 | 947 | 1463 |  | dmg | SW | 8270 C |
| Surrogate: Tribromophenol | 71 | 8 | 08/19/2001 | 947 | 1463 |  | dmg | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman HULI \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002

|  | Result | Flag | Units | Date <br> Analyzed | Prep Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE NO. | SAMPLE DE | CRI | IIO |  |  |  |  | DAT | /TIME | TAKEN |
| 699309 | SBI002: GB | -9:S | 0002 | 412 |  |  |  | 08/ | 9/2001 | 1 09:00 |



## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001 6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


| Bromoform | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | SN | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bromobenzene | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| 2-Butanone (MEK) | $<53$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<53$ | bmh | SW | 8260A |
| Carbon disulfide | < 5.3 | $u g / \mathrm{kg}$ dw | 08/14/2001 | 1462 | <5.3 | bmh | SH | 8260A |
| Carbon tetrachloride | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| Chlorobenzene | <5.3 | $u g / \mathrm{kg}$ dw | 08/14/2001 | 1462 | <5.3 | bmh | SW | 8260A |
| Chloroethane | $<10.5$ | ug/kg dw | 08/14/2001 | 1462 | <10.5 | bmh | SW | 8260A |
| 2-Chlorotoluene | <5.3 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.3 | bmh | SW | 8260A |
| 4-Chlorotoluene | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmin | SW | 8260A |
| Chloroform | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | SW | 8260A |
| Chloromethane | $<10.5$ | ug/kg dw | 08/14/2001 | 1462 | $<10.5$ | bmh | SW | 8260A |
| Dibromochloromethane | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| Dibromomethane | $<5.3$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.3 | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.3$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | brih | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | brih | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | SH | 8260A |
| 1,2-Dichloropropane | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | brah | SW | 8260A |
| 1,3-Dichloropropane | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.3 | bmh | SW | 8260A |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.

Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBIO02

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 699309 |  | SBI002: GB | -9: | 0002 | 412 |  |  |  | 08/ | 9/2001 | 1. 09:00 |


| 2,2-Dichloropropane | <5.3 | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1-Dichloropropene | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | brih | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.3$ | ug/ikg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| Ethylbenzene | $<5.3$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | SW | 8260A |
| n -Hexane | $<21.1$ | ug/kg dw | 08/14/2001 | 1462 | $<21.1$ | bmh | SW | 8260A |
| 2-Hexanone | $<52.6$ | ug/kg dw | 08/14/2001 | 1462 | <52.6 | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| p-Isopropyltoluene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.3 | bmh | SW | 8260A |
| Bromomethane | $<10.5$ | ug/kg dw | 08/14/2001 | 1462 | $<10.5$ | bmh | SW | 8260A |
| Methylene Chloride | $<10.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<10.5$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTEE) | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | sw | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<52.6$ | ug/kg dw | 08/14/2001 | 1462 | $<52.6$ | bmh | SW | 8260A |
| n-Propylbenzene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| Styrene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| Naphthalene | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| Tetrachloroethene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| Toluene | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | <5.3 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.3 | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.3$ | $u g / \mathrm{kg}$ dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| Trichloroethene | <5.3 | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 699309 | SBIOO2 $:$ GB-9:S000020:412 | $08 / 09 / 2001$ 09:00 |


| Trichlorofluoromethane | <5.3 | ug/kg dw | 08/14/2001 |  | 1462 | $<5.3$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,3-Trichloropropane | $<5.3$ | ug/kg dw | 08/14/2001 |  | 1462 | $<5.3$ | bmh | Sw | 8260A |
| 1,2,4-Trimethylbenzene | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | $<5.3$ | bmh | SW | 8250A |
| 1,3,5-Trimethylbenzene | <5.3 | ug/kg dw | 08/14/2001 |  | 1462 | <5.3 | bmh | SW | 8260A |
| Vinyl Acetate | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | <5.3 | bmh | SW | 8260A |
| Vinyl Chloride | $<2.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | <2.1 | bmh | SW | 8260A |
| Xylenes, Total | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | $<5.3$ | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 109 | 1 | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 105 | 4 | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| d8-Toluene (surr) | 95 | 4 | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 99 | \% | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| BASE NEUT. COMPS. -8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<347$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW | 82700 |
| Acenaphthylene | $<347$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW | 8270C |
| Anthracene | $<347$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW | 82700 |
| Benzo (a) anthracene | 574 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW | 8270C |
| Benzo (b) fluoranthene | 988 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Benzo(k)fluoranthene | 451 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW | 8270C |
| Benzo (a) pyrene | 427 | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<174$ | jrw | SW | 8270C |
| Benzyl alcohol | $<347$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW | 8270 C |
| Benzyl butyl phthalate | $<347$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW | 8270 C |
| Bis (2-chloroethyl)ether | <347 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW | 8270C |
| Bis (2-chloroethoxy) methane | $<347$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<347$ | j2w | SW | 82700 |
| Bis (2-ethylhexyl) phthalate | <347 | ug/kg dw | 08/17/2001 | 947 | 1461 | <347 | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14452

## Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | PTIO |  |  |  |  | DA | /TIME | TAKEN |
| 699309 |  | SBI002 : GB | -9: S | 00002 | 412 |  |  |  | 08/ | 9/2001 | 09:00 |


| 2,2'-oxybis(1-Chloropropane) | $<347$ |
| :--- | :--- |
| 4-Bromophenyl phenyl ether | $<347$ |
| 4-Chloroaniline | $<347$ |
| 2-Chloronaphthalene | $<347$ |
| Chrysene | 753 |
| Dibenzo(a,h)anthracene | $<174$ |
| Dibenzofuran | $<347$ |
| 1,2-Dichlorobenzene | $<347$ |
| 1,3-Dichlorobenzene | $<347$ |
| 1,4-Dichlorobenzene | $<347$ |
| 3,3'-Dichlorobenzidine | $<695$ |
| Diethyl phthalate | $<347$ |
| Dimethyl phthalate | $<347$ |
| 2,4-Dinitrotoluene | $<347$ |
| 2,6-Dinitrotoluene | $<347$ |
| Di-n-octylphthalate | $<347$ |
| Fluoranthene | 1,040 |
| Fluorene | $<347$ |
| Hexachlorobenzene | $<347$ |
| Hexachloro-1,3-butadiene | $<347$ |
| Hexachlorocyclopentadiene | $<695$ |
| Hexachloroethane | $<347$ |
| Indeno(1,2,3-cd)pyrene | $<347$ |
| Isophorone | $<347$ |
| Naphthalene | $<347$ |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.14452<br>Client Project ID: South Bend Indiana SBIO02

08/27/2001


SAMPLE NO. SAMPLE DESCRIPTION DATE/TIME TAKEN 699309 SBI002:GB-9:S000020:412

| Nitrobenzene | $<347$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N-Nitrosodi-n-propylamine | $<347$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW 8270C |
| Phenanthrene | 749 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW 8270C |
| Pyrene | 2,340 |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW 8270C |
| 1,2,4-Trichlorobenzene | $<347$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW 8270C |
| Surrogate: d5-Nitrobenzene | 72 |  | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW 8270C |
| Surrogate: 2-Fluorobiphenyl | 91 |  | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW 8270C |
| Surrogate: dl4-Terphenyl | 161 | Note | 4 | 08/17/2001 | 947 | 1461 |  | jrw | SW 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,740 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<1.740$ | jrw | SW 8270C |
| 4-Chloro-3-methylphenol | $<347$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW 8270C |
| 2-Chlorophenol | $<347$ |  | $u g / \mathrm{kg} \mathrm{dw}$. | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW 8270C |
| 2,4-Dichlorophenol | $<347$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW 8270C |
| 2,4-Dimethylphenol | $<347$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<347$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW 8270C |
| 2-Methylphenol | $<347$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW 8270C |
| meta \& para-Methylphenol | $<347$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW 8270C |
| 2-Nitrophenol | $<347$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW 8270C |
| Pentachlorophenol | $<347$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW 8270C |
| Phenol | $<347$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW 8270C |
| 2,4,5-Trichlorophenol | $<347$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW 8270C |
| 2,4,6-Trichlorophenol | $<347$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<347$ | jrw | SW 8270C |
| Surrogate: d6-Phenol | 75 |  | $\%$ | 08/17/2001 | 947 | 1461 |  | jrw | SW 8270C |
| Surrogate: 2-Fluorophenol | 61 |  | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | SCRI | PTION |  |  |  |  | DAT | /TIME | TAKEN |
| 699309 |  | SBI002: GB | -9: S | 00002 | : 412 |  |  |  | 08/ | 9/2001 | 09:00 |


| Surrogate: Tribromophenol | -78 | $\%$ | 08/17/2001 | 947 | 1461 |  | jrw | sw 8270C |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PCB's M 8082, Non-Aq |  |  |  |  |  |  |  |  |  |  |
| Aroclor 1016 | $<0.53$ | mg/kg dw | 08/20/2001 | 103 | 187 | <0.53 | jdc | Sw | 8082 |  |
| Aroclor 1221 | <0.53 | mg/kg dw | 08/20/2001 | 103 | 187 | <0.53 | jdc | Sw | 8082 |  |
| Aroclor 1232 | $<0.53$ | $\mathrm{mg} / \mathrm{kg}$ dw | 08/20/2001 | 103 | 187. | <0.53 | jdc | SW | 8082 |  |
| Aroclor 1242 | <0.53 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 103 | 187 | $<0.53$ | jde | Sw | 8082 |  |
| Aroclor 1248 | <0.53 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 103 | 187 | $<0.53$ | jde | SW | 8082 |  |
| Aroclor 1254 | <0.53 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 103 | 187 | $<0.53$ | jde | sw | 8082 |  |
| Aroclor 1260 | $<0.53$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 103 | 187 | <0.53 | jde | Sw | 8082 |  |
| Surrogate:TCX/DCB | 118/101 note | * | 08/20/2001 | 103 | 187 |  | jdc | sw | 8082 |  |
| TPH - FTIR Non-aq | 2,320 | mg/kg dw | 08/16/2001 | 589 | 621 | <53 | 110 |  |  |  |
| SAMPLE NO. 699310 | SAMPLE DESCRIPTION |  |  |  |  |  | DATE/TIME TAKEN$08 / 09 / 2001 \quad 09: 45$ |  |  |  |


| Dry Weight | 95.4 | \% | 08/17/2001 |  | 1479 |  | mhg | SM 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/17/2001 |  | 1232 | Complete | emd | SW 6010B |
| Arsenic, ICP | <6.9 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 903 | 2960 | <6.9 | emd | SW 6010B |
| Earium, ICP | 237 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 903 | 2891 | <1.4 | emd | Sw 6010B |
| Cadmium, ICP | 89.2 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 903 | 2873 | $<2.1$ | emd | SW 6010B |
| Chromium, ICF | 16.2 | mg/kg dw | 08/17/2001 | 903 | 2861 | $<2.7$ | end | SW 6010B |
| Lead, ICP | 147 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 903 | 2862 | <5.6 | emd | SW 6010B |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
699310 $\quad$ SBIOO2:GB-10:SOOOO20:412

DATE/TIME TAKEN 08/09/2001 09:45

| Mercury, CVAA | 0.419 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 607 | 624 | $<0.031$ | epk |  | 7471A |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Selenium, ICP | $<6.9$ | $m \mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 903 | 2940 | $<6.9$ | emd | SW | 6010B |  |
| Silver, ICP | <2.7 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 903 | 2893 | <2.7 | ema | SW | 6010B |  |
| ICP Digestion, Nonaqueous | Complete |  | 08/15/2001 | 903 |  | Complete | mrt | SW | 3050B |  |
| Mercury Digestion, Non-Aq | Complete |  | 08/14/2001 | 607 |  | Complete | epk | SW | 7471A |  |
| Prep, pCBs Non-Aq 8082 | Complete |  | 08/16/2001 | 103 |  | Complete | mlr |  | 3540C; SW 3545 |  |
| Prep, BNA Non-Aq | Complete |  | 08/14/2001 | 947 |  | Complete | mlr |  | A 625; SW 3540C | SW 3545 |
| Prep, TPH 418.1 Nonaq | COMPLETE |  | 08/15/2001 | 589 |  | Complete | 110 | SW | 9071 |  |
| VOLATILE COMPOUNDS-8260 Non-Aq |  |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/14/2001 |  | 1462 | Complete | bmh |  |  |  |
| Acetone | $<105$ | ug/kg dw | 08/14/2001 |  | 1462 | $<105$ | bmh | SW | 8260A |  |
| Benzene | <5.2 | ug/kg dw | 08/14/2001 |  | 1462 | <5.2 | bmh | SW | 8260A |  |
| tert-Butylbenzene | $<5.2$ | ug/kg dw | 08/14/2001 |  | 1462 | $<5.2$ | bmh | SH | 8260A |  |
| sec-Butylbenzene | $<5.2$ | ug/kg dw | 08/14/2001 |  | 1462 | $<5.2$ | bmh | SW | 8260A |  |
| n-Butylbenzene | <5.2 | ug/kg dw | 08/14/2001 |  | 1462 | $<5.2$ | bmh | SW | 8260A |  |
| Bromochloromethane | <5.2 | ug/kg dw | 08/14/2001 |  | 1462 | <5.2 | bmh | SW | 8260A |  |
| Bromodichloromethane | <5.2 | ug/kg dw | 08/14/2001 |  | 1462 | $<5.2$ | bmh | SW | 8260A |  |
| Bromoform | <5.2 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | $<5.2$ | bmh | SW | 8260A |  |
| Bromobenzene | $<5.2$ | ug/kg dw | 08/14/2001 |  | 1462 | $<5.2$ | bmh | SW | 8260A |  |
| 2-Butanone (MEK) | $<52$ | ug/kg dw | 08/14/2001 |  | 1462 | $<52$ | bmh | SW | 8260A |  |
| Carbon disulfide | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | $<5.2$ | bmh | SW | 8260A |  |
| Carbon tetrachloride | <5.2 | ug/kg dw | 08/14/2001 |  | 1462 | $<5.2$ | bmh | SW | 8260A |  |
| Chlorobenzene | <5.2 | ug/kg dw | 08/14/2001 |  | 1462 | <5.2 | bmh | SW | 8260A |  |
| Chloroethane | <10.5 | ug/kg dw | 08/14/2001 |  | 1462 | <10.5 | bmh | SW | 8260A |  |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.14452<br>Client Project ID: South Bend Indiana SBI002

08/27/2001

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |
| Analyed | Number | Number | Limit | Initials Method Reference |  |  |

$\begin{array}{ll}\text { SAMPLE NO. SAMPLE DESCRIPTION } \\ 699310 & \text { SBIOO2:GB-10:S000020:412 }\end{array}$
DATE/TIME TAKEN 08/09/2001 09:45

| 2-Chlorotoluene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | brah | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Chlorotoluene. | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| Chloroform | <5.2 | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| Chloromethane | $<10.5$ | ug/kg dw | 08/14/2001 | 1462 | <10.5 | bmh | SW | 8260A |
| Dibromochloromethane | $<5.2$ | $u g / \mathrm{kg}$ dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| Dibromomethane | $<5.2$ | $u g / \mathrm{kg}$ dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmin | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | <5.2 | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.2$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{d} w$ | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | brah | SW | 8260A |
| 1,1-Dichloroethene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | <5.2 | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | Sw | 8260A |
| cis-1,3-Dichloropropene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | Sw | 8260A |
| trans-1,3-Dichloropropene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| Ethylbenzene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| n-Нехале | $<21.0$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<21.0$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

## Job Number: 01.14452

Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |
| Rumbed | Number | Number Limit | Initials Method Reference |  |  |  |

## SAMPLE NO. SAMPLE DESCRIPTION 699310 <br> SBI002:GB-10:S000020:412

DATE/TIME TAKEN
08/09/2001 09:45

| <-Hexanone | $<52.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<52.4$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Isopropylbenzene (Cumene) | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| p-Isopropyltoluene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| Bromomethane | $<10.5$ | ug/kg dw | 08/14/2001 | 1462 | $<10.5$ | bmh | SW | 8260A |
| Methylene Chloride | $<10.5$ | ug/kg dw | 08/14/2001 | 1462 | <10.5 | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | <5.2 | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<52.4$ | ug/kg dw | 08/14/2001 | 1462 | $<52.4$ | bmh | Sw | 8260A |
| n-Propylbenzene | $<5.2$ | $u g / \mathrm{kg}$ dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| Styrene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | Sw | 8260A |
| Naphthalene | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | Sw | 8260A |
| 1,1,2,2-Tetrachioroethane | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | .08/14/2001 | 1462 | $<5.2$ | bmh | Sw | 8260A |
| Tetrachloroethene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| Toluene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| Trichloroethene | 7.9 | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| Trichlorofluoromethane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.2$ | ug/kg dw | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | <5.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| Vinyl Acetate | <5.2 | ug/kg dw | 08/14/2001 | 1462 | <5.2 | bmh | SW | 8260A |
| Vinyl Chloride | $<2.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<2.1$ | bmh | SW | 8260A |
| Xylenes, Total | $<5.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.2$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBIOO2


## SAMPLE NO. <br> SAMPLE DESCRIPTION 699310 <br> SBIO 02 :GB-10:S000020:412

DATE/TIME TAKEN
$08 / 09 / 2001$ 09:45

| d4-1,2-Dichloroethane (surr) | 105 | \% | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibromofluoromethane (surr) | 99 | \% | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| d8-Toluene (surr) | 92 | \% | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 94 | 4 | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| BASE NEUT. COMPS.-8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | <3,500 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 947 | 1462 | <3,500 | jes | SW | 8270 C |
| Acenaphthylene | $<3,500$ | ug/kg dw | 08/19/2001 | 947 | 1462 | <3,500 | jcs | SW | 8270 C |
| Anthracene | 5,270 | ug/kg dw | 08/19/2001 | 947 | 1462 | $<3,460$ | jes | SW | 8270 C |
| Benzo (a) anthracene | 12.300 | ug/kg dw | 08/19/2001 | 947 | 1462 | $<3,460$ | jce | SW | 8270 C |
| Benzo (b) fluoranthene | 16,000 | ug/kg dw | 08/19/2001 | 947 | 1462 | <3,460 | jcs | SW | 8270 C |
| Benzo(k) fluoranthene | 6,170 | $u g / \mathrm{kg}$ dw | 08/19/2001 | 947 | 1462 | <3,460 | jes | SW | 8270 C |
| Benzo (a) pyrene | 10,900 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/19/2001 | 947 | 1462 | <1,680 | jes | SW | 8270 C |
| Benzyl alcohol | $<3,500$ | ug/kg dw | 08/19/2001 | 947 | 1462 | $<3,500$ | jes | SW | 8270 C |
| Benzyl butyl phthalate | $<3,500$ | ug/kg dw | 08/19/2001 | 947 | 1462 | $<3.500$ | jcs | SW | 8270 C |
| Bia (2-chloroethyl) ether | $<3,500$ | ug/kg dw | 08/19/2001 | 947 | 1462 | $<3,500$ | jes | SW | 8270 C |
| Bis (2-chloroethoxy) methane | $<3.500$ | ug/kg dw | 08/19/2001 | 947 | 1462 | $<3,500$ | jcs | SW | 8270 C |
| Bis (2-ethylhexyl)phthalate | $<3.500$ | ug/kg dw | 08/19/2001 | 947 | 1462 | <3,500 | jcs | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | $<3,500$ | ug/kg dw | 08/19/2001 | 947 | 1462 | $<3,500$ | jcs | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<3,500$ | ug/kg dw | 08/19/2001 | 947 | 1462 | <3,500 | jcs | SH | 8270 C |
| 4-Chloroaniline | $<3,500$ | ug/kg dw | 08/19/2001 | 947 | 1462 | <3,500 | jcs | SW | 8270 C |
| 2-Chloronaphthalene | $<3,500$ | $u \mathrm{~g} / \mathrm{kg}$ dw | 08/19/2001 | 947 | 1462 | $<3,500$ | jcs | SW | 8270 C |
| Chrysene | 12,500 | ug/kg dw | 08/19/2001 | 947 | 1462 | $<3,460$ | jes | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | <1,700 | ug/kg dw | 08/19/2001 | 947 | 1462 | <1,700 | jes | SW | 8270 C |
| Dibenzofuran | <3,500 | ug/kg dw | 08/19/2001 | 947 | 1462 | <3,500 | jes | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 699310

SAMPLE DESCRIPTION
SBI002:GB-10:S000020:412

DATE/TIME TAKEN 08/09/2001 09:45

| 1,2-Dichlorobenzene | $<3,500$ |
| :--- | :--- |
| 1,3-Dichlorobenzene | $<3,500$ |
| 1,4-Dichlorobenzene | $<3,500$ |
| 3,3'-Dichlorobenzidine | $<6,900$ |
| Diethyl phthalate | $<3,500$ |
| Dimethyl phthalate | $<3,500$ |
| 2,4-Dinitrotoluene | $<3,500$ |
| 2,6-Dinitrotoluene | $<3,500$ |
| Di-n-octylphthalate | $<3,500$ |
| Fluoranthene | 20,000 |
| Fluorene | $<3,500$ |
| Hexachlorobenzene | $<3,500$ |
| Hexachloro-1,3-butadiene | $<3,500$ |
| Hexachlorocyclopentadiene | $<6,900$ |
| Hexachloroethane | $<3,500$ |
| Indeno(1,2,3-cd)pyrene | 3,160 |
| Isophorone | $<3,500$ |
| Naphthalene | $<3,500$ |
| Nitrobenzene | $<3,500$ |
| N-Nitrosodi-n-propylamine | $<3,500$ |
| Phenanthrene | 19,100 |
| Pyrene | 30,600 |
| 1,2,4-Trichlorobenzene | $<3,500$ |
| Surrogate: d5-Nitrobenzene | $d 1$ |
| Surrogate: 2-Fluorobiphenyl | 123 |

Surrogate: 2-Fluorobiphenyl
$<3,500$
,500

6,900
<3,500
<3,500
<3,500
<3,500
3,500
<3,500
<3,500
<6,900
$<3,500$
,160
<3,500
$<3,500$
19,100
30,600

123


08/19/2001
08/19/2001 947
08/19/2001 947
08/19/2001 94
08/19/2001
08/19/2001 94
08/19/2001 947
08/19/2001 947
08/19/2001 947
08/19/2001


08/19/2001 947
08/19/2001 947
$\begin{array}{ll}08 / 19 / 2001 & 947 \\ 08 / 19 / 2001 & 947\end{array}$
08/19/2001 947
$\begin{array}{ll}08 / 19 / 2001 & 947 \\ 08 / 19 / 2001 & 947\end{array}$
08/19/2001 947
08/19/2001 947

## 08/19/2001 947

08/19/2001 9471462 08/19/2001 947 $\begin{array}{rll}08 / 19 / 2001 & 947 & 1462 \\ .08 / 19 / 2001 & 947 & 1462\end{array}$ 08/19/2001 9471462
1462

| $<3,500$ | jcs | SW 8270C |
| :--- | :--- | :--- |
| $<3,500$ | jcs | SW 8270C |
| $<3,500$ | jcs | SW 8270C |
| $<6,900$ | jcs | SW 8270C |
| $<3,500$ | jcs | SW 8270C |
| $<3,500$ | jcs | SW 8270C |
| $<3,500$ | jcs | SW 8270C |
| $<3,500$ | jcs | SW 8270C |
| $<3,500$ | jcs | SW 8270C |
| $<3,460$ | jcs | SW 8270C |
| $<3,500$ | jcs | SW 8270C |
| $<3,500$ | jcs | SW 8270C |
| $<3,500$ | jcs | SW 8270C |
| $<6,900$ | jcs | SW 8270C |
| $<3,500$ | jcs | SW 8270C |
| $<1,730$ | jcs | SW 8270C |
| $<3,500$ | jcs | SW 8270C |
| $<3,500$ | jcs | SW 8270C |
| $<3,500$ | jcs | SW 8270C |
| $<3,500$ | jcs | SW 8270C |
| $<3,460$ | jcs | SW 8270C |
| $<3,460$ | jcs | SW 8270C |
| $<3,500$ | jcs | SW 8270C |
|  | jcs | SW $8270 C$ |
|  | jcs | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { SAMPLE } \\ & 699310 \end{aligned}$ | NO. | SAMPLE D SBI002: GB | $\begin{aligned} & \text { SCRI } \\ & -10: \end{aligned}$ | $\begin{aligned} & \text { TION } \\ & 50000 \end{aligned}$ | $0: 412$ |  |  |  | $\begin{aligned} & \text { DATI } \\ & 08 / 0 \end{aligned}$ | $\begin{aligned} & / \text { TIME } \\ & 9 / 2001 \end{aligned}$ | $\begin{aligned} & \text { TAKEN } \\ & 1 \quad 09: 45 \end{aligned}$ |


| Surrogate: d14-Terphenyl | 174 | $*$ | 08/19/2001 | 947 | 1462 |  | jcs | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<17.000$ | ug/kg dw | 08/19/2001 | 947 | 1462 | $<17.000$ | jes | SW | 8270 C |
| 4-Chloro-3-methylphenol | <3,500 | ug/kg dw | 08/19/2001 | 947 | 1462 | $<3,500$ | jes | Sw | 8270C |
| 2-Chlorophenol | $<3,500$ | ug/kg dw | 08/19/2001 | 947 | 1462 | $<3,500$ | jes | SW | 8270C |
| 2,4-Dichlorophenol | $<3.500$ | ug/kg dw | 08/19/2001 | 947 | 1462 | $<3,500$ | jes | SW | 8270 C |
| 2,4-Dimethylphenol | $<3,500$ | ug/kg dw | 08/19/2001 | 947 | 1462 | <3,500 | jcs | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<3,500$ | ug/kg dw | 08/19/2001 | 947 | 1462 | $<3,500$ | jes | SW | 8270 C |
| 2-Methylphenol | $<3,500$ | ug/kg dw | 08/19/2001 | 947 | 1462 | $<3,500$ | jes | SW | 8270 C |
| meta \& para-Methylphenol | $<3,500$ | ug/kg dw | 08/19/2001 | 947 | 1462 | <3,500 | jcs | SW | 8270C |
| 2-Nitrophenol | <3,500 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 947 | 1462 | $<3,500$ | jes | SW | 8270C |
| Pentachlorophenol | $<3,500$ | ug/kg dw | 08/19/2001 | 947 | 1462 | $<3,500$ | jes | SH | 8270 C |
| Phenol | $<3,500$ | ug/kg dw | 08/19/2001 | 947 | 1462 | $<3.500$ | jes | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<3,500$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 947 | 1462 | $<3,500$ | jes | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<3,500$ | ug/kg dw | 08/19/2001 | 947 | 1462 | $<3,500$ | jes | SW | 8270 C |
| Surrogate: d6-Phenol | dl | 4 | 08/19/2001 | 947 | 1462 |  | jes | SW | 8270C |
| Surrogate: 2-Fluorophenol | dl | 4 | 08/19/2001 | 947 | 1462 |  | jcs | SW | 8270C |
| Surrogate: Tribromophenol | dI | $\%$ | 08/19/2001 | 947 | 1462 |  | jce | SW | 8270 C |
| PCB's M 8082, Non-Aq |  |  |  |  |  |  |  |  |  |
| Aroclor 1016 | $<0.52$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 103 | 187 | $<0.52$ | jdc | SW | 8082 |
| Arocior 1221 | $<0.52$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 103 | 187 | $<0.52$ | jdc | SW | 8082 |
| Aroclor 1232 | $<0.52$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 103 | 187 | $<0.52$ | jdc | SW | 8082 |
| Aroclor 1242 | $<0.52$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 103 | 187 | $<0.52$ | jdc | SW | 8082 |
| Aroclor 1248 | $<0.52$ | $\mathrm{mg} / \mathrm{kg}$ dw | 08/20/2001 | 103 | 187 | $<0.52$ | jdc | SW | 8082 |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
$08 / 27 / 2001$
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION 699310 <br> SBI002:GB-10:S000020:412

DATE/TIME TAKEN 08/09/2001 09:45
Aroclor 1254
Aroclor 1260
Surrogate:TCX/DCB
TPH - FTIR Non-aq

SAMPLE NO. 699311
$<0.52 \mathrm{mg} / \mathrm{kg}$ dw 08/20/2001 103
$<0.52 \quad \mathrm{mg} / \mathrm{kg}$ dw 08/20/2001 103
90/53 note $\&$ 08/20/2001 103

SAMPLE DESCRIPTION
SBIO 02 : GB-12:S000020:412

| jdc | SW 8082 |
| :--- | :--- |
| jdc | SW 8082 |
| jdc | SW 8082 |
| 110 | 418.1 |

DATE/TIME TAKEN 08/09/20.01 10:10

| Dry Weight | 94.0 | $\%$ | 08/17/2001 |  | 1479 |  | mhg |  | 2540 G. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/17/2001 |  | 1232 | Complete | emd | SW | 6010B |  |
| Arsenic, ICP | $<18$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 903 | 2960 | $<18$ | emd | SW | 6010B |  |
| Barium, ICP | 187 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 903 | 2891 | <3.5 | emd | Sk | 6010B |  |
| Cadmium, ICP | $<5.3$ | $\mathrm{mg} / \mathrm{kg}$ dw | 08/17/2001 | 903 | 2873 | $<5.3$ | emd | SW | 6010B |  |
| Chromium, ICP | 177 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 903 | 2861 | $<7.0$ | emd | SW | 60108 |  |
| Lead, ICP | 167 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 903 | 2862 | $<14$ | emd | SW | 6010B |  |
| Mercury, CVAA | 0.523 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 607 | 624 | $<0.035$ | epk | SW | 7471A |  |
| Selenium, ICP | $<18$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 903 | 2940 | $<18$ | emd | Sh | 6010B |  |
| Silver, ICP | $<7.0$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 903 | 2893 | $<7.0$ | emd | Sw | 6010B |  |
| ICP Digestion, Nonaqueous | Complete |  | 08/15/2001 | 903 |  | Complete | mrt |  | 3050B |  |
| Mercury Digestion, Non-Aq | Complete |  | 08/14/2001 | 607 |  | Complete | epk |  | 7471A |  |
| Prep, PCBs Non-Aq 8082 | Complete |  | 08/16/2001 | 103 |  | Complete | mlr |  | 3540C; SW 3545 |  |
| Prep, BNA Non-Aq | Complete |  | 08/14/2001 | 947 |  | Complete | $m \mathrm{mr}$ |  | A 625; SW 3540C; | W 3545 |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


| Prep, TPH 418.1 Nonaq | COMPLETE |  | 08/15/2001 | 589 |  | Complete | 110 | Sw | 9071 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VOLATILE COMPOUNDS-8260 Non-Aq |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/14/2001 |  | 1462 | Complete | bmh |  |  |
| Acetone | $<106$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/14/2001 |  | 1462 | $<106$ | bmh | SW | 8260A |
| Benzene | <5.3 | ug/kg dw | 08/14/2001 |  | 1462 | $<5.3$ | bmh | SW | 8260A |
| tert-Butylbenzene | $<5.3$ | ug/kg dw | 08/14/2001 |  | 1462 | <5.3 | bmh | SW | 8260A |
| sec-Butylbenzene | $<5.3$ | ug/kg dw | 08/14/2001 |  | 1462 | $<5.3$ | bmh | SW | 8260A |
| $n$-Butylbenzene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | $<5.3$ | bmh | SW | 8260A |
| Bromochloromethane | $<5.3$ | ug/kg dw | 08/14/2001 |  | 1462 | <5.3 | bmh | SW | 8260A |
| Bromodichloromethane | $<5.3$ | ug/kg dw | 08/14/2001 |  | 1462 | <5.3 | bmh | SW | 8260A |
| Bromoform | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | <5.3 | bmh | SW | 8260A |
| Bromobenzene | $<5.3$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/14/2001 |  | 1462 | $<5.3$ | bmh | SW | 8260A |
| 2-Butanone (MEK) | $<53$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | $<53$ | bmh | SW | 8260A |
| Carbon disulfide | $<5.3$ | ug/kg dw | 08/14/2001 |  | 1462 | $<5.3$ | bmh | SW | 8260A |
| Carbon tetrachloride | $<5.3$ | ug/kg dw | 08/14/2001 |  | 1462 | $<5.3$ | bmh | SW | 8260A |
| Chlorobenzene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | $<5.3$ | bmh | SW | 8260A |
| Chloroethane | $<10.6$ | ug/kg dw | 08/14/2001 |  | 1462 | $<10.6$ | bmh | SW | 8260A |
| 2-Chlorotoluene | <5.3 | ug/kg dw | 08/14/2001 |  | 1462 | $<5.3$ | bmh | SW | 8260A |
| 4-Chlorotoluene | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | $<5.3$ | bmh | SW | 8260A |
| Chloroform | $<5.3$ | ug/kg dw | 08/14/2001 |  | 1462 | <5.3 | bmh | SW | 8260A |
| Chloromethane | $<10.6$ | $\underline{u g / k g ~ d w ~}$ | 08/14/2001 |  | 1462 | $<10.6$ | bmh | SW | 8260A |
| Dibromochloromethane | $<5.3$ | ug/kg dw | 08/14/2001 |  | 1462 | $<5.3$ | bmh | SW | 8260A |
| Dibromomethane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | <5.3 | bmh | SW | 8260A |
| Dichlorodifluoromethane | <5.3 | ug/kg dw | 08/14/2001 |  | 1462 | <5.3 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initiala | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPIE | NO. | SAMPLE DE | CR | PION |  |  |  |  | DA | TIME | TAKEN |
| 699311 |  | SBI002: GB | -12 | 00002 | : 412 |  |  |  | $08 /$ | 9/200 | 10:10 |


| 1,2-Dibromo-3-chloropropane | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichlorobenzene | <5.3 | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW 8260A |
| 1,3-Dichlorobenzene | <5.3 | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | SW 8260A |
| 1,4-Dichlorobenzene | <5.3 | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW 8260A |
| 1,1-Dichloroethane | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | SW 8260A |
| 1,2-Dichloroethane | $<5.3$ | ug/ kg dw | 08/14/2001 | 1462 | <5.3 | -bmh | SW 8260A |
| 1,1-Dichloroethene | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW 8260A |
| Cis-1,2-Dichloroethene | <5.3 | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | SW 8260A |
| trans-1,2-Dichloroethene | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | SW 8260A |
| 1,2-Dichloropropane | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW 8260A |
| I,3-Dichloropropane | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW 8260A |
| 2,2-Dichloropropane | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW 8260A |
| 1,1-Dichloropropene | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW 8260A |
| cis-1,3-Dichloropropene | $<5.3$ | ug/ kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW 8260A |
| trans-1, 3-Dichloropropene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.3$ | bmh | SW 8260A |
| Ethylbenzene | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | SW 8260A |
| Hexachlorobutadiene | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW B260A |
| ת-Hexane | $<21.3$ | ug/kg dw | 08/14/2001 | 1462 | <21.3 | bmh | SW 8260A |
| 2-Hexanone | $<53.2$ | ug/kg dw | 08/14/2001 | 1462 | $<53.2$ | bmh | SW 8260A |
| Isopropylbenzene (Cumene) | <5.3 | ug/kg dw | 08/14/2001. | 1462 | <5.3 | bmh | SW 8260A |
| p-Isopropyltoluene | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW 8260A |
| Bromomethane | $<10.6$ | ug/kg dw | 08/14/2001 | 1462 | $<10.6$ | bmh | SW 8260A |
| Methylene Chloride | $<10.6$ | ug/kg dw | 08/14/2001 | 1462 | $<10.6$ | bmh | SW 8260A |
| Methyl t-butyl ether (MTBE) | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | SW 8260A |
| 4-Methyl-2-pentanone (MIBK) | <53.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<53.2$ | bmh | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001 6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01. 14452
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO.

 699311SAMPLE DESCRIPTION
SBI002:GB-12:S000020:412

DATE/TIME TAKEN 08/09/2001 10:10

| n-Propylbenzene | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Styrene | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| Naphthalene | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | Sw | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | Sw | 8260A |
| Tetrachloroethene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/14/2001 | 1462 | <5.3 | bmh | Sw | 8260A |
| Toluene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.3$ | $u g / \mathrm{kg}$ dw | 08/14/2001 | 1462 | <5.3 | bmh | SW | 8260A |
| Trichloroethene | <5.3 | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| Trichlorofluoromethane | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | <5.3 | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.3$ | $u g / \mathrm{kg}$ dw | 08/14/2001 | 1462 | <5.3 | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.3 | bmh | SW | 8260A |
| Vinyl Acetate | $<5.3$ | ug/kg dw | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| Vinyl Chloride | $<2.1$ | ug/kg dw | 08/14/2001 | 1462 | $<2.1$ | bmh | SW | 8260A |
| Xylenes, Total | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.3$ | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 100 | \% | 08/14/2001 | 1462 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 103 | $\%$ | 08/14/2001 | 1462 |  | bmh | SW | 8260A |
| ds-Toluene (surr) | 94 | \% | 08/14/2001 | 1462 |  | buh | SW | 8260A |
| Bromofluorobenzene (surr) | 94 | $\%$ | 08/14/2001 | 1462 |  | bmh | SW | 8260A |
| BASE NEUT. COMPS. -8270 Non- |  |  |  |  |  |  |  |  |
| Acenaphthene | <351 | ug/kg dw | 08/17/2001 | 1461 | <351 | jrw | SW | $8270{ }^{\text {c }}$ |

## ANALYTICAL REPORT

Kevin Wildman
$\begin{array}{ll}\text { HULL \& ASSOC. (Dublin) } & 08 / 27 / 2001 \\ \text { 6130 Wilcox Rd. }\end{array}$ Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


| Acenaphthylene | <351 | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jrw | Sw | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Anthracene | 689 | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jrw | Sw | 82700 |
| Benzo (a) anthracene | 2,740 | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jrw | Sw | 82700 |
| Benzo (b) Eluoranthene | 5,660 | ug/kg dw | 08/18/2001 | 947 | 1462 | <3,510 | jcs | SW | 82700 |
| Benzo (k) fluoranthene | 2,170 | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jrw | SW | 82700 |
| Benzo (a) pyrene | 2,650 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<176$ | jr | SW | 82700 |
| Benzyl alcohol. | <351. | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jrw | SW | 8270C |
| Benzyl butyl phthalate | <351 | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jr | Sw | 8270 C |
| Bis (2-chloroethyl)ether | <351 | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jrw | SW | 82700 |
| Bis (2-chloroethoxy) methane | <351 | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jrw | SW | 8270C |
| Bis (2-ethylhexyl)phthalate | <351 | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jrw | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | <351 | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jrw | SW | 82700 |
| 4-Bromophenyl phenyl ether | <351 | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jx | sw | 8270 C |
| 4-Chloroaniline | $<351$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <351 | jxw | SW | 8270 C |
| 2 -Chloronaphthalene | <351 | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jrw | SW | 8270 C |
| Chrysene | 2,830 | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jrw | SW | 82700 |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<176$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<176$ | jrw | Sw | 82700 |
| Dibenzofuran | <351 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <351 | jrw | SW | 8270 C |
| 1,2-Dichlorobenzene | <351 | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jrw | sw | 82700 |
| 1,3-Dichlorobenzene | <351 | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jrw | sw | 8270 C |
| 1,4-Dichlorobenzene | <351 | ug/kg dw | 08/17/2001 | 947 | 1462 | <351 | jrw | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<702$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<702$ | jrw | sw | 8270 C |
| Diethyl phthalate | <351 | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jrw | SW | 8270C |
| Dimethyl phthalate | <351 | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jrw | Sw | 82700 |
| 2,4-Dinitrotoluene | <351 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <351 | jrw | Sw | 82700 |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |

SAMPLE NO. SAMPLE DESCRIPTION 699311

SBIO 02 :GB-12:S000020:412

| 2,6-Dinitrotoluene | <351 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jrw | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Di-n-octylphthalate | $<351$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jrw | SW | 82700 |
| Fluoranthene | 5.540 |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/18/2001 | 947 | 1462 | <3,510 | jes | SW | 8270 C |
| Fluorene | <351 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | 'jrw | SW | 82700 |
| Hexachlorobenzene | $<351$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jrw | SW | 8270C |
| Hexachloro-1,3-butadiene | $<351$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jrw | SW | 8270 C |
| Hexachlorocyclopentadiene | $<702$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<702$ | jrw | SW | 8270C |
| Hexachloroethane | <351 |  | ug/ kg dw | 08/17/2001 | 947 | 1461 | <351 | jrw | SW | 8270C |
| Indeno (1,2,3-cd) pyrene | 377 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jrw | SW | 8270C |
| Isophorone | $<351$ |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<351$ | jxw | Sw | 8270C |
| Naphthalene | <351 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<351$ | jrw | Sw | 82700 |
| Nitrobenzene | <351 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | jıw | SW | 8270 C |
| N-Nitrosodi-n-propylamine | <351 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<351$ | jrw | SW | 8270 C |
| Phenanthrene | 4,650 |  | ug/kg dw | 08/18/2001 | 947 | 1462 | <3,510 | jcs | SW | 8270C |
| Pyrene | 9.230 |  | ug/kg dw | 08/18/2001 | 947 | 1462 | <3,510 | jcs | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<351$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | j5w | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 47 |  | $\%$ | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 91 |  | 8 | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |
| Surrogate: d14-Terphenyl | 194 | Note | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270c |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,760 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <1,760 | dmg | SW | 8270C |
| 4-Chloro-3-methylphenol | $<351$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | cimg | SW | 8270C |
| 2-Chlorophenol | $<351$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | dimg | SW | 8270C |
| 2,4-Dichlorophenol | <351 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <351 | dmg | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01. 14452
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy |  | Number | Number | Limit | Initials Method Reference |

SAMPLE NO. SAMPLE DESCRIPTION 699311 SBI002:GB-12:S000020:412

DATE/TIME TAKEN 08/09/2001 10:10

| 2,4-Dimethylphenol | <351 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<351$ | dmg | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Methyl-4,6-dinitrophenol | $<351$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<351$ | dimg | SW 8270C |
| 2-Methylphenol | <351 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<351$ | ding | SW 8270C |
| meta \& para-Methylphenol | <351 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | dmg | SW 8270 C |
| 2-Nitrophenol | <351 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | dmg | SW 8270C |
| Pentachlorophenol | <351 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<351$ | dimg | SW 8270C |
| Phenol | 529 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<351$ | dmg | SW 8270C |
| 2,4,5-Trichlorophenol | <351 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | dmg | SW 8270C |
| 2,4,6-Trichlorophenol | <351 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <351 | dmg | SW 8270C |
| Surrogate: d6-Phenol | 74 |  | \% | 08/17/2001 | 947 | 1461 |  | dmg | SW 8270C |
| Surrogate: 2-Fluorophenol | 66 |  | \% | 08/17/2001 | 947 | 1461 |  | dmg | Sw 8270C |
| Surrogate: Tribromophenol | 72 |  | 8 | 08/17/2001 | 947 | 1461 |  | dimg | SW 8270C |
| PCB'日 M 8082, Non-Aq |  |  |  |  |  |  |  |  |  |
| Aroclor 1016 | $<0.53$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 103 | 187 | $<0.53$ | jdc | SW 8082 |
| Aroclor 1221 | $<0.53$ |  | $\mathrm{mg} / \mathrm{kg}$ dw | 08/20/2001 | 103 | 187 | $<0.53$ | jdc | SW 8082 |
| Aroclor 1232 | $<0.53$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 103 | 187 | $<0.53$ | jdc | SW 8082 |
| Aroclor 1242 | $<0.53$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 103 | 187 | $<0.53$ | jdc | SW 8082 |
| Aroclor 1248 | $<0.53$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 103 | 187 | $<0.53$ | jde | SW 8082 |
| Aroclor 1254 | $<0.53$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 103 | 187 | $<0.53$ | jdc | SW 8082 |
| Arocior 1260 | $<0.53$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 103 | 187 | $<0.53$ | jdc | SW 8082 |
| Surrogate:TCX/DCB | 131/90 | note | 8 | 08/20/2001 | 103 | 187 |  | jde | SW 8082 |
| TPH - FTIR Non-aq | 3,510 |  | mg/kg dw | 08/16/2001 | 589 | 621 | $<53$ | 110 | 418.1 |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002



## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01. 14452
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CR | IIO |  |  |  |  | DAT | /TIME | TAKEN |
| 699312 |  | SBI 002 : HM | N26 | S01 | $5: 412$ |  |  |  | 08/ | 9/2001 | 1 11:40 |


| 2-Butanone (MEK) | $<55$ | ug/kg dw | 08/14/2001 | 1462 | <55 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carbon disulfide | $<5.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| Carbon tetrachloride | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| Chlorabenzene | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |
| Chloroethane | $<10.9$ | ug/kg dw | 08/14/2001 | 1462 | $<10.9$ | bmh | SW | 8260A |
| 2-Chlorotoluene | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | <5.5 | buh | SW | 8260A |
| 4-Chlorotoluene | $<5.5$ | $u g / \mathrm{kg}$ dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| Chloroform | <5.5 | ug/kg dw | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |
| Chloromethane | $<10.9$ | ug/kg dw | 08/14/2001 | 1462 | $<10.9$ | bmh | SW | 8260A |
| Dibromochloromethane | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| Dibromomethane | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<5.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.5$ | bmh | STW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | brah | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.5$ | $u g / \mathrm{kg}$ dw | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| Cis-1,2-Dichloroethene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8250A |
| trans-1,2-Dichloroethene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.5$ | $u g / \mathrm{kg} d w$ | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |
| 1.1-Dichloropropene | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


DATE/TIME TAKEN 08/09/2001 11:40

| Cis-1,3-Dichloropropene | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | < 5.5 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans-1,3-Dichloropropene | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | < 5.5 | bmh | SW | 8260A |
| Ethylbenzene | <5.5 | ug/kg dw | 08/14/2001 | 1462 | < 5.5 | brah | SW | 8260A |
| Hexachlorobutadiene | $<5.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |
| n -Hexane | $<21.8$ | ug/kg dw | 08/14/2001 | 1462 | $<21.8$ | bmh | Sw | 8260A |
| 2-Hexanone | $<54.6$ | ug/kg dw | 08/14/2001 | 1462 | $<54.6$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| p-Isopropyltoluene | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |
| Bromomethane | $<10.9$ | ug/kg dw | 08/14/2001 | 1462 | $<10.9$ | bmh | SW | 8260A |
| Methylene Chloride | $<10.9$ | ug/kg dw | 08/14/2001 | 1462 | $<10.9$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<54.6$ | ug/kg dw | 08/14/2001 | 1462 | $<54.6$ | bmh | SW | 8260A |
| n-Propylbenzene | <5.5 | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | Sw | 8260A |
| Styrene | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| Naphthalene | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| Tetrachloroethene | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |
| Toluene | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | <5.5 | bmh | sw | 8260A |
| 1,2,4-Trichlorobenzene | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | < 5.5 | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | < 5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | < 5.5 | bmh | SW | 8260A |
| Trichlorcethene | < 5.5 | ug/kg dw | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |
| Trichlorofluoromethane | $<5.5$ | ug/kg dw | 08/14/2001 | 1462 | <5.5 | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 | 1462 | $<5.5$ | bmh | SW | 8260A |

# ANALYTICAL REPORT 

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 699312

SAMPLE DESCRIPTION
SBIO02:HMW26S:S015025:412

DATE/TIME TAKEN 08/09/20.01 11:40

| 1,2,4-Trimethylbenzene | <5.5 | ug/kg dw | 08/14/2001 |  | 1462 | <5.5 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,3,5-Trimethylbenzene | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/14/2001 |  | 1462 | < 5.5 | bmh | SW | 8260A |
| Vinyl Acetate | <5.5 | ug/kg dw | 08/14/2001 |  | 1462 | <5.5 | bmh | SW | 8260A |
| Vinyl Chloride | $<2.2$ | ug/kg dw | 08/14/2001 |  | 1462 | $<2.2$ | bmh | SW | 8260A |
| XYlenes, Total | <5.5 | ug/kg dw | 08/14/2001 |  | 1462 | <5.5 | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 106 | $\%$ | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 92 | 8 | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| d8-Toluene (surr) | 91 | 8 | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 95 | 8 | 08/14/2001 |  | 1462 |  | bmh | SW | 8260A |
| BASE NEUT. COMPS.-8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<360$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 8270C |
| Acenaphthylene | $<360$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <360 | jxw | SW | 8270 C |
| Anthracene | $<360$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 8270C |
| Benzo (a) anthracene | $<360$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<360$ | jxw | SK | 8270C |
| Benzo(b) fluoranthene | <360 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 8270C |
| Benzo(k) fluoranthene | $<360$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <360 | jrw | SW | 8270C |
| Benzo (a) pyrene | $<180$ | .ug/ kg dw | 08/17/2001 | 947 | 1461 | $<180$ | jrw | SW | 82700 |
| Benzyl alcohol | $<360$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 8270C |
| Benzyl butyl phthalate | <360 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 8270C |
| Bis (2-chloroethyl) ether | $<360$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <360 | jrw | SW | 8270C |
| Bis (2-chloroethoxy) methane | $<360$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <360 | jrw | SW | 8270C |
| Bis (2-ethylhexyl) phthalate | $<360$ | ug/kg dw | 08/17/2001 | 947 | 1461 | <360 | jrw | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<360$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 8270 C |
| 4-Bromophenyl phenyl ether | <360 | ug/kg dw | 08/17/2001 | 947 | 1461 | <360 | jrw | SW | 8270 C |

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
08/27/2001

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
699312

DATE/TIME TAKEN
08/09/2001 11:40

| 4-Chloroaniline | $<360$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Chloronaphthalene | $<360$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 8270C |
| Chrysene | <360 | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/17/2001 | 947 | 1461 | <360 | jrw | SW | 82700 |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<180$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<180$ | jıw | Sw | 8270 C |
| Dibenzofuran | $<360$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 8270 C |
| 1,2-Dichlorobenzene | $<360$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 8270 C |
| 1,3-Dichlorobenzene | $<360$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<360$ | jıw | SW | 8270 C |
| 1,4-Dichlorobenzene | $<360$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | <360 | jxw | SW | 82700 |
| 3,3'-Dichlorobenzidine | $<721$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<721$ | jxw | SW | 8270C |
| Diethyl phthalate | $<360$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 8270C |
| Dimethyl phthalate | <360 | ug/kg dw | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 82700 |
| 2,4-Dinitrotoluene | $<360$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 8270 C |
| 2,6-Dinitrotoluene | $<360$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 8270C |
| Di-n-octylphthalate | $<360$ | ug/kg dw | 08/17/2001 | 947 | 1451 | $<360$ | jrw | SW | 8270 C |
| Fluoranthene | <360 | ug/kg dw | 08/17/2001 | 947 | 1461 | <360 | jrw | SW | 8270C |
| Fluorene | $<360$ | $u g / \mathrm{kg}$ dw | 08/17/2001 | 947 | 1461 | $<360$ | jıw | SW | 8270C |
| Hexachlorobenzene | <360 | ug/kg dw | 08/17/2001 | 947 | 1461 | - 360 | jrw | SW | 8270C |
| Hexachloro-1,3-butadiene | $<360$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<360$ | j5w | SW | 8270C |
| Hexachlorocyclopentadiene | $<721$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<721$ | jrw | SW | 8270 C |
| Hexachloroethane | $<360$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 8270 C |
| Indeno(1,2,3-cd) pyrene | $<360$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 8270 C |
| Inophorone | $<360$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 8270C |
| Naphthalene | $<360$ | ug/kg dw | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 8270C |
| Nitrobenzene | $<360$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 8270 C |
| N-Nitrosodi-n-propylamine | <360 | ug/kg dw | 08/17/2001 | 947 | 1.461 | <360 | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 699312

SBI002: HMW26S:S015025:412

DATE/TIME TAKEN 08/09/2001 11:40

| Phenanthrene | <360 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <360 | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pyrene | $<360$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <360 | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | <360 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <360 | jrw | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 58 |  | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 79 |  | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |
| Surrogate: di4-Terphenyl | 153 | Note | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,800 |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<1,800$ | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<360$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <360 | jxw | SW | 8270 C |
| 2-Chlorophenol | $<360$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <360 | jrw | SW | 8270 C |
| 2,4-Dichlorophenol | $<360$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <360 | jxw | SW | 8270C |
| 2,4-Dimethylphenol | $<360$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<360$ | j2w | SW | 8270C |
| 2-Methyi-4,6-dinitrophenol | $<360$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <360 | jrw | SW | 8270 C |
| 2-Methylphenol | $<360$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 8270 C |
| meta \& para-Methylphenol | $<360$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <360 | jrw | SW | 8270C |
| 2-Nitrophenol | $<360$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <360 | jrw | SW | 8270 C |
| Pentachlorophenol | $<360$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 8270C |
| Phenol | $<360$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 8270C |
| 2,4,5-Trichlorophenol | $<360$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | $<360$ | jrw | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<360$ |  | ug/kg dw | 08/17/2001 | 947 | 1461 | <360 | jrw | SW | 8270C |
| Surrogate: d6-Phenol | 76 |  | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorophenol | 71 |  | $\%$ | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270C |
| Surrogate: Tribromophenol | 59 |  | \% | 08/17/2001 | 947 | 1461 |  | jrw | SW | 8270 C |
| TPH - GRO (Non-Aqueous) | $<5$ |  | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/13/2001 |  | 246 | < 5 | meb | SW | 8015M |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting Limit | Analyst Initials | Method R | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | PTION |  |  |  |  | DAT | /TIME | TAKEN |
| 699313 |  | SBI002: FB | 1:W | 8809 | 412 |  |  |  | 08/ | 9/200 | 1 17:15 |



## ANALYTICAL REPORT

## Kevin Wildman

HULIL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.

Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batyzed | Reporting Analyst |  |
| Number | Number Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 699313

SBI002:FB-1:W080901:412

DATE/TIME TAKEN 08/09/2001 17:15

| Bromodichloromethane | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bromoform | $<1.0$ | ug/L | 08/15/2001 | 3487 | <1.0 | bmh | SW 8260A |
| Bromobenzene | $<1.0$ | ug/L | 08/15/2001 | 3487 | <1.0 | bmh | SW 8260A |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 08/15/2001 | 3487 | $<12.5$ | bmh | SW 8260A |
| Carbon disulfide | $<1.0$ | ug/L | 08/15/2001 | 3487 | <1.0 | bmh | SW 8260A |
| Carbon tetrachloride | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW 8260A |
| Chlorobenzene | $<1.0$ | ug/L | 08/15/2001 | 3487 | <1.0 | bmh | SW 8260A |
| Chloroethane | < 5.0 | ug/L | 08/15/2001 | 3487 | $<5.0$ | bmh | SW 8260A |
| 2-Chlorotoluene | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW 8260A |
| 4-Chlorotoluene | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW 8260A |
| Chloroform | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW 8260A |
| Chloromethane | $<5.0$ | ug/L | 08/15/2001 | 3487 | <5.0 | bmh | SW 8260A |
| Dibromochloromethane | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW 8260A |
| Dibromomethane | $<1.0$ | ug/L | 08/15/2001 | 3487 | <1.0 | bmh | SW 8260A |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW 8260A |
| 1,2-Dibromo-3-chloropropane | <5.0 | ug/L | 08/15/2001 | 3487 | $<5.0$ | bmh | SW 8260A |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 08/15/2001 | 3487. | <1.0 | bmh | SW 8260A |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | sw 8260A |
| I, 4-Dichlorobenzene | $<1.0$ | ug/L | 08/15/2001 | 3487 | <1.0 | bmh | SW 8260A |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 08/15/2001 | 3487 | <1.0 | bmh | SW 8260A |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW 8260A |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW 8260A |
| Cis-1,2-Dichloroethene | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW 8260A |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 08/15/2001 | 3487 | <1.0 | bmh | SW 8260A |
| 1,2-Dichloropropane | <1.0 | ug/L | 08/15/2001 | 3487 | <1.0 | bmh | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/27/2001

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 699313

SAMPLE DESCRIPTION
SBI002:FB-1:W080901:412

DATE/TIME TAKEN 08/09/2001 17:15

| 1,3-Dichloropropane | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | <1.0 | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |
| Cis-1,3-Dichloropropene | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | <1.0 | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |
| Ethylbenzene | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.0$ | ug/L | 08/15/2001 | 3487 | <5.0 | bmh | SW | 8260A |
| n -Hexane | $<5.0$ | ug/L | 08/15/2001 | 3487 | <5.0 | bmh | SW | 8260A |
| 2-Hexanone | $<12.5$ | ug/L | 08/15/2001 | 3487 | $<12.5$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 08/15/2001 | 3487 | <1.0 | bmh | SW | 8260A |
| p-Isopropyltoluene | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |
| Bromomethane | $<5.0$ | ug/L | 08/15/2001 | 3487 | <5.0 | bmh | SW | 8260A |
| Methylene Chloride | <5.0 | ug/L | 08/15/2001 | 3487 | <5.0 | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | <5.0 | ug/L | 08/15/2001 | 3487 | $<5.0$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | <12.5 | ug/L | 08/15/2001 | 3487 | $<12.5$ | bmh | SW | 8260A |
| $n$-Propylbenzene | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |
| Styrene | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |
| Naphthalene | $<5.0$ | ug/L | 08/15/2001 | 3487 | $<5.0$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | <1.0 | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |
| Tetrachloroethene | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |
| Toluene | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmin | SW | 8260A |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 08/15/2001 | 3487 | $<5.0$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | <1.0 | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 08/15/2001 | 3487 | <1.0 | bmh | SW | 8260A |

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 699313

SAMPLE DESCRIPTION
SBI002:FB-1:W080901:412

DATE/TIME TAKEN 08/09/2001 17:15

| Trichloroethene | $<1.0$ | ug/L | 08/15/2001 |  | 3487 | $<1.0$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Trichlorofluoromethane | $<1.0$ | ug/L | 08/15/2001 |  | 3487 | $<1.0$ | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | <5.0 | $u g / L$ | 08/15/2001 |  | 3487 | <5.0 | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 08/15/2001 |  | 3487 | $<1.0$ | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<1.0$ | $\underline{u g / L}$ | 08/15/2001 |  | 3487 | $<1.0$ | bmh | SW | 8260A |
| Vinyl Acetate | $<5.0$ | ug/L | 08/15/2001 |  | 3487 | $<5.0$ | bmh | SW | 8260A |
| Vinyl Chloride | $<1.0$ | ug/L | 08/15/2001 |  | 3487 | $<1.0$ | bmh | SW | 8260A |
| Xylenes | $<1.0$ | ug/L | 08/15/2001 |  | 3487 | $<1.0$ | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (gurr) | 103 | 8 | 08/15/2001 |  | 3487 |  | brah | SW | 8260A |
| Dibromofluoromethane (surr) | 104 | 8 | 08/15/2001 |  | 3487 |  | bmh | SW | 8260A |
| d8-Toluene (surr) | 95 | $\%$ | 08/15/2001 |  | 3487 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 102 | 8 | 08/15/2001 |  | 3487 |  | bmin | SW | 8260A |
| BASE NEUTRAL COMP. (AO) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| Acenaphthylene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dimg | SW | 8270C |
| Anthracene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| Benzo (a) anthracene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | Sw | 8270 C |
| Benzo(b) fluoranthene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| Benzo (k) fluoranthene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| Benzo(a) pyrene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| Benzyl alcohol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| bis(2-chloroethyl) ether | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dimg | SW | 8270C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

## Job Number: 01.14452

Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |

DATE/TIME TAKEN 08/09/2001 17:15

| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | <10 | dmg | SW | 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| 2-Chloronaphthalene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| Chrysene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| Dibenzofuran | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | Sw | 8270 C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | ding | SW | $8270{ }^{\circ}$ |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | ding | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 08/20/2001 | 1255 | 2658 | < 50 | dmg | SW | 8270C |
| Diethyl phthalate | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | Sw | 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| Fluoranthene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| Fluorene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dimg | SW | 8270C |
| Hexachloro-1, 3-butadiene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 08/20/2001 | 1255 | 2658 | $<20$ | dmg | SW | 8270C |
| Hexachloroethane | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | ding | SW | 8270C |
| Indeno (1,2,3-cd) pyrene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dimg | SW | 8270 C |
| Isophorone | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

## Job Number: 01. 14452

Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 699313 |  | SBI002: FB | -1:W | 8090 | 412 |  |  |  | 08/ | 9/2001 | 17:15 |


| Naphthalene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nitrobenzene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | ding | SW | 8270C |
| N-Nitrosodi-n-propylamine | <10 | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| Phenanthrene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| Pyrene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | 5 W | 8270 C |
| Surrogate: d5-Nitrobenzene | 64 | \% | 08/20/2001 | 1255 | 2658 |  | dmg | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 70 | \% | 08/20/2001 | 1255 | 2658 |  | amg | SW | 8270 C |
| Surrogate: di4-Terphenyl | 71 | $\%$ | 08/20/2001 | 1255 | 2658 |  | dmg | SW | 8270 C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 08/20/2001 | 1255 | 2658 | $<50$ | dmg | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | <10 | dmg | SW | 8270 C |
| 2-Chlorophenol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dimg | SW | 8270C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dimg | SW | 8270C |
| 2.4-Dimethylphenol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | $8270 C^{\text {c }}$ |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| 2-Methylphenol | <10 | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| meta \& para-Methylphenol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dimg | SW | 8270C |
| 2-Nitrophenol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| Pentachlorophenol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270 C |
| Phenol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | ding | SW | 8270C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | dmg | SW | 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 08/20/2001 | 1255 | 2658 | $<10$ | ding | SW | 8270 C |
| Surrogate: d6-Phenol | 58 | 8 | 08/20/2001 | 1255 | 2658 |  | dmg | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14452
Client Project ID: South Bend Indiana sBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { SAMPIE } \\ & 699313 \end{aligned}$ | NO. | SAMPLE DE SBI002:FB | 1:VRI | $88090$ | $: 412$ |  |  |  | $\begin{aligned} & \text { DAT } \\ & 08 \end{aligned}$ | $\begin{aligned} & \text { STIME } \\ & 9 / 2001 \end{aligned}$ | $\begin{gathered} \text { TAKEN } \\ 1 \quad 17: 15 \end{gathered}$ |


| Surrogate: 2-Fluorophenol | 55 | 7 | 08/20/2001 | 1255 | 2658 |  | dmg | Sw 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: Tribromophenol | 52 | $\%$ | 08/20/2001 | 1255 | 2658 |  | dmg | SW 8270C |
| PCB's M 8082. Aqueous |  |  |  |  |  |  |  |  |
| Aroclor 1016 | $<0.20$ | ug/L | 08/16/2001 | 55 | 101 | $<0.20$ | mrb | SW 8082 |
| Aroclor 1221 | $<0.20$ | ug/L | 08/16/2001 | 55 | 101 | $<0.20$ | mrb | SW 8082 |
| Aroclor 1232 | $<0.20$ | ug/L | 08/16/2001 | 55 | 101 | $<0.20$ | marb | SW 8082 |
| Aroclor 1242 | $<0.20$ | ug/L | 08/16/2001 | 55 | 101 | $<0.20$ | mrb | SW 8082 |
| Aroclor 1248 | $<0.20$ | ug/L | 08/16/2001 | 55 | 101 | $<0.20$ | mrb | SW 8082 |
| Aroclor 1254 | $<0.20$ | ug/L | 08/16/2001 | 55 | 101 | $<0.20$ | mrb | SW 8082 |
| Aroclor 1260 | $<0.20$ | ug/L | 08/16/2001 | 55 | 101 | $<0.20$ | mrb | SW 8082 |
| Surrogate:DCB/TCX | 86/54 | \% | 08/16/2001 | 55 | 101 |  | mrb | SW 8082 |
| TPH - GRO (Aqueous) | $<1$ | $\mathrm{mg} / \mathrm{L}$ | 08/14/2001 |  | 79 | $<1$ | meb | SW 8015M |
| TPH - Method 418.1 (AQ) | <0.2 | $\mathrm{mg} / \mathrm{L}$ | 08/16/2001 | 593 | 712 | <0.2 | 110 | EPA 418.1 |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14452

Client Project ID: South Bend Indiana SBI002



## SAMPLE NO. SAMPLE DESCRIPTION 699314 <br> SBI002:TB-1:W080901:412



## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/27/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14452

## Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 699314

SBIO 02 :TB-1:W080901:412

DATE/TIME TAKEN 08/09/2001 17:15

| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 08/15/2001 | 3487 | <1.0 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 08/15/2001 | 3487 | <1.0 | bmh | SW | 8260A |
| 1,1-Dichloroethane | <1.0 | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 08/15/2001 | 3487 | <1.0 | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 08/15/2001 | 3487 | <1.0 | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 08/15/2001 | 3487 | <1.0 | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | Sw | 8260A |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 08/15/2001 | 3487 | <1.0 | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |
| Cis-1,3-Dichloropropene | <1.0 | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |
| Ethylbenzene | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.0$ | ug/L | 08/15/2001 | 3487 | $<5.0$ | bmh | SW | 8260A |
| n -Hexane | $<5.0$ | ug/L | 08/15/2001 | 3487 | $<5.0$ | bmh | SW | 8260A |
| 2-Hexanone | $<12.5$ | ug/L | 08/15/2001 | 3487 | $<12.5$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |
| p-Isopropyltoluene | $<1.0$ | ug/L | 08/15/2001 | 3487 | <1.0 | bmh | SW | 8260A |
| Bromomethane | $<5.0$ | ug/L | 08/15/2001 | 3487 | $<5.0$ | bmh | SW | 8260A |
| Methylene Chloride | $<5.0$ | ug/L | 08/15/2001 | 3487 | $<5.0$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 08/15/2001 | 3487 | $<5.0$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 08/15/2001 | 3487 | $<12.5$ | bmh | SW | 8260A |
| n-Propylbenzene | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |
| Styrene | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

## Kevin Wildman

## HULL \& ASSOC. (Dublin)

6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14452

## Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPIE DE | CR | PIO |  |  |  |  | DAT | /TIME | TAKEN |
| 699314 |  | SBI002:TB | -1: | 08090 | 412 |  |  |  | 08/ | 9/2001 | 17:15 |


| Naphthalene | $<5.0$ | ug/L | 08/15/2001 | 3487 | $<5.0$ | bmh | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 08/15/2001 | 3487 | <1.0 | bmh | SW 8260A |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | $\underline{u g / L}$ | 08/15/2001 | 3487 | $<1.0$ | bmh | SW 8260A |
| Tetrachloroethene | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW 8260A |
| Toluene | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW 8260A |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 08/15/2001 | 3487 | <5.0 | bmh | SW 8260A |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW 8260A |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW 8260A |
| Trichloroethene | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW 8260A |
| Trichlorofluoromethane | $\leqslant 1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW 8260A |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 08/15/2001 | 3487 | <5.0 | bmh | SW 8260A |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW 8260A |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SH 8260A |
| Vinyl Acetate | <5.0 | ug/L | 08/15/2001 | 3487 | $<5.0$ | bmh | SW 8260A |
| Vinyl Chloride | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW 8260A |
| Xylenes | $<1.0$ | ug/L | 08/15/2001 | 3487 | $<1.0$ | bmh | SW 8260A |
| d4-1,2-Dichloroethane (surr) | 104 | $\%$ | 08/15/2001 | 3487 |  | bmh | SW 8260A |
| Dibromofluoromethane (surr) | 104 | 8 | 08/15/2001 | 3487 |  | bmh | SW 8260A |
| d8-Toluene (surr) | 95 | 8 | 08/15/2001 | 3487 |  | bmh | SW 8260A |
| Bromofluorobenzene (surr) | 103 | $\%$ | 08/15/2001 | 3487 |  | bmh | SW 8260A |

## QUALITY CONTROL FLAG DEFINITIONS

Job Number: 01.14452
(*) Indicates an out-of-control QC. The analytical data was reported based on other supporting quality control information.
(Note) Indicates to review the notes and comments section of the analytical report as there is additional information concerning this analytical result.
(MS) Indicates that the Matrix Spike (MS) was out of statistical advisory limits.
(MSD) Indicates that the Matrix Spike Duplicate (MSD) was out of statistical advisory limits.
(RPD) Indicates that the Relative Percent Difference (RPD) for the MS/MSD pair was outside of statistical advisory limits.
(SS) Indicates that the MS and MSD were out of statistical advisory limits.
(SSR) Indicates that the MS, MSD and RPD were out of statistical advisory limits.
(MSR) Indicates that the MS and RPD were out of statistical advisory limits.
(MSDR) Indicates that the MSD and RPD were out of statistical advisory limits.
(DL) Indicates that the MS and MSD were diluted out and the percent recoveries of the spikes could not be calculated.
(LS) Indicates that statistical accuracy and precision data is not available for spike concentrations which are < 1/4 of the sample amount. Care should be used in interpreting this data.
(J) Indicates estimated concentration due to internal standard areas or surrogate recoveries outside of control limits. A sample matrix effect is usually indicated.
(DW) Indicates Dry Weight.
Analytical Reporting Limits
The reporting limits listed for non-aqueous samples in the analytical report section are Practical Quantitation Iimits (PQLs). These PQLs are based upon a typical standard weight used for a non-aqueous sample. The reporting limit for a sample may be different from the PQL listed depending upon the actual weight of sample used, the samples moisture content and any dilutions used during the analysis.

NOTES AND COMMENTS

TestAmerica Job Number: 01.14452
Sample Number: 699304 (10X dilution)
Analysis: 8270 BNA
Due to elevated levels of non-target compounds, the di2-perylene internal standard was below the recommended response level. The result for benzo(b)fluoranthene should be considered an estimate.

Recovery of acid surrogate, 2,5,6-tribromophenol was below the recommended range.

Sample Number: 699310 (10X dilution)
Analysis: 8270 BNA
After an initial, undiluted analysis yielded severe, multiple internal standard and surrogate failures, and mass-spectral interferences, a ten fold dilution was performed. Data is reported from this analysis, with reporting limits elevated accordingly. The d12-perylene internal standard was below the recommended response levels for this analysis, also. Results for the following should be considered estimates:

```
benzo (b) fluoranthene
benzo(k) fluoranthene
benzo (a) pyrene
indeno (1,2,3-c,d) pyrene
```

The surrogates, 2-fluorobiphenyl and dl4-p-terphenyl, were above the recommended \% recovery criteria. The acid-fraction surrogates were diluted below their reporting limits.

Sample Number: 699311 (10X dilution)
Analysis: 82.70 BNA
Due to elevated levels of non-target compounds, the d12-perylene internal standard was below the recommended response level. The result for benzo(b)fluoranthene should be considered an estimate.

Sample Number: 699305, 699303
Analysis: 8270 soils
Due to the nature of the sample matrix, recovery of internal standard, di2-Perylene was below the recommended $50-200 \%$ range. The results for benzo(b)fluoranthene and benzo(a) pyrene should be considered an estimate.

NOTES AND COMMENTS

TestAmerica Job Number: 01.14452
Analysis: 8082 Soil PCBs
Sample Numbers: 699309, 699310, 699311
The MB for these samples was accidently spiked with the LCS spike instead of the surrogate spike. No Arochlor hits, above the reporting limits,were seen in the samples.

Sample Number: 699297, 699299, 699300
Analysis: 8270 soils
Recovery of d12-Perylene was below the recommended 50-200\% range. However, no target analytess were detected above the reporting limit.

Sample Number: 699301, 699302, 699307, 699309
Analysis: 8270 soils
Due to the nature of the sample matrix, recovery of di2-Perylene was below the recommended $50-200 \%$ range. Results for benzo(b)fluoranthene, benzo(k)fluoranthene and benzo(a)pyrene should be considered estimates.

Sample Number: 699312
Analysis: 8270 soils
Due to the nature of the sample matrix, recovery of di2-Perylene was below the recommended 50-200\% range. Recovery of surrogate d14-p-Terphenyl exceeded the recommended range of 18-137, mostly likely as a result of the low internal standard recovery. No detections above the reporting limits were noted.

Sample Number: 699304, 699306
Analysis: 8270 soils
Due to the nature of the sample matrix, recovery of di2-Perylene was below the recommended $50-200 \%$ range. Recovery of d14-p-Terphenyl exceeded the recommended range of $18-137 \%$, most likely as a result of the low internal standard recovery. Results reported for benzo(b)fluoranthene, benzo(k)fluoranthene and benzo(a)pyrene should be considered estimates. For sample 699304, recovery of acid surrogate $2,4,6$-Tribromophenol was below the recommended range of 19-122\%.

NOTES AND COMMENTS
TestAmerica Job Number: 01.14452
Sample Number: ..... 699311
Analysis: 8270 soils
Due to the nature of the sample matrix, recovery of d12-Perylenewas below the recommended 50-200\% range. Recovery ofd14-p-Terphenyl exceeded the recommended range of 18-137\%, mostlikely as a result of the low internal standard recovery.Results reported for benzo(b)fluoranthene, benzo (k)fluorantheneand benzo(a) pyrene should be considered estimates.
Sample Number: ..... 699313
Analysis: $\mathrm{PCB}^{i}$ ..... 8082
The matrix spike duplicate associated with this prep batch ..... wasnot surrogated. However, acceptable extraction recovery isconfirmed by the spike recoveries.
$\square$ Iolede a Worrensville Heights
 PhX: (216)514-7104
CHATN OF CUSTODT RECORD $\quad$ PAGE $\frac{1}{2} O F-2$.
COMMENTS

MATEXX SPIKE

 Deliver To: SAimpls R\{cawins Method of Delivery: $F C D E . Y$ Airbill Number: 826265968028 NOTES: Airbill Number: 826265968028 DATE: $-9-01$ TIME: 1830| DATE: | - |
| :--- | :--- |
| TME: | - | DAEE:8-10-01 4

1
0
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$\sum_{2}$
2
$1.14452$


## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin) 08/30/2001

6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14950

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

Sample Number

700809 700810 700811 700812 700813

Sample Description
SBI002 : HMW13D: S005020:428
SBI002: HMW35S:S000020:428
SBI002:HMW35SD:S02020:428
SBI002:FB1:W081601:428
SBI002:TB1:W081601:428

Date Taken
$08 / 14 / 2001 \quad 08 / 17 / 2001$
$08 / 16 / 2001 \quad 08 / 17 / 2001$ $08 / 16 / 2001 \quad 08 / 17 / 2001$ $08 / 16 / 2001 \quad 08 / 17 / 2001$ $08 / 16 / 2001 \quad 08 / 17 / 2001$

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted only in its entirety.

Enclosure


## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/30/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.14950<br>Client Project ID: South Bend Indiana SBI002



SAMPLE NO. 700809

SAMPLE DESCRIPTION
SBIO02:HMW13D:S005020:428

DATE/TIME TAKEN 08/14/2001 12:50

| Dry Weight | 89.3 | \% | 08/23/2001 |  | 1483 |  | mhg |  | 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/23/2001 |  | 1245 | Complete | emd | Sw | 6010B |
| Arsenic, ICP | 5.21 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2975 | $<3.7$ | emd | SW | 6010B |
| Barium, ICP | 156 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2906 | $<0.74$ | emd | SW | 6010B |
| Cadmium, ICP | $<1.1$ | mg/kg dw | 08/23/2001 | 907 | 2888 | <1.1 | emd | SW | 6010B |
| Chromium, ICP | 5.02 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2876 | $<1.5$ | emd | SW | 6010B |
| Lead, ICP | 230 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2877 | $<3.0$ | emd | SW | 6010B |
| Mercury, CVAA | 0.121 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 613 | 631 | $<0.009$ | epk | SW | 7471A |
| Selenium, ICP | $<3.7$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2955 | <3.7 | emd | SW | 6010B |
| Silver, ICP | $<1.5$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2908 | $<1.5$ | emd | SW | 6010B |
| ICP Digestion, Nonaqueous | Complete |  | 08/22/2001 | 907 |  | Complete | mrt | SW | 3050B |
| Mercury Digestion, Non-Aq | Complete |  | 08/24/2001 | 613 |  | Complete | clm | SW | 7471A |
| VOLATILE COMPOUNDS-8260 Non-Aq |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/19/2001 |  | 1473 | Complete | bmh |  |  |
| Acetone | <112 | ug/kg dw | 08/19/2001 |  | 1473 | $<112$ | bmh | SW | 8260A |
| Benzene | $<5.6$ | ug/kg dw | 08/19/2001 |  | 1473 | $<5.6$ | bmh | SW | 8260A |
| tert-Butylbenzene | $<5.6$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 |  | 1473 | $<5.6$ | bmh | SW | 8260A |
| sec-Butylbenzene | $<5.6$ | ug/kg dw | 08/19/2001 |  | 1473 | $<5.6$ | bmh | SW | 8260A |
| n-Butylbenzene | <5.6 | ug/kg dw | 08/19/2001 |  | 1473 | $<5.6$ | bmh | SW | 8260A |
| Bromochloromethane | $<5.6$ | ug/kg dw | 08/19/2001 |  | 1473 | $<5.6$ | bmh | SW | 8260A |
| Bromodichloromethane | <5.6 | ug/kg dw | 08/19/2001 |  | 1473 | $<5.6$ | bmh | SW | 8260A |
| Bromoform | $<5.6$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 |  | 1473 | $<5.6$ | bmh | SW | 8260A |
| Bromobenzene | $<5.6$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 |  | 1473 | $<5.6$ | bmh | SW | 8260A |
| 2-Butanone (MEK) | <56 | ug/kg dw | 08/19/2001 |  | 1473 | <56 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULI \& ASSOC. (Dublin)<br>08/30/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14950
Client Project ID: South Bend Indiana SBIO02

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DA! | /TIME | TAKEN |
| 700809 |  | SBI002: HM | 13 D | SOO | 20:428 |  |  |  | 08/ | 4/2001 | 1 12:50 |


| srbon disulfide | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 1473 | <5.6 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carbon tetrachloride | $<5.6$ | ug/kg dw | 08/19/2001 | 1473 | <5.6 | bmh | SW | 8260A |
| Chlorobenzene | $<5.6$ | ug/kg dw | 08/19/2001 | 1473 | <5.6 | bmh | SW | 8260A |
| Chloroethane | $<11.2$ | ug/kg dw | 08/19/2001 | 1473 | $<11.2$ | bmh | SW | 8260A |
| 2-Chlorotoluene | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 1473 | <5.6 | bmh | Sw | 8260A |
| 4-Chlorotoluene | $<5.6$ | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |
| Chloroform | $<5.6$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 1473 | <5.6 | bmh | SW | 8260A |
| Chloromethane | $<11.2$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 1473 | $<11.2$ | bmh | SW | 8260A |
| Dibromochloromethane | $<5.6$ | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |
| Dibromomethane | < 5.6 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 1473 | $<5.6$ | brh | SW | 8260A |
| Dichlorodifluoromethane | $<5.6$ | $u g / \mathrm{kg}$ dw | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.6$ | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | bmh | Sw | 8260A |
| 1,2-Dichlorobenzene | <5.6 | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | bmh | Sw | 8260A |
| 1,3-Dichlorobenzene | $<5.6$ | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | bmh | Sw | 8260A |
| 1,4-Dichlorobenzene | $<5.6$ | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | <5.6 | ug/kg dw | 08/19/2001 | 1473 | < 5.6 | bmh | Sw | 8260A |
| 1,2-Dichloroethane | <5.6 | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.6$ | ug/kg dw | 08/19/2001 | 1473 | <5.6 | bmh | SW | 8260A |
| Cis-1,2-Dichloroethene | $<5.6$ | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.6$ | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<5.6$ | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | <5.6 | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | <5.6 | ug/kg dw | 08/19/2001 | 1473 | <5.6 | bmh | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.6$ | ug/kg dw | 08/19/2001 | 1473 | <5.6 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) 08/30/2001<br>6130 Wilcox Rd. Dublin, OH 43016<br>Job Number: 01.14950<br>Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |
| Analy |  | Number | Number | Limit | Initials Method Reference |  |

SAMPLE NO. SAMPLE DESCRIPTION 700809 SBI002:HMW13D:S005020:428

DATE/TIME TAKEN 08/14/2001 12:50

| trans-1,3-Dichloropropene. | $<5.6$ | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | bmh | Sw | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ethylbenzene | <5.6 | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |
| Hexachlorobutadiene | <5.6 | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | bmh | Sw | 8260A |
| n -Hexane | $<22.4$ | ug/kg dw | 08/19/2001 | 1473 | $<22.4$ | bmh | Sw | 8260A |
| 2-Hexanone | <56.0 | ug/kg dw | 08/19/2001 | 1473 | $<56.0$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.6$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |
| p-Izopropyltoluene | $<5.6$ | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | brah | SW | 8260A |
| Bromomethane | $<11.2$ | ug/kg dw | 08/19/2001 | 1473 | $<11.2$ | bmh | SW | 8260A |
| Methylene Chloride | $<11.2$ | ug/kg dw | 08/19/2001 | 1473 | $<11.2$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.6$ | ug/kg dw | 08/19/2001 | 1473 | <5.6 | brah | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<56.0$ | ug/kg dw | 08/19/2001 | 1473 | $<56.0$ | bmh | SW | 8260A |
| n-Propylbenzene | $<5.6$ | ug/kg dw | 08/19/2001 | 1473 | <5.6 | bruh | SW | 8260A |
| Styrene | $<5.6$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/19/2001 | 1473 | $<5.6$ | brah | SW | 8260A |
| Naphthalene | $<5.6$ | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | brh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | <5.6 | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |
| Tetrachloroethene | 65.6 | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |
| Toluene | <5.6 | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.6$ | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.6$ | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.6$ | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |
| Trichloroethene | $<5.6$ | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |
| Trichlorofluoromethane | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.6$ | ug/kg dw | 08/19/2001 | 1473 | $<5.6$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14950
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION 700809 SBIO02:HMW13D:S005020:428

DATE/TIME TAKEN 08/14/2001 12:50

| ,3,5-Trimethylbenzene | <5.6 |  | ug/kg dw | 08/19/2001 | 1473 | <5.6 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Acetate | $<5.6$ |  | ug/kg dw | 08/19/2001 | 1473 | <5.6 | bmh | SW | 8260A |
| Vinyl Chloride | $<2.2$ |  | ug/kg dw | 08/19/2001 | 1473 | <2.2 | bmh | SW | 8260A |
| Xylenes, Total | 7.1 |  | ug/kg dw | 08/19/2001 | 1473 | <5.6 | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 90 |  | \% | 08/19/2001 | 1473 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 67 | Note | \% | 08/19/2001 | 1473 |  | bmh | SW | 8260A |
| d8-Toluene (surr) | 113 |  | \% | 08/19/2001 | 1473 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 119 |  | 8 | 08/19/2001 | 1473 |  | bmh | SW | 8260A |

## SAMPLE NO. SAMPLE DESCRIPTION <br> 700810 <br> SBIO02:HMW35S:S000020:428

## DATE/TIME TAKEN <br> 08/16/2001 11:45

| Dry Weight | 93.3 | \% | 08/23/2001 |  | 1483 |  | mhg | SM | 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/23/2001 |  | 1245 | Complete | emd | SW | 6010B |
| Arsenic, ICP | <7.0 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2975 | <0.11 | emd | SW | 6010B |
| Barium, ICP | 56.8 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2906 | $<0.70$ | emd | SW | 6010B |
| Cadmium, ICP | $<1.1$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2888 | $<1.1$ | emd | SW | 6010B |
| Chromium, ICP | 6.72 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2876 | $<1.4$ | emd | SW | 6010B |
| Lead, ICP | 75.9 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2877 | <2.8 | emd | SW | 6010B |
| Mercury, CVAA | 0.411 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 613 | 631 | <0.009 | epk | SW | 7471A |
| Selenium, ICP | <3.4 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2955 | <3.4 | emd | SW | 6010B |
| Silver, ICP | <1. 4 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2908 | <1.4 | emd | SW | 6010B |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/30/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14950
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |
| Analyzed | Number | Number | Limit | Initials Method Reference |  |  |

## SAMPLE NO. 700810

SAMPLE DESCRIPTION
SBIO 02 :HMW35S:S000020:428

DATE/TIME TAKEN 08/16/2001 11:45


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Client Project ID: South Bend Indiana SBI002


| Sromomethane | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dichlorodifluoromethane | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.4$ | ug/kg dw | 08/19/2001 | 14.73 | <5.4 | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | <5.4 | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | <5.4 | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | <5.4 | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| Cis-1,2-Dichloroethene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | <5.4 | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | <5.4 | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| Ethylbenzene | $<5.4$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 1473 | <5. 4 | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| n -Hexane | $<21.4$ | ug/kg dw | 08/19/2001 | 1473 | $<21.4$ | bmh | 5W | 8260A |
| 2 -Hexanone | $<53.6$ | ug/kg dw | 08/19/2001 | 1473 | $<53.6$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | <5.4 | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| p-Isopropyltoluene | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| Bromomethane | $<10.7$ | ug/kg dw | 08/19/2001 | 1473 | $<10.7$ | bmh | SW | 8260A |
| Methylene Chloride | $<10.7$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 1473 | $<10.7$ | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14950

Client Project ID: South Bend Indiana SBI002



## SAMPLE NO.

SAMPLE DESCRIPTION
SBI002: HMW35S:S000020:428

DATE/TIME TAKEN 08/16/2001 11:45

| Methyl t-butyl ether (MTBE) | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Methyl-2-pentanone (MIBK) | $<53.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/19/2001 | 1473 | $<53.6$ | bmh | Sw | 8260A |
| n -Propylbenzene | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| Styrene | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| Naphthalene | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | <5.4 | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | <5.4 | bmh | SW | 826.0A |
| 1,1,2,2-Tetrachloroethane | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| Tetrachloroethene | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| Toluene | <5.4 | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | <5.4 | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | <5.4 | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| Trichloroethene | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| Trichlorofluoromethane* | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| Vinyl Acetate | $<5.4$ | ug/kg dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| Vinyl Chloride | $<2.1$ | ug/kg dw | 08/19/2001 | 1473 | $<2.1$ | bmh | SW | 8260A |
| Xylenes, Total | $<5.4$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/19/2001 | 1473 | $<5.4$ | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 85 | \% | 08/19/2001 | 1473 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 92 | $t$ | 08/19/2001 | 1473 |  | bmh | SW | 8260A |
| d8-Toluene (surr) | 102 | 8 | 08/19/2001 | 1473 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 97 | \% | 08/19/2001 | 1473 |  | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULJ \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01. 14950<br>Client Project ID: South Bend Indiana SBI002

08/30/2001

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | SCRI | PTIO1 |  |  |  |  | DA | TIME | TAKEN |
| 700810 |  | SBIO02 : HM | N35S | S000 | 0:428 |  |  |  | 08/ | $6 / 2001$ | 11:45 |



## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14950
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 700810 | SBIOO2:HMW35S:S000020:428 |

DATE/TIME TAKEN
08/16/2001 11:45

| Dimethyl phthalate | $<354$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dinitrotoluene | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| 2,6-Dinitrotoluene | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| Di-n-octylphthalate | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| Fluoranthene | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270c |
| Fluorene | <354 | $u g / \mathrm{kg}$ dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| Hexachlorobenzene | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | Sw | 8270C |
| Hexachloro-1,3-butadiene | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| Hexachlorocyclopentadiene | $<707$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<707$ | jıw | SW | 8270 C |
| Hexachloroethane | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW | 8270C |
| Indeno(1,2,3-cd) pyrene | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| Isophorone | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| Naphthalene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| Nitrobenzene | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270 C |
| Phenanthrene | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| Pyrene | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | <354 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 82 | \% | 08/24/2001 | 952 | 1473 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 90 | \% | 08/24/2001 | 952 | 1473 |  | jrw | SW | 8270C |
| Surrogate: dl4-Terphenyl | 91 | 4 | 08/24/2001 | 952 | 1473 |  | jrw | SW | 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,770$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<1.770$ | jrw | SW | 8270C |
| 4-Chloro-3-methylphenol | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)

08/30/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14950
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Bnalyzed | Batch | Batch | Reporting Analyst |  |
| Number | Limit | Initials Method Reference |  |  |  |  |

## SAMPLE NO. SAMPLE DESCRIPTION

 700810SBIO 02 : HMW35S:S000020:428

DATE/TIME TAKEN 08/16/2001 11:45

| hlorophenol | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<354$ | jıw | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dichlorophenol | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jıw | SW | 8270C |
| 2,4-Dimethylphenol | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | Sw | 82700 |
| 2-Methyl-4,6-dinitrophenol | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<354$ | jrw | Sw | 8270C |
| 2-Methylphenol | $<354$ | $u g / \mathrm{kg} d w$ | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 82700 |
| meta \& para-Methylphenol | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW | 8270C |
| 2-Nitrophenol | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW | 82700 |
| Pentachlorophenol | $<354$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW | $8270{ }^{\text {8 }}$ |
| Phenol | $<354$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<354$ | jrw | SW | 8270C |
| 2,4,6-Trichlorophenol | <354 | ug/kg dw | 08/24/2001 | 952 | 1473 | <354 | jrw | SW | 8270C |
| Surrogate: d6-Phenol | 73 | ${ }^{4}$ | 08/24/2001 | 952 | 1473 |  | jıw | SW | $8270{ }^{\circ}$ |
| Surrogate: 2-Fluorophenol | 64 | 8 | 08/24/2001 | 952 | '1473 |  | jrw | SW | 8270C |
| Surrogate: Tribromophenol | 87 | 8 | 08/24/2001 | 952 | 1473 |  | jrw | SW | 8270C |

SAMPLE NO. SAMPLE DESCRIPTION
DATE/TIME TAKEN
08/16/2001 11:45

| Dry Weight | 93.9 | \% | 08/23/2001 |  | 1483 |  | mhg |  | 2540 G |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 08/23/2001 |  | 1245 | Complete | emd |  | 6010B |
| Arsenic, ICP | 6.08 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2975 | $<3.5$ | emd |  | 6010B |
| Barium, ICP | 59.7 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 907 | 2906 | $<0.70$ | emd | SW | 6010b |

## ANALYTICAL REPORT

Kevin wildman
HULL \& ASSOC. (Dublin)
$08 / 30 / 2001$
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14950

Client Project ID: South Bend Indiana SBI002



## SAMPLE NO. 700811

SAMPLE DESCRIPTION
SBI 002: HMW35SD:S02020:428

DATE/TIME TAKEN 08/16/2001 11:45


## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
$08 / 30 / 2001$
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14950
Client Project ID: South Bend Indiana SBI002


| -aloroethane | $<10.6$ |  | ug/kg dw | 08/20/2001 | 1473 | $<10.6$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Chlorotoluene | $<5.3$ |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| 4-Chlorotoluene | <5.3 |  | ug/kg dw | 08/20/2001 | 1473 | $<5.3$ | bmh | S* | 8260A |
| Chloroform | $<5.3$ |  | $u g / \mathrm{kg} \mathrm{d} w$ | 08/20/2001 | 1473 | $<5.3$ | bmh | Sw | 8260A |
| Chloromethane | $<10.6$ |  | ug/kg dw | 08/20/2001 | 1473 | $<10.6$ | bmh | SW | 8260A |
| Dibromochloromethane | <5.3 |  | $u \mathrm{l} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| Dibromomethane | $<5.3$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<5.3$ |  | ug/kg dw | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.3$ |  | ug/kg dw | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.3$ |  | ug/kg dw | 08/20/2001 | 1473 | $<5.3$ | bonh | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.3$ |  | ug/kg dw | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.3$ |  | ug/kg dw | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<5.3$ |  | ug/kg dw | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<5.3$ |  | ug/kg dw | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.3$ |  | $\mathrm{ug} / \mathrm{kg}$ dw | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| Cis-1,2-Dichloroethene | $<5.3$ |  | ug/kg dw | 08/20/2001 | 1473 | < 5.3 | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.3$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| 1,2-Dichioropropane | $<5.3$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.3$ |  | ug/kg dw | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.3$ |  | ug/kg dw | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<5.3$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | <5.3 | bmh | SW | 8260A |
| Cis-1,3-Dichloropropene | <5.3 |  | ug/kg dw | 08/20/2001 | 1473 | <5.3 | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | <5.3 |  | ug/kg dw | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| Ethylbenzene | <5.3 | ss | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| Hexachlorobutadiene | <5.3 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | <5.3 | bmh | SW | 8260A |

# ANALYTICAL REPORT 

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/30/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14950
Client Project ID: South Bend Indiana SBI002

$\begin{array}{ll}\text { SAMPLE NO. SAMPLE DESCRIPTION } \\ 700811 & \text { SBIOO2:HMW35SD:S02020:428 }\end{array}$

DATE/TIME TAKEN 08/16/2001 11:45

| n-Hexane | $<21.3$ |
| :--- | :--- |
| 2-Hexanone | $<53.2$ |
| Isopropylbenzene (Cumene) | $<5.3$ |
| p-Isopropyltoluene | $<5.3$ |
| Bromomethane | $<10.6$ |
| Methylene Chloride | $<10.6$ |
| Methyl t-butyl ether (MTBE) | $<5.3$ |
| 4-Methyl-2-pentanone (MIBK) | $<53.2$ |
| n-Propylbenzene | $<5.3$ |
| Styrene | $<5.3$ |
| Naphthalene | $<5.3$ |
| $1,1,1,2$-Tetrachloroethane | $<5.3$ |
| $1,1,2,2$-Tetrachloroethane | $<5.3$ |
| Tetrachloroethene | $<5.3$ |
| Toluene | $<5.3$ |
| $1,2,4$-Trichlorobenzene | $<5.3$ |
| 1,1,1-Trichloroethane | $<5.3$ |
| 1,1,2-Trichloroethane | $<5.3$ |
| Trichloroethene | $<5.3$ |
| Trichlorofluoromethane | $<5.3$ |
| 1,2,3-Trichloropropane | $<5.3$ |
| 1,2,4-Trimethylbenzene | $<5.3$ |
| 1,3,5-Trimethylbenzene | $<5.3$ |
| Vinyl Acetate | $<5.3$ |
| Vinyl Chloride | $<2.1$ |

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| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<21.3$ | bmis | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ug/kg dw | 08/20/2001 | 1473 | $<53.2$ | brah | SW | 8260A |
| ug/kg dw | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| ug/kg dw | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| ug/kg dw | 08/20/2001 | 1473 | $<10.6$ | bmh | SW | 8260A |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<10.6$ | bmh | SW | 8260A |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| ug/kg dw | 08/20/2001 | 1473 | <53.2 | bmh | SW | 8260A |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<5.3$ | brnh | SW | 8260A |
| ug/kg dw | 08/20/2001 | 1473 | <5.3 | bmh | SW | 8260A |
| ug/kg dw | 08/20/2001 | 1473 | <5.3 | bmh | SW | 8260A |
| ug/kg dw | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| ug/kg dw | 08/20/2001 | 1473 | <5.3 | bmh | SW | 8260A |
| ug/kg dw | 08/20/2001 | 1473 | <5.3 | bmh | SW | 8260A |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| ug/kg dw | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| ug/kg dw | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| ug/kg dw | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| ug/kg dw | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| ug/ kg dw | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| ug/kg dw | 08/20/2001 | 1473 | <5.3 | bmh | Sw | 8260A |
| ug/kg dw | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| ug/kg dw | 08/20/2001 | 1473 | $<5.3$ | bmh | SW | 8260A |
| $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | <2.1 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14950
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting | Analyst |  |  |
| Raly |  | Number | Number | Limit | Initials Method Reference |  |  |

## SAMPLE NO. 700811 <br> SAMPLE DESCRIPTION

DATE/TIME TAKEN
08/16/2001 11:45

| . - | <5.3 | ug/kg dw | 08/20/2001 |  | 1473 | < 5.3 | bmh | SW | 8260A. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d4-1,2-Dichloroethane (surr) | 87 | * | 08/20/2001 |  | 1473 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 89 | 7 | 08/20/2001 |  | 1473 |  | bmh | SW | 8260A |
| d8-Toluene (surr) | 96 | $\%$ | 08/20/2001 |  | 1473 |  | bmh | SW | 8260A |
| Bromofluorobenzene (surr) | 90 | 4 | 08/20/2001 |  | 1473 |  | bmh | SW | 8260A |
| BASE NEUT. COMPS.-8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | <351 | jrw | SW | 82700 |
| Acenaphthylene | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<351$ | jrw | SW | 8270C |
| Anthracene | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | <351 | jrw | SW | 82700 |
| Benzo (a) anthracene | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<351$ | jrw | SW | 8270C |
| Benzo (b) fluoranthene | $<351$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<351$ | jrw | SW | 8270C |
| Benzo (k) fluoranthene | <351 | $u g / \mathrm{kg} \mathrm{d} w$ | 08/24/2001 | 952 | 1473 | <351 | jrw | SW | 8270C |
| Benzo (a) pyrene | $<176$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<176$ | jrw | SW | 8270C |
| Benzyl alcohol | <351 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <351 | jrw | SW | $8270{ }^{\text {c }}$ |
| Benzyl butyl phthalate | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | <351 | jrw | SW | 8270C |
| Bis (2-chloroethyl) ether | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<351$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Bis (2-chloroethoxy) methane | $<351$ | $u g / \mathrm{kg}$ dw | 08/24/2001 | 952 | 1473 | <351 | jrw | SW | 82700 |
| Bis (2-ethylhexyl) phthalate | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<351$ | jrw | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<351$ | jrw | SW | 8270C |
| 4-Bromophenyl phenyl ether | <351 | $u g / \mathrm{kg}$ dw | 08/24/2001 | 952 | 1473 | <351 | jrw | SW | 82700 |
| 4 -Chloroaniline | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | <351 | jrw | SW | $8270{ }^{\circ}$ |
| 2-Chloronaphthalene | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | <351 | jrw | SW | 8270C |
| Chrysene | <351 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <351 | jrw | SW | 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<176$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<176$ | jrw | SW | $8270{ }^{\text {c }}$ |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 08/30/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14950
Client Project ID: South Bend Indiana SBI002


| Dibenzofuran | $<351$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <351 | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichlorobenzene | $<351$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <351 | jıw | SW | 8270C |
| 1,3-Dichlorobenzene | $<351$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<351$ | jrw | SW | 8270C |
| 1,4-Dichlorobenzene | $<351$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<351$ | jrw | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<703$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<703$ | jrw | SW | 8270C |
| Diethyl phthalate | $<351$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<351$ | jrw | SW | 8270 C |
| Dimethyl phthalate | $<351$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<351$ | j5w | SW | 8270 C |
| 2,4-Dinitrotoluene | $<351$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<351$ | jrw | SW | $8270{ }^{\text {c }}$ |
| 2,6-Dinitrotoluene | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<351$ | jrw | SW | 8270C |
| Di-n-octylphthalate | $<351$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<351$ | jrw | SW | 8270C |
| Fluoranthene | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | <351 | jıw | SW | 8270C |
| Fluorene | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | <351 | jrw | SW | 8270C |
| Hexachlorobenzene | $<351$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<351$ | jxw | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<351$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <351 | jTw | SW | 8270C |
| Hexachlorocyclopentadiene | $<703$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<703$ | jrw | SW | 8270C |
| Hexachloroethane | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | <351 | jxw | SW | 8270C |
| Indeno(1,2,3-cd) pyrene | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<351$ | jrw | SW | 8270C |
| Isophorone | $<351$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<351$ | jrw | SW | 8270C |
| Naphthalene | $<351$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<351$ | jrw | SW | 8270C |
| Nitrobenzene | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<351$ | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<351$ | jrw | SW | 8270C |
| Phenanthrene | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | <351 | jrw | SW | 8270C |
| Pyrene | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<351$ | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | <351 | jrw | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 85 | 4 | 08/24/2001 | 952 | 1473 |  | jrw | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14950
Client Project ID: South Bend Indiana SBI002

|  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE NO. | SAMPLE DE | CRI | PION |  |  |  |  | DAT | /TIME | TAKEN |
| 700811 | SBI002: HM | N35S | : 502 | 2: 428 |  |  |  | 08/ | 6/2001 | 1 11:45 |


| -urrogate: 2-Fluorobiphenyl | 96 | $t$ | 08/24/2001 | 952 | 1473 |  | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: d14-Terphenyl | 93 | \% | 08/24/2001 | 952 | 1473 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,760$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | <1,760 | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | <351. | ug/kg dw | 08/24/2001 | 952 | 1473 | <351 | jrw | SW | $8270{ }^{\text {c }}$ |
| 2-Chlorophenol | $<351$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <351 | jrw | SW | 8270 C |
| 2,4-Dichlorophenol | $<351$ | ug/kg dw | 08/24/2001 | 952 | 1473 | $<351$ | jrw | SW | 8270 C |
| 2,4-Dimethylphenol | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<351$ | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | <351 | $u g / \mathrm{kg}$ dw | 08/24/2001 | 952 | 1473 | $<351$ | jrw | SW | 8270 C |
| 2-Methylphenol | $<351$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <351 | jrw | SW | 8270C |
| meta \& para-Methylphenol | $<351$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <351 | jrw | SW | 8270C |
| 2-Nitrophenol | $<351$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <351 | jrw | SW | 8270C |
| Pentachlorophenol | $<351$ | ug/kg dw | 08/24/2001 | 952 | 1473 | <351 | jrw | SW | 8270 C |
| Phenol | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | $<351$ | jrw | SW | 8270 C |
| 2,4,5-Trichlorophenol | <351 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 952 | 1473 | $<351$ | j5w | SW | 82700 |
| 2,4,6-Trichlorophenol | <351 | ug/kg dw | 08/24/2001 | 952 | 1473 | <351 | jrw | SW | 8270 C |
| Surrogate: d6-Phenol | 78 | \% | 08/24/2001 | 952 | 1473 |  | jıw | SW | $8270{ }^{\circ}$ |
| Surrogate: 2-Fluorophenol | 68 | $\%$ | 08/24/2001 | 952 | 1473 |  | jrw | SW | 8270C |
| Surrogate: Tribromophenol | 90 | \% | 08/24/2001 | 952 | 1473 |  | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/30/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.14950<br>Client Project ID: South Bend Indiana SBI002



SAMPLE NO. SAMPLE DESCRIPTION
700812
DATE/TIME TAKEN 08/16/2001 16:00


## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>08/30/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14950
Client Project ID: South Bend Indiana SBIO02

|  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method R | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 700812 | SBI002:FB | : W0 | 8160 | 428 |  |  |  | 08/ | $6 / 200$ | 1 16:00 |


| omobenzene | <1.0 | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 08/22/2001 | 3513 | $<12.5$ | eap | SW 8260A |
| Carbon disulfide | $<1.0$ | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW 8260A |
| Carbon tetrachloride | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Chlorobenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Chloroethane | $<5.0$ | ug/L | 08/22/2001 | 3513 | < 5.0 | eap | SW 8260A |
| 2-Chlorotoluene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| 4-Chlorotoluene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Chloroform | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Chloromethane | $<5.0$ | ug/L | 08/22/2001 | 3513 | $<5.0$ | eap | SW 8260A |
| Dibromochloromethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Dibromomethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 08/22/2001 | 3513 | $<5.0$ | eap | SW 8260A |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| 1,1-Dichloroethane | <1.0 | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW b260A |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14950
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 700812 | SBI002:FB1:W081601:428 | $08 / 16 / 200116: 00$ |


| 1,1-Dichloropropene | <1.0 | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW 8260A |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Ethylbenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Hexachlorobutadiene | < 5.0 | ug/L | 08/22/2001 | 3513 | <5.0 | eap | SW 8260A |
| $n$-Hexane | <5.0 | ug/L | 08/22/2001 | 3513 | <5.0 | eap | SW 8260A |
| 2-Hexanone | $<12.5$ | ug/L | 08/22/2001 | 3513 | $<12.5$ | eap | SW 8260A |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| p-Isopropyltoluene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Bromomethane | $<5.0$ | ug/L | 08/22/2001 | 3513 | <5.0 | eap | SW 8260A |
| Methylene Chloride | $<5.0$ | ug/L | 08/22/2001 | 3513 | $<5.0$ | eap | SW 8260A |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 08/22/2001 | 3513 | <5.0 | eap | SW 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 08/22/2001 | 3513 | $<12.5$ | eap | SW 8260A |
| n-Propylbenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Styrene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Naphthalene | $<5.0$ | ug/L | 08/22/2001 | 3513 | <5.0 | eap | SW 8260A |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW 8260A |
| Tetrachloroethene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Toluene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 08/22/2001 | 3513 | <5.0 | eap | SW 8260A |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Trichloroethene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Trichlorofluoromethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14950
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting Limit | Analyst Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 700812 |  | SBI002: F | : WO | 160 | 428 |  |  |  | 08/ | 6/2001 | 1 16:00 |


| ,2,3-Trichloropropane | $<5.0$ | ug/L | 08/22/2001 |  | 3513 | <5.0 | eap | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 08/22/2001 |  | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 08/22/2001 |  | 3513 | <1.0 | eap | SW | 8260A |
| Vinyl Acetate | <5.0 | ug/L | 08/22/2001 |  | 3513 | < 5.0 | eap | SW | 8260A |
| Vinyl Chloride | $<1.0$ | ug/L | 08/22/2001 |  | 3513 | $<1.0$ | eap | SW | 8260A |
| Xylenes | <1.0 | ug/L | 08/22/2001 |  | 3513 | $<1.0$ | eap | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 104 | \% | 08/22/2001 |  | 3513 |  | eap | SW | 8260A |
| Dibromofluoromethane (surr) | 105 | \% | 08/22/2001 |  | 3513 |  | eap | SW | 8260A |
| d8-Toluene (surr) | 94 | 8 | 08/22/2001 |  | 3513 |  | eap | SW | 8260A |
| Bromofluorobenzene (surr) | 96 | \& | 08/22/2001 |  | 3513 |  | eap | SW | 8260A |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 82700 |
| Acenaphthylene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jсs | SW | 8270 C |
| Anthracene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270 C |
| Benzo (a) anthracene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW | 8270 C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW | 8270 C |
| Benzo(k) fluoranthene | <10 | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270 C |
| Benzo(a) pyrene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW | 8270 C |
| Benzyl alcohol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW | $8270{ }^{\text {c }}$ |
| Eenzyl butyl phthalate | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW | 8270 C |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW | 8270C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW | 8270 C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | јсв | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | <10 | jcs | SW | 8270C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>08/30/2001<br>6130 Wilcox Rd.

Dublin, OH 43016

Job Number: 01.14950

## Client Project ID: South Bend Indiana SBIO02



| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 700812 | SBI002:FB1:W081601:428 | $08 / 16 / 2001$ 16:00 |


| 4-Eromophenyl phenyl ether | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jces | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Chloroaniline | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | $8270{ }^{\text {c }}$ |
| 2-Chloronaphthalene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270C |
| Chrysene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270C |
| Dibenzofuran | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270 C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | <10 | jcs | SW | 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 08/27/2001 | 1258 | 2666 | <50 | jcs | SW | 8270 C |
| Diethyl phthalate | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | <10 | jes | SW | 8270 C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jce | SW | $8270{ }^{\text {c }}$ |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270C |
| Fluoranthene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270C |
| Fluorene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jсв | Sw | 8270 C |
| Hexachlorobenzene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | <10 | jcs | SW | 8270C |
| Hexachloro-1, 3-butadiene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270 C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 08/27/2001 | 1258 | 2666 | $<20$ | jcs | SW | 8270 C |
| Hexachloroethane | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270C |
| Indeno (1,2,3-cd) pyrene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270C |
| Isophorone | <10 | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270C |
| Naphthalene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270C |
| Nitrobenzene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW | 8270C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>08/30/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14950
Client Project ID: South Bend Indiana SBI002


| .-Nitrosodi-n-propylamine | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Phenanthrene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW 8270C |
| Pyrene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW 8270C |
| Surrogate: d5-Nitrobenzene | 96 | $\%$ | 08/27/2001 | 1258 | 2666 |  | jes | SW 8270C |
| Surrogate: 2-Fluorobiphenyl | 102 | \% | 08/27/2001 | 1258 | 2666 |  | jcs | SW 8270C |
| Surrogate: di4-Terphenyl | 109 | \% | 08/27/2001 | 1258 | 2666 |  | jcs | SW 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 08/27/2001 | 1258 | 2666 | $<50$ | jcs | SW 8270C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW 8270C |
| 2-Chlorophenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | <10 | jes | SW 8270C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW 8270C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW 8270C |
| 2-Methylphenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW 8270C |
| meta \& para-Methylphenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | <10 | jcs | SW 8270C |
| 2-Nitrophenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | <10 | jcs | SW 8270C |
| Pentachlorophenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW 8270C |
| Phenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | Sw 8270C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jcs | SW 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 08/27/2001 | 1258 | 2666 | $<10$ | jes | SW 8270C |
| Surrogate: d6-Phenol | 84 | 8 | 08/27/2001 | 1258 | 2666 |  | jcs | SW 8270C |
| Surrogate: 2-Fluorophenol | 77 | 8 | 08/27/2001 | 1258 | 2666 |  | jcs | SW 8270C |
| Surrogate: Tribromophenol | 100 | $\%$ | 08/27/2001 | 1258 | 2666 |  | jcs | SW 8270C |

# ANALYTICAL REPORT 

Kevin Wildman<br>HULL \& ASSOC. (Dublin) 08/30/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14950
Client Project ID: South Bend Indiana SBIO02

|  |  | Reault | Flag | Units | Date <br> Analyzed | prep Batch Number | Run <br> Batch Number | Reporting <br> Limit | Analyst <br> Initials | Method R | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 700813 |  | SBI002:TB | : W0 | 1601 | 28 |  |  |  | 08/ | 6/200 |  |


| 8260 - SW846 (AQ) | Complete |  | 08/22/2001 | 3513 | Complete | eap |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | $<20.0$ | ug/L | 08/22/2001 | 3513 | $<20.0$ | eap | SW 8260A. |
| Benzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| tert-Butylbenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| gec-Butylbenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| n-Butylbenzene | <1.0 | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Bromochloromethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Bromodichloromethane | <1.0 | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Bromoform | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Bromobenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| 2-Butanone (MEK) | <12.5 | ug/L | 08/22/2001 | 3513 | $<12.5$ | eap | SW 8260A |
| Carbon disulfide | <1.0 | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Carbon tetrachloride | $<1.0$ | ug/L | 08/22/2001 | 3513 | <1.0 | eap | Sw 8260A |
| Chlorobenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW 8260A |
| Chloroethane | <5.0 | ug/L | 08/22/2001 | 3513 | <5.0 | eap | SW 8260A |
| 2-Chlorotoluene | <1.0 | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| 4-Chlorotoluene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Chloroform | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Chloromethane | <5.0 | ug/L | 08/22/2001 | 3513 | $<5.0$ | eap | SW 8260A |
| Dibromochloromethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Dibromomethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW 8260A |
| 1,2-Dibromo-3-chloropropane | <5.0 | ug/L | 08/22/2001 | 3513 | <5.0 | eap | SW 8260A |
| 1,2-Dichlorobenzene | <1.0 | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.14950
Client Project ID: South Bend Indiana SBI002


| 1.3-Dichlorobenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW | 8260A |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW | 8260A |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW | 8260A |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW | 8260A |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Ethylbenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Hexachlorobutadiene | $<5.0$ | ug/L | 08/22/2001 | 3513 | $<5.0$ | eap | SW | 8260A |
| n -Hexane | <5.0 | ug/L | 08/22/2001 | 3513 | < 5.0 | eap | SW | 8260A |
| 2 -Hexanone | $<12.5$ | ug/L | 08/22/2001 | 3513 | $<12.5$ | eap | SW | 8260A |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| p-Isopropyltoluene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Bromomethane | $<5.0$ | ug/L | 08/22/2001 | 3513 | $<5.0$ | eap | SW | 8260A |
| Methylene Chloride | $<5.0$ | ug/L | 08/22/2001 | 3513 | $<5.0$ | eap | SW | 8260A |
| Methyl t-butyl ether (MTAE) | $<5.0$ | ug/L | 08/22/2001 | 3513 | <5.0 | eap | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 08/22/2001 | 3513 | $<12.5$ | eap | SW | 8260A |
| n-Propylbenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Styrene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

08/30/2001

Job Number: 01.14950
Client Project ID: South Bend Indiana SBI002


SAMPLE NO.
SAMPLE DESCRIPTION SBI002:TB1:W081601:428

DATE/TIME TAKEN 08/16/2001

| Naphthalene | < 5.0 | ug/L | 08/22/2001 | 3513 | < 5.0 | eap | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Tetrachloroethene | <1.0 | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Toluene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 08/22/2001 | 3513 | $<5.0$ | eap | SW | 8260A |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 08/22/2001 | 3513, | $<1.0$ | eap | SW | 8260A |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Trichloroethene | $<1.0$ | ug/L | 08/22/2001 | 3.513 | $<1.0$ | eap | SW | 8260A |
| Trichlorofluoromethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 08/22/2001 | 3513 | $<5.0$ | eap | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Vinyl Acetate | $<5.0$ | ug/L | 08/22/2001 | 3513 | $<5.0$ | eap | SW | 8260A |
| Vinyl Chloride | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| XYlenes | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| d4-1.2-Dichloroethane (surr) | 105 | 8 | 08/22/2001 | 3513 |  | eap | SW | 8260A |
| Dibromofluoromethane (surr) | 105 | 8 | 08/22/2001 | 3513 |  | eap | SW | 8260A |
| d8-Toluene (surr) | 93 | 8 | 08/22/2001 | 3513 |  | eap | SW | 8260A |
| Bromofluorobenzene (surr) | 96 | $\%$ | 08/22/2001 | 3513 |  | eap | SW | 8260A |

## QUALITY CONTROL FLAG DEFINITIONS

Job Number: 01.14950
(*) Indicates an out-of-control QC. The analytical data was reported based on other supporting quality control information.
(Note) Indicates to review the notes and comments section of the analytical report as there is additional information concerning this analytical result.
(MS) Indicates that the Matrix Spike (MS) was out of statistical advisory limits.
(MSD) Indicates that the Matrix Spike Duplicate (MSD) was out of statistical advisory limits.
(RPD) Indicates that the Relative Percent Difference (RPD) for the MS/MSD pair was outside of statistical advisory limits.
(SS) Indicates that the MS and MSD were out of statistical advisory limits.
(SSR) Indicates that the MS, MSD and RPD were out of statistical advisory limits.
(MSR) Indicates that the MS and RPD were out of statistical advisory limits.
(MSDR) Indicates that the MSD and RPD were out of statistical advisory limits.
(DL) Indicates that the MS and MSD were diluted out and the percent recoveries of the spikes could not be calculated.
(LS) Indicates that statistical accuracy and precision data is not available for spike concentrations which are $<1 / 4$ of the sample amount. Care should be used in interpreting this data.
(J) Indicates estimated concentration due to internal standard areas or surrogate recoveries outside of control limits. A sample matrix effect is usually indicated.
(DW) Indicates Dry Weight.
Analytical Reporting Limits
The reporting limits listed for non-aqueous samples in the analytical report section are Practical Quantitation Limits (PQLs). These PQLs are based upon a typical standard weight used for a non-aqueous sample. The reporting limit for a sample may be different from the PQL listed depending upon the actual weight of sample used, the samples moisture content and any dilutions used during the analysis.

```
TestAmerica Job Number: 1.14950
Sample Number: 700809
Analysis: 8260 - Volatiles
Surrogate recovery of dibromofluoromethane was below recovery
limits of 80-120%. Results were confirmed by repeat analysis.
```

$1.14950$


## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman

HULL \& ASSOC. (Dublin) 6130 Wilcox Rd.
Dublin, OH 43016

09/04/2001
Job Number: 01.14991

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

Sample
Number

Sample Description
Date Taken

Date

700968 SBI002:TB1:W081701 SBIO 02:HMW23D:S000020:428

08/17/2001 08/18/2001
08/17/2001 08/18/2001

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted only in its entirety.


## ANALYTICAL REPORT

## Kevin Wildman

HULI \& ASSOC. (Dublin)<br>09/04/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14991
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO.

SAMPLE DESCRIPTION
SBIO02:TBI:W081701
DATE/TIME TAKEN 08/17/2001

| VOLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8260 - SW846 (AQ) | Complete |  | 08/22/2001 | 3513 | Complete | eap |  |  |
| Acetone | <20.0 | ug/L | 08/22/2001 | 3513 | $<20.0$ | eap | Sw | 8260A |
| Benzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| tert-Butylbenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| sec-Butylbenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | <1.0 | eap | Sw | 8260A |
| n-Butylbenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Bromochloromethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Bromodichloromethane | <1.0 | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Bromoform | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | Sw | 8260A |
| Bromobenzene | <1.0 | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 08/22/2001 | 3513 | $<12.5$ | eap | SW | 8260A |
| Carbon disulfide | <1.0 | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Carbon tetrachloride | $<1.0$ | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW | 8260A |
| Chlorobenzene | <1.0 | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Chloroethane | $<5.0$ | ug/L | 08/22/2001 | 3513 | $<5.0$ | eap | SW | 8260A |
| 2-Chlorotoluene | <1.0 | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW | 8260A |
| 4-Chlorotoluene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Chloroform | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Chloromethane | $<5.0$ | ug/L | 08/22/2001 | 3513 | $<5.0$ | eap | SW | 8260A |
| Dibromochloromethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW | 8260A |
| Dibromomethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 08/22/2001 | 3513 | $<5.0$ | eap | SW | 8260A |
| 1,2-Dichlorobenzene. | $<1.0$ | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW | 8260A |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin) 09/04/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14991.
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method R | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 700968 |  | SBI002:TE | :W0 | 1701 |  |  |  |  | 08/ | 7/2001 |  |


| -,3-Dichlorobenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,4-Dichlorobenzene | $<1.0$ | $\underline{L G / L}$ | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1.1-Dichloroethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1.1-Dichloroethene | $<1.0$ | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW | 8260A |
| Cis-1,2-Dichloroethene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A. |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW | 8260A |
| Cis-1,3-Dichloropropene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW | 8260A |
| Ethylbenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Hexachlorobutadiene | $<5.0$ | ug/L | 08/22/2001 | 3513 | $<5.0$ | eap | SW | 8260A |
| n -Hexane | $<5.0$ | ug/L | 08/22/2001 | 3513 | < 5.0 | eap | Sw | 8260A |
| 2-Hexanone | $<12.5$ | ug/L | 08/22/2001 | 3513 | $<12.5$ | eap | SW | 8260A |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| p-Isopropyltoluene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Bromomethane | $<5.0$ | ug/L | 08/22/2001 | 3513 | $<5.0$ | eap | SW | 8260A |
| Methylene Chloride | $<5.0$ | ug/L | 08/22/2001 | 3513 | $<5.0$ | eap | SW | 8260A |
| Methyl t-butyl ether (MTBE) | <5.0 | ug/L | 08/22/2001 | 3513 | $<5.0$ | eap | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 08/22/2001 | 3513 | $<12.5$ | eap | SW | 8260A |
| n-Propylbenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Styrene | <1.0 | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) 09/04/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14991
Client Project ID: South Bend Indiana SBI002


| Naphthalene | $<5.0$ | ug/L | 08/22/2001 | 3513 | $<5.0$ | eap | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Tetrachloroethene | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | Sw | 8260A |
| Toluene | $<1.0$ | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 08/22/2001 | 3513 | <5.0 | eap | SW | 8260A |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Trichloroethene | $<1.0$ | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW | 8260A |
| Trichlorofluoromethane | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 08/22/2001 | 3513 | <5.0 | eap | Sw | 8260A |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 08/22/2001 | 35.13 | $<1.0$ | eap | SW | 8260A |
| Vinyl Acetate | $<5.0$ | ug/L | 08/22/2001 | 3513 | $<5.0$ | eap | SW | 8260A |
| Vinyl Chloride | $<1.0$ | ug/L | 08/22/2001 | 3513 | $<1.0$ | eap | SW | 8260A |
| Xylenes | $<1.0$ | ug/L | 08/22/2001 | 3513 | <1.0 | eap | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 103 | \% | 08/22/2001 | 3513 |  | eap | SW | 8260A |
| Dibromofluoromethane (surr) | 106 | 8 | 08/22/2001 | 3513 |  | eap | SW | 8260A |
| d8-Toluene (surr) | 93 | 8 | 08/22/2001 | 3513 |  | eap | SW | 8260A |
| Bromofluorobenzene (surr) | 97 | 8 | 08/22/2001 | 3513 |  | eap | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

09/04/2001

Job Number: 01.14991
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Unitb | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 700969 |  | SBIO02 : HM | N23D | S000 | 20:428 |  |  |  | 08/ | 7/2001 | 09:00 |



## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 09/04/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14991
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |
| :--- | :--- | :--- |
| 700969 | SBI002:HMW23D:S000020:428 |


| Bromobenzene | $<5.8$ | ug/kg dw | 08/20/2001 | 1473 | <5.8 | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Butanone (MEK) | $<58$ | ug/kg dw | 08/20/2001 | 1473 | $<58$ | bmh | Sw | 8260A |
| Carbon disulfide | $<5.8$ | ug/kg dw | 08/20/2001 | 1473 | <5.8 | bmh | SW | 8260A |
| Carbon tetrachloride | $<5.8$ | ug/kg dw | 08/20/2001 | 1473 | <5.8 | bmh | SW | 8260A |
| Chlorobenzene | <5.8 | ug/kg dw | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| Chloroethane | $<11.7$ | ug/kg dw | 08/20/2001 | 1473 | $<11.7$ | bmh | SW | 8260A |
| 2-Chlorotoluene | $<5.8$ | ug/kg dw | 08/20/2001 | 1473 | <5.8 | bmh | SW | 8260A |
| 4-Chlorotoluene | < 5.8 | ug/kg dw | 08/20/2001 | 1473 | <5.8 | bmih | SW | 8260A |
| Chloroform | < 5.8 | ug/kg dw | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| Chloromethane | $<11.7$ | ug/kg dw | 08/20/2001 | 1473 | $<11.7$ | bmh | SW | 8260A |
| Dibromochloromethane | $<5.8$ | ug/kg dw | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| Dibromomethane | $<5.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<5.8$ | bmb | SW | 8260A |
| Dichlorodifluoromethane | $<5.8$ | ug/ kg dw | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | <5.8 | ug/kg dw | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | <5.8 | ug/kg dw | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | <5.8 | ug/kg dw | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| 1,4-Dichiorobenzene | $<5.8$ | ug/kg dw | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | < 5.8 | ug/kg dw | 08/20/2001 | 1473 | < 5.8 | bmh | SW | 8260A |
| 1,2-Dichloroethane | $<5.8$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.8$ | ug/kg dw | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.8$ | ug/kg dw | 08/20/2001 | 1473 | < 5.8 | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| 1.2-Dichloropropane | $<5.8$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.8$ | ug/kg dw | 08/20/2001 | 1473 | $<5.8$ | bonk | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.14991
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch Reporting Analyst |  |  |


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 700969 | SBIO02:HMW23D:SOOOO20:428 |

DATE/TIME TAKEN
08/17/2001 09:00
1

| . 1-Dichloropropene | $<5.8$ | ug/kg dw | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cis-1,3-Dichloropropene | $<5.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | < 5.8 | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.8$ | ug/kg dw | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| Ethylbenzene | $<5.8$ | ug/kg dw | 08/20/2001 | 1473 | <5.8 | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | <5.8 | bmh | SW | 8260A |
| n-Hexane | $<23.3$ | ug/kg dw | 08/20/2001 | 1473 | $<23.3$ | bmh | SW | 8260A |
| 2-Hexanone | $<58.3$ | ug/kg dw | 08/20/2001 | 1473 | $<58.3$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.8$ | $u g / \mathrm{kg}$ dw | 08/20/2001 | 1473 | <5.8 | bmh | SW | 8260A |
| p-Isopropyltoluene | $<5.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | <5.8 | bmh | SW | 8260A |
| Bromomethane | $<11.7$ | ug/kg dw | 08/20/2001 | 1473 | $<11.7$ | bmh | SW | 8260A |
| Methylene Chloride | $<11.7$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<11.7$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<58.3$ | ug/kg dw | 08/20/2001 | 1473 | $<58.3$ | bmh | SW | 8260A |
| n-Propylbenzene | $<5.8$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| Styrene | $<5.8$ | ug/kg dw | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| Naphthalene | $<5.8$ | ug/kg dw | 08/20/2001 | 1473 | <5.8 | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.8$ | ug/kg dw | 08/20/2001 | 1473 | < 5.8 | bmh | SW | 8260 A |
| 1,1,2,2-Tetrachloroethane | $<5.8$ | ug/kg dw | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| Tetrachloroethene | $<5.8$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| Toluene | $<5.8$ | ug/kg dw | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.8$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.8$ | ug/kg dw | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.8$ | ug/kg dw | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| Trichloroethene | $<5.8$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 | 1473 | $<5.8$ | bmh | SW | 8260A |
| Trichlorofluoromethane | <5.8 | ug/kg dw | 08/20/2001 | 1473 | < 5.8 | bmh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>09/04/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.14991
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 700969 | SBIOO2:HMW23D:S000020:428 |

DATE/TIME TAKEN
700969 SBIO02:HMW23D:S000020:428

| 1,2,3-Trichloropropane | $<5.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/20/2001 |  | 1473 | $<5.8$ | bmin | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,4-Trimethylbenzene | $<5.8$ | ug/kg dw | 08/20/2001 |  | 1473 | <5.8 | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.8$ | ug/kg dw | 08/20/2001 |  | 1473 | < 5.8 | bmh | SW | 8260A |
| Vinyl Acetate | $<5.8$ | ug/kg dw | 08/20/2001 |  | 1473 | $<5.8$ | bmh | SW | 8260A |
| Vinyl Chloride | <2.3 | ug/kg dw | 08/20/2001 |  | 1473 | <2.3 | bmh | SW | 8260A |
| Xylenes, Total | $<5.8$ | ug/kg dw | 08/20/2001 |  | 1473 | $<5.8$ | bmh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 86 | \% | 08/20/2001 |  | 1473 |  | bmh | SW | 8260A |
| Dibromofluoromethane (surr) | 86 | 8 | 08/20/2001 |  | 1473 |  | bmh | SW | 8260A |
| de-Toluene (surr) | 94 | 8 | 08/20/2001 |  | 1473 |  | bmh | SW | 8260A |
| Bromofluorobenzene (burr) | 93 | \% | 08/20/2001 |  | 1473 |  | bmh | SW | 8260A |
| BASE NEUT. COMPS. -8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270C |
| Acenaphthylene | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jıw | SW | 8270C |
| Anthracene | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270 C |
| Benzo (a) anthracene | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | sw | 8270C |
| Benzo (b) fluoranthene | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270C |
| Benzo(k) fluoranthene | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | <385 | jrw | sw | 8270C |
| Benzo (a) pyrene | $<193$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<193$ | jrw | SW | 8270C |
| Benzyl alcohol | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | <385 | jrw | SW | 8270C |
| Benzyl butyl phthalate | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | <385 | jrw | SW | $8270{ }^{\text {c }}$ |
| Bis (2-chloroethyl) ether | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | <385 | jrw | Sw | 8270c |
| Bis (2-chloroethoxy) methane | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | Sw | 8270C |
| Bis (2-ethylhexyl) phthalate | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270C |
| 2,2'-oxybis(1-Chloropropane) | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 82700 |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

09/04/2001

-

Job Number: 01.14991
Client Project ID: South Bend Indiana SBI002


SAMPLE NO 700969

SAMPLE DESCRIPTION
SBIO 02 :HMW23D:S000020:428

DATE/TIME TAKEN
08/17/2001 09:00

| 4-Bromophenyl phenyl ether | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Chloroaniline | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jxw | SW | 8270C |
| 2-Chloronaphthalene | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270C |
| Chrysene | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jıw | SW | 8270C |
| Dibenzo (a, h ) anthracene | $<193$ | ug/ $/ \mathrm{kg}$ dw | 08/30/2001 | 952 | 1480 | $<193$ | jrw | SW | 8270C |
| Dibenzofuran | $<385$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | .08/30/2001 | 952 | 1480 | <385 | jrw | SW | $8270{ }^{\text {c }}$ |
| 1,2-Dichlorobenzene | <385 | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270 C |
| 1,3-Dichlorobenzene | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270C |
| 1,4-Dichlorobenzene | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270 C |
| 3.3'-Dichlorobenzidine | $<770$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 952 | 1480 | $<770$ | jrw | SW | 8270C |
| Diethyl phthalate | <385 | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270C |
| Dimethyl phthalate | <385 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270C |
| 2,4-Dinitrotoluene | <385 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270 C |
| 2,6-Dinitrotoluene | $<385$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270 C |
| Di-n-octylphthalate | $<385$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270C |
| Fluoranthene | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270C |
| Fluorene | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | <385 | jxw | SW | $8270{ }^{\text {c }}$ |
| Hexachlorobenzene | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | <385 | jrw | SW | 8270C |
| Hexachloro-1,3-butadiene | $<385$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270 C |
| Hexachlorocyclopentadiene | $<770$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 952 | 1480 | $<770$ | jrw | SW | 8270C |
| Hexachloroethane | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270C |
| Indeno (1,2,3-cd) pyrene | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270C |
| Isophorone | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270C |
| Naphthalene | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | <385 | jrw | SW | 8270 C |
| Nitrobenzene | <385 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

09/04/2001

Job Number: 01.14991
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting | Analyst |  |
| Number | Limit | Initials Method Reference |  |  |  |  |  |

## SAMPLE NO. 700969

SAMPLE DESCRIPTION
SBIO02:HMW23D:S000020:428

DATE/TIME TAKEN 08/17/2001 09:00

| N-Nitrosodi-n-propylamine | $<385$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Phenanthrene | <385 | ug/kg dw | 08/30/2001 | 952 | 1480 | <385 | jrw | SW | 8270C |
| Pyrene | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | <385 | jrw | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 51 | \% | 08/30/2001 | 952 | 1480 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 86 | \% | 08/30/2001 | 952 | 1480 |  | jrw | SW | 8270 C |
| Surrogate: di4-Terphenyl | 126 | \% | 08/30/2001 | 952 | 1480 |  | jrw | SW | 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,930$ | ug/kg dw | 08/30/2001 | 952 | 1480 | <1,930 | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jxw | SW | 8270C |
| 2-Chlorophenol | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270C |
| 2,4-Dichlorophenol | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270 C |
| 2,4-Dimethylphenol | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270C |
| 2-Methylphenol | <385 | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270C |
| meta \& para-Methylphenol | $<385$ | ug/kg dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270C |
| 2-Nitrophenol | $<385$ | $u g / \mathrm{kg}$ dw | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270C |
| Pentachlorophenol | $<385$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 952 | 1480 | $<385$ | jxw | SW | 8270 C |
| Phenol | $<385$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<385$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270C |
| 2,4,6-Trichlorophenol | $<385$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 952 | 1480 | $<385$ | jrw | SW | 8270 C |
| Surrogate: d6-Phenol | 87 | $\%$ | 08/30/2001 | 952 | 1480 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorophenol | 83 | 8 | 08/30/2001 | 952 | 1480 |  | jrw | SW | 8270C |
| Surrogate: Tribromophenol | 57 | \% | 08/30/2001 | 952 | 1480 |  | jrw | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULJ \& ASSOC. (Dublin) ..... 09/04/2001
6130 Wilcox Rd.
Dublin, OH 4301
Job Number: 01.14991
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION

 700969DATE/TIME TAKEN 08/17/2001 09:00

| ¢PH - DRO Non-Aqueous | 95.8 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/22/2001 | 199 | 286 | $<12$ | 8 | SW 8015M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TPH - GRO (Non-Aqueous) | <6 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 |  | 248 | <6 | meb | SW 8015M |

## QUALITY CONTROL FLAG DEFINITIONS <br> PAGE 12 of 12

Job Number: 01.14991
(*) Indicates an out-of-control QC. The analytical data was reported based on other supporting quality control information.
(Note) Indicates to review the notes and comments section of the analytical report as there is additional information concerning this analytical result.
(MS) Indicates that the Matrix Spike (MS) was out of statistical advisory limits.
(MSD) Indicates that the Matrix Spike Duplicate (MSD) was out of statistical advisory limits.
(RPD) Indicates that the Relative Percent Difference (RPD) for the MS/MSD pair was outside of statistical advisory limits.
(SS) Indicates that the MS and MSD were out of statistical advisory limits.
(SSR) Indicates that the MS, MSD and RPD were out of statistical advisory limits.
(MSR) Indicates that the MS and RPD were out of statistical advisory limits.
(MSDR) Indicates that the MSD and RPD were out of statistical advisory limits.
(DL) Indicates that the MS and MSD were diluted out and the percent recoveries of the spikes could not be calculated.
(LS) Indicates that statistical accuracy and precision data is not available for spike concentrations which are < I/4 of the sample amount. Care should be used in interpreting this data.
(J) Indicates estimated concentration due to internal standard areas or surrogate recoveries outside of control limits. A sample matrix effect is usually indicated.
(DW) Indicates Dry Weight.
Analytical Reporting Limits
The reporting limits listed for non-aqueous samples in the analytical report section are Practical Quantitation Limits (PQLs). These PQLs are based upon a typical standard weight used for a non-aqueous sample. The reporting limit for a sample may be different from the PQL listed depending upon the actual weight of sample used, the samples moisture content and any dilutions used during the analysis.
14991


## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 09/05/2001
6130 Wilcox Rd.
Dublin, OH 43016

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

## Sample <br> Number

Sample Description
702159 SBI002:HMW15S:S080090:428
702160
702161
702162 SBI002:SB26A:S020040:505
702163 SBI002:SB27A:S020040:505

| Date <br> Taken | Date <br> Received |
| :---: | :---: |
| $08 / 23 / 2001$ | $08 / 24 / 2001$ |
| $08 / 23 / 2001$ | $08 / 24 / 2001$ |
| $08 / 23 / 2001$ | $08 / 24 / 2001$ |
| $08 / 23 / 2001$ | $08 / 24 / 2001$ |
| $08 / 23 / 2001$ | $08 / 24 / 2001$ |

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted only in its entirety.

Enclosure


## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
09/05/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15425
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 702159

SBIO02:HMW15S:S080090:428
DATE/TIME TAKEN
08/23/2001 08:00


## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)

09/05/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15425
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 702159 | SBIOO2:HMW15S:S080090:428 | $08 / 23 / 2001$ 08:00 |


| Dibromomethane | $<6.0$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 1487 | $<6.0$ | jxc | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dichlorodifluoromethane | <6.0 | ug/kg dw | 08/28/2001 | 1487 | <6.0 | jxc | SW 8260A |
| 1,2-Dibromo-3-chloropropane | $<6.0$ | ug/kg dw | 08/28/2001 | 1487 | <6.0 | jxc | SW 8260A |
| 1,2-Dichlorobenzene | $<6.0$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 1487 | <6.0 | jxc | SW 8260A |
| 1,3-Dichlorobenzene | $<6.0$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 1487 | $<6.0$ | jxc | SW 8260A |
| 1,4-Dichlorobenzene | $<6.0$ | ug/kg dw | 08/28/2001 | 1487 | $<6.0$ | jxc | SW 8260A |
| 1,1-Dichloroethane | <6.0 | ug/kg dw | 08/28/2001 | 1487 | <6.0 | jxcc | SW 8260A |
| 1,2-Dichloroethane | <6.0 | ug/kg dw | 08/28/2001 | 1487 | <6.0 | jxc | SW 8260A |
| 1,1-Dichloroethene | $<6.0$ | ug/kg dw | 08/28/2001 | 1487 | $<6.0$ | jxc | Sw 8260A |
| cib-1,2-Dichloroethene | $<6.0$ | ug/kg dw | 08/28/2001 | 1487 | <6.0 | jxc | SW 8260A |
| trans-1,2-Dichloroethene | <6.0 | ug/kg dw | 08/28/2001 | 1487 | $<6.0$ | jxc | SW 8260A |
| 1,2-Dichloropropane | $<6.0$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 1487 | $<6.0$ | jxc | SW 8260A |
| 1,3-Dichloropropane | $<6.0$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 1487 | $<6.0$ | jxc | SW 8260A |
| 2,2-Dichloropropane | $<6.0$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 1487 | $<6.0$ | jxc | SW 8260A |
| 1,1-Dichloropropene | $<6.0$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 1487 | $<6.0$ | jxc | SW 8260A |
| cis-1,3-Dichloropropene | $<6.0$ | ug/kg dw | 08/28/2001 | 1487 | $<6.0$ | jxc | SW 8260A |
| trans-1,3-Dichloropropene | <6.0 | ug/kg dw | 08/28/2001 | 1487 | $<6.0$ | jxc | SW 8260A |
| Ethylbenzene | $<6.0$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/28/2001 | 1487 | $<6.0$ | jxc | SW 8260A |
| Hexachlorobutadiene | $<6.0$ | ug/kg dw | 08/28/2001 | 1487 | <6.0 | jxc | SW 8260A |
| n -Hexane | $<24.0$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 1487 | $<24.0$ | jxc | SW 8260A |
| 2-Hexanone | $<60.0$ | ug/kg dw | 08/28/2001 | 1487 | $<60.0$ | jxc | SW 8260A |
| Isopropylbenzene (Cumene) | $<6.0$ | ug/kg dw | 08/28/2001 | 1487 | <6.0 | jxc | SW 8260A |
| p-Isopropyltoluene | <6.0 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 1487 | $<6.0$ | jxc | SW 8260A |
| Bromomethane | $<12.0$ | ug/kg dw | 08/28/2001 | 1487 | $<12.0$ | jxc | SW 8260A |
| Methylene Chloride | <12.0 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 1487 | $<12.0$ | jxc | SW 8250A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>09/05/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.15425
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
702159 SBIOO2:HMW15S:S080090:428

| Methyl t-butyl ether (MTBE) | $<6.0$ | ug/kg. dw | 08/28/2001 | 1487 | $<6.0$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Methyl-2-pentanone (MIBK) | $<60.0$ | ug/kg dw | 08/28/2001 | 1487 | $<60.0$ | jxc | SW | 8260A |
| n-Propylbenzene | $<6.0$ | ug/kg dw | 08/28/2001 | 1487 | $<6.0$ | jxc | SW | B260A |
| Styrene | <6.0 | ug/kg dw | 08/28/2001 | 1487 | $<6.0$ | jxc | SW | 8260A |
| Naphthalene | <6.0 | ug/kg dw | 08/28/2001 | 1487 | <6.0 | jxc | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | <6.0 | ug/kg dw | 08/28/2001 | 1487 | $<6.0$ | jxc | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<6.0$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/28/2001 | 1487 | $<6.0$ | jxc | SN | 8260A |
| Tetrachloroethene | $<6.0$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 1487 | $<6.0$ | jxc | SW | 8260A |
| Toluene | $<6.0$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 1487 | $<6.0$ | jxc | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<6.0$ | ug/kg dw | 08/28/2001 | 1487 | $<6.0$ | jxc | SW | 8260A |
| 1,1,1-Trichloroethane | $<6.0$ | ug/kg dw | 08/28/2001 | 1487 | <6.0 | jxc | SW | 8260A |
| 1,1,2-Trichloroethane | <6.0 | ug/kg dw | 08/28/2001 | 1487 | $<6.0$ | jxc | SW | 8260A |
| Trichloroethene | <6.0 | ug/ kg dw | 08/28/2001 | 1487 | $<6.0$ | jxc | SW | 8260A |
| Trichlorofluoromethane | $<6.0$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 1487 | $<6.0$ | jxc | SW | 8260A |
| 1,2,3-Trichloropropane | <6.0 | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 1487 | $<6.0$ | jxc | SW | 8260A |
| 1،2,4-Trimethylbenzene | $<6.0$ | $u \mathrm{~g} / \mathrm{kg}$ dw | 08/28/2001 | 1487 | $<6.0$ | jxc | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<6.0$ | $u g / \mathrm{kg}$ dw | 08/28/2001 | 1487 | <6.0 | jxc | SW | 8260A |
| Vinyl Acetate | $<6.0$ | ug/kg dw | 08/28/2001 | 1487 | <6.0 | jxc | SW | 8260A |
| Vinyl Chloride | $<2.4$ | ug/kg dw | 08/28/2001 | 1487 | $<2.4$ | jxc | SW | 8260A |
| Xylenes, Total | $<6.0$ | ug/kg dw | 08/28/2001 | 1487 | <6.0 | jxc | SW | 8260A |
| d4-1, 2-Dichloroethane (surr) | 93 | $\%$ | 08/28/2001 | 1487 |  | jxc | SW | 8260A |
| Dibromofluoromethane (surr) | 97 | \% | 08/28/2001 | 1487 |  | jxc | SW | 8260A |
| d8-Toluene (surr) | 94 | 8 | 08/28/2001 | 1487 |  | jxc | SW | 8260A |
| Bromofluorobenzene (surr) | 92 | \% | 08/28/2001 | 1487 |  | jxc | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
09/05/2001
6130 Wilcox Rd.
Dublin, OH 43016
Job Number: 01.15425
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run Batch Number | Reporting <br> Limit | Analyst Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO1 |  |  |  |  | DAT | /TIME | TAKEN |
| 702159 |  | SBI002: HM | 15 | S080 | 9:428 |  |  |  |  | 3/2001 | 1 08:00 |

gASE NEUT. COMPS.-8270 NOn-aq

| Acenaphthene | $<396$ | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthylene | $<396$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 8270 C |
| Anthracene | $<396$ | $u \mathrm{l} / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 8270C |
| Benzo (a) anthracene | $<396$ | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 8270C |
| Benzo (b) fluoranthene | $<396$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 82700 |
| Benzo(k)fluoranthene | $<396$ | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 82700 |
| Benzo(a) pyrene | $<198$ | $u g / \mathrm{kg}$ dw | 08/30/2001 | 956 | 1478 | $<198$ | dmg | SW | 8270C |
| Benzyl alcohol | $<396$ | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | dimg | SW | 8270C |
| Benzyl butyl phthalate | $<396$ | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 8270 C |
| Bis (2-chloroethyl)ether | $<396$ | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 8270C |
| Bis (2-chloroethoxy) methane | $<396$ | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | $8270{ }^{\text {c }}$ |
| Bis (2-ethylhexyd) phthalate | $<396$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<396$ | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 8270C |
| 4-Bromophenyl phenyl ether | <396 | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 8270C |
| 4-Chloroaniline | $<396$ | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | dimg | SW | 8270C |
| 2-Chloronaphthalene | $<396$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 8270C |
| Chrysene | $<396$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 8270C |
| Dibenzo (a, h) anthracene | $<198$ | ug/kg dw | 08/30/2001 | 956 | 1478 | $<198$ | dmg | SW | 8270 C |
| Dibenzofuran | <396 | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 82700 |
| 1,2-Dichlorobenzene | <396 | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 8270 C |
| 1,3-Dichlorobenzene | $<396$ | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 8270 C |
| 1,4-Dichlorobenzene | $<396$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<792$ | ug/kg dw | 08/30/2001 | 956 | 1478 | $<792$ | dimg | SW | 8270 C |
| Diethyl phthalate | <396 | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 09/05/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15425
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 702159

SBI002:HMW15S:S080090:428

DATE/TIME TAKEN 08/23/2001 08:00

| Dimethyl phthalate | $<396$ | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,4-Dinitrotoluene | $<396$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 8270 C |
| 2,6-Dinitrotoluene | <396 | ug/kg dw | 08/30/2001 | 956 | 1478 | <396 | dmg | SW | 8270 C |
| Di-n-octylphthalate | $<396$ | ug/kg dw | 08/30/2001 | 956 | 1478 | <396 | dmg | Sw | 8270 C |
| Fluoranthene | $<396$ | ug/kg dw | 08/30/2001 | 956 | 1478 | <396 | ding | SH | 8270 C |
| Fluorene | $<396$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 82700 |
| Hexachlorobenzene | $<396$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 956 | 1478 | <396 | dmg | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<396$ | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | ding | SW | 8270 C |
| Hexachlorocyclopentadiene | $<792$ | ug/kg dw | 08/30/2001 | 956 | 1478 | $<792$ | dimg | SW | 8270 C |
| Hexachloroethane | <396 | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 8270 C |
| Indeno (1, 2, 3-cd) pyrene | $<396$ | ug/kg dw | 08/30/2001 | 956 | 1478 | <396 | dmg | SW | 8270 C |
| Isophorone | $<396$ | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | dimg | SW | 8270 C |
| Naphthalene | $<396$ | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | ding | sw | 8270 C |
| Nitrobenzene | $<396$ | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 8270 C |
| N-Nitrosodi-n-propylamine | $<396$ | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 8270 C |
| Phenanthrene | $<396$ | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | dmg | SW | 8270 C |
| Pyrene | $<396$ | ug/kg dw | 08/30/2001 | 956 | 1478 | $<396$ | ding | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<396$ | ug/kg dw | 08/30/2001 | 956 | 1478 | <396 | dmg | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 86 | \% | 08/30/2001 | 956 | 1478 |  | dimg | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 81 | \% | 08/30/2001 | 956 | 1478 |  | dmg | SW | 8270 C |
| Surrogate: di4-Terphenyl | 86 | $\%$ | 08/30/2001 | 956 | 1478 |  | dmg | SW | 8270 C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,980 | ug/kg dw | 08/30/2001 | 956 | 1478 | $<1.980$ | dmg | SW | 82700 |
| 4-Chloro-3-methylphenol | <396 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 956 | 1478 | <396 | dmg | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman

Job Number: 01.15425
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 702159

SAMPLE DESCRIPTION
SBIOO2:HMW15S:S080090:428

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
09/05/2001

Initials Method Reference
DATE/TIME TAKEN .08/23/2001 08:00



## ANALYTICAL REPORT

Kevin Wildman

HULL \& ASSOC. (Dublin) 6130 Wilcox Rd.<br>Dublin, OH 43016<br>09/05/2001

J̇ob Number: 01. 15425
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 702160

SBI002:HMW15S:S040050:428
DATE/TIME TAKEN 08/23/2001 07:50

VOLATILE COMPOUNDS-8260 NON-Aq

| 8260 - SW846 (Non-aq) | Complete |  | 08/28/2001 | 1487 | Complete | jxc |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | $<109$ | ug/kg dw | 08/28/2001 | 1487 | $<109$ | jxc | SW | 8260A |
| Benzene | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| tert-Butyibenzene | <5.5 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| sec-Butylbenzene | < 5.5 | ug/kg dw | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| n-Butylbenzene | <5.5 | ug/kg dw | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| Bromochloromethane | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| Bromodichloromethane | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| Bromoform | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| Bromobenzene | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | <5.5 | jxc | SW | 8260A |
| 2-Butanone (MEK) | $<55$ | ug/kg dw | 08/28/2001 | 1487 | <55 | jxc | SW | 8260A |
| Carbon disulfide | < 5.5 | ug/kg dw | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| Carbon tetrachloride | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| Chlorobenzene | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | $<5.5$ | jxx | SW | 8260A |
| Chloroethane | $<10.9$ | ug/kg dw | 08/28/2001 | 1487 | $<10.9$ | jxc | SW | 8260A |
| 2-Chlorotoluene | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| 4-Chlorotoluene | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| Chloroform | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | <5.5 | jxc | Sw | 8260A |
| Chloromethane | $<10.9$ | ug/kg dw | 08/28/2001 | 1487 | $<10.9$ | jxc | SW | 8260A |
| Dibromochloromethane | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 1487 | <5.5 | jxc | SW | 8260A |
| Dibromomethane | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | < 5.5 | jxc | SW | 8260A |
| Dichlorodifluoromethane | < 5.5 | ug/kg dw | 08/28/2001 | 1487 | <5.5 | jxc | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | <5.5 | ug/kg dw | 08/28/2001 | 1487 | <5.5 | jxc | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | <5.5 | jxc | SW | 8260A |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.15425

## Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TION |  |  |  |  | DAT | TIME | TAKEN |
| 702160 |  | SBI002: HM | 15 S | S040 | 0:428 |  |  |  | 08/ | 3/2001 | 1 07:50 |


| 1,3-Dichlorobenzene | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | < 5.5 | jxc | Sw | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,4-Dichlorobenzene | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| 1,1-Dichloroethane | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | < 5.5 | jxe | SW | 8260A |
| 1,2-Dichloroethane | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| 1,1-Dichloroethene | < 5.5 | ug/kg dw | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| Cis-1, 2-Dichloroethene | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| trans-1,2-Dichloroethene | <5.5 | $u g / \mathrm{kg} \mathrm{d} w$ | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| 1,2-Dichloropropane | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | <5.5 | jxc | SW | 8260A |
| 1,3-Dichloropropane | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| 2,2-Dichloropropane | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| 1،1-Dichloropropene | $<5.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.5$ | $u g / \mathrm{kg} \mathrm{d} w$ | 08/28/2001 | 1487 | <5.5 | jxc | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| Ethylbenzene | $<5.5$ | $u g / \mathrm{kg}$ dw | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| Hexachlorobutadiene | $<5.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 1487 | <5.5 | jxc | SW | 8260A |
| n -Hexane | $<21.8$ | ug/kg dw | 08/28/2001 | 1487 | $<21.8$ | jxc | SW | 8260A |
| 2-Hexanone | $<54.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/28/2001 | 1487 | $<54.5$ | jxc | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| p-Isopropyltoluene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 1487 | <5.5 | jxc | SW | 8260A |
| Bromomethane | $<10.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 1487 | $<10.9$ | jxc | SW | 8260A |
| Methylene Chloride | $<10.9$ | ug/kg dw | 08/28/2001 | 1487 | $<10.9$ | jxc | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.5$ | ug/kg dw | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | <54.5 | ug/kg dw | 08/28/2001 | 1487 | $<54.5$ | jxc | Sw | 8260A |
| n -Propylbenzene | < 5.5 | ug/kg dw | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |
| Styrene | <5.5 | ug/kg dw | 08/28/2001 | 1487 | $<5.5$ | jxc | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15425
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 702160

SAMPLE DESCRIPTION
SBIO02:HMW15S:S040050:428

DATE/TIME TAKEN 08/23/2001 07:50


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result |  | Date | Batch | Batch | Reporting Analyst |


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 702160 | SBIO02:HMW15S:S040050:428 |

DATE/TIME TAKEN 08/23/2001 07:50

| Benzo (a)anthracene | 7,880 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/31/2001 | 956 | 1479 | <3,600 | jes | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benzo (b) fluoranthene | 10,800 | ug/kg dw | 08/31/2001 | 956 | 1479 | <3,600 | jcs | Sw 8270C |
| Benzo (k) fluoranthene | 2,990 | ug/kg dw | 08/29/2001 | 956 | 1480 | <360 | jrw | SW 8270C |
| Benzo (a) pyrene | 7,610 | ug/kg dw | 08/31/2001 | 956 | 1479 | $<1,740$ | jes | SW 8270C |
| Benzyl alcohol | <360 | ug/kg dw | 08/29/2001 | 956 | 1480 | <360 | jrw | SW 8270C |
| Benzyl butyl phthalate | <360 | ug/kg dw | 08/29/2001 | 956 | 1480 | $<360$ | jrw | SW 8270C |
| Bis(2-chloroethyl) ether | <360 | ug/kg dw | 08/29/2001 | 956 | 1480 | $<360$ | jrw | SW 8270C |
| Bis (2-chloroethoxy) methane | $<360$ | ug/kg dw | 08/29/2001 | 956 | 1480 | $<360$ | jrw | SW 8270C |
| Bis (2-ethylhexyl) phthalate | <360 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1480 | $<360$ | jrw | SW 8270C |
| 2,2'-oxybis(1-Chloropropane) | $<360$ | ug/kg dw | 08/29/2001 | 956 | 1480 | $<360$ | jrw | SW 8270C |
| 4-Bromophenyl phenyl ether | <360 | ug/kg dw | 08/29/2001 | 956 | 1480 | <360 | jrw | SW 8270C |
| 4-Chloroaniline | $<360$ | ug/kg dw | 08/29/2001 | 956 | 1480 | $<360$ | jrw | SW 8270C |
| 2-Chloronaphthalene | $<360$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1480 | $<360$ | jxw | SW 8270C |
| Chrysene | 7,670 | ug/kg dw | 08/31/2001 | 956 | 1479 | <3,600 | jcs | SW 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | 410 | $u g / \mathrm{kg}$ dw | 08/29/2001 | 956 | 1480 | $<180$ | jrw | S* 8270C |
| Dibenzofuran | 450 | ug/kg dw | 08/29/2001 | 956 | 1480 | $<360$ | jrw | SW 8270C |
| 1,2-Dichlorobenzene | $<360$ | ug/kg dw | 08/29/2001 | 956 | 1480 | <360 | jrw | SW 8270C |
| 1,3-Dichlorobenzene | $<360$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1480 | $<360$ | jrw | SW 8270C |
| 1,4-Dichlorobenzene | $<360$ | ug/kg dw | 08/29/2001 | 956 | 1480 | <360 | jrw | SN 8270C |
| 3,3'-Dichlorobenzidine | $<720$ | ug/kg dw | 08/29/2001 | 956 | 1480 | <720 | jrw | SW 8270C |
| Diethyl phthalate | $<360$ | $u \mathrm{~g} / \mathrm{kg}$ dw | 08/29/2001 | 956 | 1480 | $<360$ | jrw | SW 8270C |
| Dimethyl phthalate | $<360$ | ug/kg dw | 08/29/2001 | 956 | 1480 | <360 | jrw | SW 8270C |
| 2,4-Dinitrotoluene | $<360$ | ug/kg dw | 08/29/2001 | 956 | 1480 | $<360$ | jrw | SW 8270C |
| 2,6-Dinitrotoluene | $<360$ | ug/kg dw | 08/29/2001 | 956 | 1480 | <360 | jrw | SW 8270C |
| Di-n-octylphthalate | <360 | ug/kg dw | 08/29/2001 | 956 | 1480 | <360 | jrw | SW 8270C |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15425
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION

SBI002:HMW15S:S040050:428
DATE/TIME TAKEN
08/23/2001 07:50

| Fluoranthene | 13.500 | ug/kg dw | 08/31/2001 | 956 | 1479 | <3,600 | jcs | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fluorene | 636 | ug/kg dw | 08/29/2001 | 956 | 1480 | <360 | jrw | SW 8270C |
| Hexachlorobenzene | $<360$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1480 | $<360$ | jrw | SW 8270C |
| Hexachloro-1, 3-butadiene | $<360$ | ug/kg dw | 08/29/2001 | 956 | 1480 | <360 | jxw | SW 8270C |
| Hexachlorocyclopentadiene | $<720$ | ug/kg dw | 08/29/2001 | 956 | 1480 | $<720$ | jrw | SW 8270C |
| Hexachloroethane | <360 | ug/kg dw | 08/29/2001 | 956 | 1480 | $<360$ | jrw | SW 8270C |
| Indeno (1, 2,3-cd) pyrene | 1,180 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1480 | $<360$ | jrw | SW 8270C |
| Isophorone | <360 | ug/kg dw | 08/29/2001 | 956 | 1480 | <360 | jrw | SW 8270C |
| Naphthalene | <360 | ug/kg dw | 08/29/2001 | 956 | 1480 | $<360$ | jrw | SW 8270C |
| Nitrobenzene | <360 | ug/kg dw | 08/29/2001 | 956 | 1480 | $<360$ | jrw | SW 8270C |
| N-Nitrosodi-n-propylamine | <360 | ug/kg dw | 08/29/2001 | 956 | 1480 | $<360$ | jrw | SW 8270C |
| Phenanthrene | 6,660 | ug/kg dw | 08/31/2001 | 956 | 1479 | <3,600 | jcs | SW 8270C |
| Pyrene | 15,500 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/31/2001 | 956 | 1479 | <3,600 | jcs | SW 8270C |
| 1,2,4-Trichlorobenzene | <360 | ug/kg dw | 08/29/2001 | 956 | 1480 | <360 | jrw | SW 8270C |
| Surrogate: d5-Nitrobenzene | 80 | \% | 08/29/2001 | 956 | 1480 |  | jrw | SW 8270C |
| Surrogate: 2-Fluorobiphenyl | 104 | \% | 08/29/2001 | 956 | 1480 |  | jrw | SW 8270C |
| Surrogate: d14-Terphenyl | 65 | 8 | 08/29/2001 | 956 | 1480 |  | jrw | SW 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |
| Benzoic Acid | <1,800 | ug/kg dw | 08/29/2001 | 956 | 1480 | <1,800 | jrw | SW 8270C |
| 4-Chloro-3-methylphenol | <360 | ug/kg dw | 08/29/2001 | 956 | 1480 | <360 | jrw | SW 8270C |
| 2-Chlorophenol | $<360$ | ug/kg dw | 08/29/2001 | 956 | 1480 | $<360$ | jrw | SW 8270C |
| 2,4-Dichlorophenol | $<360$ | ug/kg dw | 08/29/2001 | 956 | 1480 | <360 | jrw | SW 8270C |
| 2.4-Dimethylphenol | <360 | ug/kg dw | 08/29/2001 | 956 | 1480 | $<360$ | jrw | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | <360 | ug/kg dw | 08/29/2001 | 956 | 1480 | <360 | jrw | SW 8270c |

## ANALYTICAL REPORT



## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>09/05/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.15425
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION
702161 SBI002:TB1:W082301:428
DATE/TIME TAKEN
08/23/2001

| 8260 - SW846 (AQ) | Complete |  | 08/27/2001 | 3525 | Complete | mrh |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | <20.0 | ug/L | 08/27/2001 | 3525 | <20.0 | mrh | SW 8260A |
| Benzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| tert-Butylbenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| sec-Butylbenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW 8260A |
| n-Butylbenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| Bromochloromethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrb | SW 8260A |
| Bromodichloromethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW 8260A |
| Bromoform | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | $m \times \mathrm{h}$ | SW 8260A |
| Bromobenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 08/27/2001 | 3525 | $<12.5$ | mrh | SW 8260A |
| Carbon disulfide | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| Carbon tetrachloride | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW 8260A. |
| Chlorobenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| Chloroethane | <5.0 | ug/L | 08/27/2001 | 3525 | <5.0 | mrh | SW 8260A |
| 2-Chlorotoluene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| 4-Chlorotoluene | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW 8260A |
| Chloroform | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | wreh | SW 8260A |
| Chloromethane | $<5.0$ | ug/L | 08/27/2001 | 3525 | <5.0 | mrs | SW 8260A |
| Dibromochloromethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| Dibromomethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | SW 8260A |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>09/05/2001 6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.15425

## Client Project ID: South Bend Indiana SBI002



| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1.2-Dichloroethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| cis-1.2-Dichloroethene | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW | 8260A |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW | 8260A |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW | 8260A |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW | 8260A |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Ethylbenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Hexachlorobutadiene | $<5.0$ | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | SW | 8260A |
| n -Hexane | $<5.0$ | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | SW | 8260A |
| 2-Hexanone | $<12.5$ | ug/L | 08/27/2001 | 3525 | $<12.5$ | mrh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW | 8260A |
| p-Isopropyltoluene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Bromomethane | $<5.0$ | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | SW | 8260A |
| Methylene Chloride | $<5.0$ | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 08/27/2001 | 3525 | $<12.5$ | mrh | SW | 8260A |
| n-Propylbenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Styrene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
09/05/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15425
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting | Analyst |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |
| :--- | :--- | :--- |
| 702161 | SBIOO2:TB1:W082301:428 |


| Naphthalene | $<5.0$ | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW | 8260A |
| Tetrachloroethene | $<1.0$ | ug/i | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Toluene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | Sw | 8260A |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrs | SW | 8260A |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | $m \times h$ | SW | 8260A |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrin | SW | 8260A |
| Trichloroethene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mor | SW | 8260A |
| Trichlorofluoromethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 08/27/2001 | 3525 | <5.0 | mrh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mre | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Vinyl Acetate | $<5.0$ | ug/L | 08/27/2001 | 3525 | <5.0 | $m \times \mathrm{h}$ | SW | 8260A |
| Vinyl Chloride | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW | 8260A |
| Xylenes | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | Sw | 8260A |
| d4-1,2-Dichloroethane (surr) | 98 | \% | 08/27/2001 | 3525 |  | mrh | SW | 8260A |
| Dibromofluoromethane (surr) | 100 | 8 | 08/27/2001 | 3525 |  | mrh | SW | 8260A |
| d8-Toluene (surr) | 101 | 4 | 08/27/2001 | 3525 |  | mirh | Sw | 8260A |
| Bromofluorobenzene (surr) | 102 | \% | 08/27/2001 | 3525 |  | mrh | SW | 8260A |

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15425

## Client Project ID: South Bend Indiana SBI002



## SAMPLE NO. SAMPLE DESCRIPTION 702162

09/05/2001 Initials Method Reference

DATE/TIME TAKEN 08/23/2001 16:10

| Dry Weight | 93.3 | \% | 08/29/2001 |  | 1487 |  | mhg | SM 2540 G . |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prep, BNA Non-Aq | Complete |  | 08/27/2001 | 956 |  | Complete | mlr |  | 625; | SW 3545 |
| BASE NEUT. COMPS. -8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Acenaphthene | <354 | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dmg | S | 82700 |  |
| Acenaphthylene | $<354$ | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dmg | S | 8270 C |  |
| Anthracene | $<354$ | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dmg | S | 82700 |  |
| Benzo (a) anthracene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1478 | <354 | dmg | 5 | 82700 |  |
| Benzo (b) fluoranthene | $<354$ | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dmg | S | 8270 C |  |
| Benzo(k) fluoranthene | <354 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1478 | $<354$ | dmg | S | 82700 |  |
| Benzo (a) pyrene | $<177$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1478 | $<177$ | dimg | S | 82700 |  |
| Benzyl alcohol | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1478 | <354 | dmg | S | 8270 C |  |
| Benzyl butyl phthalate | $<354$ | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dmg | S | 82700 |  |
| Bis (2-chloroethyl) ether | $<354$ | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | ding | S | 82700 |  |
| Bis (2-chloroethoxy)methane | $<354$ | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dmg | S | 82700 |  |
| Bis (2-ethylhexyl) phthalate | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1478 | <354 | dmg | S | 82700 |  |
| 2,2'-oxybis (1-Chloropropane) | <354 | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | ding | 5 | 82700 |  |
| 4-Bromophenyl phenyl ether | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1478 | <354 | dmg | S | 82700 |  |
| 4-Chloroaniline | $<354$ | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dmg | S | 82700 |  |
| 2-Chloronaphthalene | $<354$ | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dmg | S | 82700 |  |
| Chrysene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1478 | <354 | dmg | S | 82700 |  |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<177$ | ug/kg dw | 08/29/2001 | 956 | 1478 | $<177$ | dimg | S | 82700 |  |
| Dibenzofuran | <354 | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dmg |  | 82700 |  |
| 1,2-Dichlorobenzene | <354 | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dmg |  | 82700 |  |
| 1,3-Dichlorobenzene | <354 | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dmg |  | 82700 |  |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

09/05/2001

Job Number: 01.15425
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batch | Reporting Analyst |  |
| Analyzed | Number | Number Limit | Initials Method Reference |  |

SAMPLE NO. 702162

## SAMPLE DESCRIPTION

SBI002:SB26A:S020040:505

DATE/TIME TAKEN 08/23/2001 16:10

| 1,4-Dichlorobenzene | <354 | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dmg | Sw | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3,3'-Dichlorobenzidine | $<707$ | ug/kg dw | 08/29/2001 | 956 | 1478 | $<707$ | dmg | SW | 8270C |
| Diethyl phthalate | $<354$ | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dmg | SW | 8270 C |
| Dimethyl phthalate | <354 | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dmg | SW | 8270C |
| 2.4-Dinitrotoluene | $<354$ | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dmg | SW | 8270C |
| 2,6-Dinitrotoluene | <354 | ug/kg dw | 08/29/2001 | 956 | 1478 | $<354$ | dmg | SW | 8270C |
| Di-n-octylphthalate | $<354$ | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dmg | SW | 82700 |
| Fluoranthene | <354 | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dimg | Sw | 8270 C |
| Fluorene | <354 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/29/2001 | 956 | 1478 | <354 | dmg | SW | 8270 C |
| Hexachlorobenzene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1478 | $<354$ | dmg | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<354$ | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | ding | SW | 8270 C |
| Hexachlorocyclopentadiene | $<707$ | ug/kg dw | 08/29/2001 | 956 | 1478 | $<707$ | dmg | SW | 8270C |
| Hexachloroethane | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1478 | <354 | dmg | SW | 8270 C |
| Indeno (1, 2, 3-cd) pyrene | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1478 | <354 | dmg | SW | 8270 C |
| Isophorone | $<354$ | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dmg | sw | 8270 C |
| Naphthalene | $<354{ }^{\circ}$ | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dmg | SW | 8270 C |
| Nitrobenzene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1478 | <354 | dimg | SW | 8270 C |
| N-Nitrosodi-n-propylamine | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1478 | <354 | dmg | SW | 82700 |
| Phenanthrene | <354 | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dimg | SW | 8270 C |
| Pyrene | <354 | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dmg | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<354$ | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dimg | SW | 8270 C |
| Surrogate: ds-Nitrobenzene | 72 | 8 | 08/29/2001 | 956 | 1478 |  | dmg | SW | 82700 |
| Surrogate: 2-Fluorobiphenyl | 79 | 8 | 08/29/2001 | 956 | 1478 |  | ding | SW | 8270 C |
| Surrogate: di4-Terphenyl | 83 | 8 | 08/29/2001 | 956 | 1478 |  | dimg | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman

## SAMPLE NO. SAMPLE DESCRIPTION 702162

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15425
Client Project ID: South Bend Indiana SBIOO2

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |

09/05/2001
<1,770
$<354$
$<354$
$<354$
$<354$
$<354$
$<354$
$<35$
$<354$

## $<354$

$<354$
$<354$
$<354$
67
63
55

| Benzoic Acid | <1,770 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1478 | $<1,770$ | dmg | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Chloro-3-methylphenol | <354 | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dmg | SW | 8270C |
| 2-Chlorophenol | <354 | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dmg | SW | 8270 C |
| 2.4-Dichlorophenol | $<354$ | ug/kg dw | 08/29/2001 | 956 | 1478 | $<354$ | dmg | SW | 8270C |
| 2,4-Dimethylphenol | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1478 | <354 | dmg | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<354$ | ug/kg dw | 08/29/2001 | 956 | 1478 | $<354$ | dmg | Sw | 8270 C |
| 2-Methylphenol | <354 | ug/kg dw | 08/29/2001 | 956 | 1478 | <354 | dmg | SW | 8270C |
| meta \& para-Methylphenol | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1478 | $<354$ | dmg | SW | 8270C |
| 2-Nitrophenol | $<354$ | ug/kg dw | 08/29/2001 | 956 | 1478 | $<354$ | dmg | SW | 8270C |
| Pentachlorophenol | <354 | ug/kg dw | 08/29/2001 | 956 | 1478 | $<354$ | dmg | SW | $8270{ }^{\text {c }}$ |
| Phenol | $<354$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/29/2001 | 956 | 1478 | <354 | dmg | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<354$ | ug/kg dw | 08/29/2001 | 956 | 1478 | $<354$ | dmg | SW | $8270{ }^{\text {c }}$ |
| 2,4,6-Trichlorophenol | $<354$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1478 | $<354$ | dmg | SW | 8270C |
| Surrogate: d6-Phenol | 67 | \% | 08/29/2001 | 956 | 1478 |  | dmg | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 63 | 8 | 08/29/2001 | 956 | 1478 |  | dmg | SW | 8270C |
| Surrogate: Tribromophenol | 55 | 8 | 08/29/2001 | 956 | 1478 |  | dmg | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

09/05/2001

Job Number: 01.15425
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO 702163

SAMPLE DESCRIPTION
SBI002:SB27A:S020040:505

DATE/TIME TAKEN 08/23/2001 16:20


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15425
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | SR2 | PIION |  |  |  |  | DAT | /TIME | TAKEN |
| 702163 |  | SBI002: | 7A | 0200 | :505 |  |  |  | $08 /$ | 3/2001 | 1 16:20 |


| 1,4-Dichlorobenzene | $<372$ | ug/kg ow | 08/29/2001 | 956 | 1480 | $<372$ | Jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3,3'-Dichlorobenzidine | $<745$ | ug/kg dw | 08/29/2001 | 956 | 1480 | $<745$ | jrw | SW 8270C |
| Diethyl phthalate | $<372$ | ug/kg dw | 08/29/2001 | 956 | 1480 | $<372$ | jrw | SW B270C |
| Dimethyl phthalate | $<372$ | ug/kg dw | 08/29/2001 | 956 | 1480 | <372 | jrw | SW 8270C |
| 2,4-Dinitrotoluene | $<372$ | $u g / \mathrm{kg}$ dw | 08/29/2001 | 956 | 1480 | $<372$ | jrw | SW B270C |
| 2,6-Dinitrotoluene | $<372$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1480 | $<372$ | JTw | SW 8270C |
| Di-n-octylphthalate | $<372$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1480 | $<372$ | jrw | SW 8270C |
| Fluoranthene | 2.130 | ug/kg dw | 08/29/2001 | 956 | 1480 | $<372$ | jrw | SW 8270C |
| Fluorene | $<372$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1480 | $<372$ | jrw | SW 8270C |
| Hexachlorobenzene | $<372$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1480 | $<372$ | jrw | SW 8270C |
| Hexachloro-1, 3-butadiene | $<372$ | ug/kg dw | 08/29/2001 | 956 | 1480 | $<372$ | jrw | SW 8270C |
| Hexachlorocyclopentadiene | $<745$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1480 | $<745$ | jrw | SW 8270C |
| Hexachloroethane | $<372$ | ug/kg dw | 08/29/2001 | 956 | 1480 | $<372$ | jrw | SW 8270C |
| Indeno(1,2,3-cd) pyrene | $<372$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1480 | $<372$ | jrw | SW 8270C |
| Isophorone | $<372$ | ug/kg dw | 08/29/2001 | 956 | 1480 | <372 | jrw | SW 8270C |
| Naphthalene | $<372$ | ug/kg dw | 08/29/2001 | 956 | 1480 | $<372$ | jrw | SW 8270C |
| Nitrobenzene | $<372$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/29/2001 | 956 | 1480 | $<372$ | jrw | SW 8270C |
| N-Nitrosodi-n-propylamine | $<372$ | ug/kg dw | 08/29/2001 | 956 | 1480 | $<372$ | jrw | SW 8270C |
| Phenanthrene | 1.170 | ug/kg dw | 08/29/2001 | 956 | 1480 | $<372$ | jrw | SW 8270 C |
| Pyrene | 1,790 | ug/kg dw | 08/29/2001 | 956 | 1480 | $<372$ | jrw | SW 8270C |
| 1,2,4-Trichlorobenzene | $<372$ | ug/kg dw | 08/29/2001 | 956 | 1480 | $<372$ | jrw | SW 8270C |
| Surrogate: d5-Nitrobenzene | 82 | \% | 08/29/2001 | 956 | 1480 |  | jrw | SW 8270C |
| Surrogate: 2-Fluorobiphenyl | '92 | \% | 08/29/2001 | 956 | 1480 |  | jrw | SW 8270C |
| Surrogate: d14-Terphenyl | 95 | \% | 08/29/2001 | 956 | 1480 |  | jrw | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin) 09/05/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15425
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch |  |
| Batch | Reporting Analyst |  |  |
| Rumber | Number Limit | Initials Method Reference |  |

## SAMPLE NO. SAMPLE DESCRIPTION 702163 <br> SBI002:SB27A:S020040:505



## QUALITY CONTROL FLAG DEFINITIONS

Job Number: 01.15425
(*) Indicates an out-of-control QC. The analytical data was reported based on other supporting quality control information.
(Note) Indicates to review the notes and comments section of the analytical report as there is additional information concerning this analytical result.
(MS) Indicates that the Matrix Spike (MS) was out of statistical advisory limits.
(MSD) Indicates that the Matrix Spike Duplicate (MSD) was out of statistical advisory limits.
(RPD) Indicates that the Relative Percent Difference (RPD) for the MS/MSD pair was outside of statistical advisory limits.
(SS) Indicates that the MS and MSD were out of statistical advisory limits.
(SSR) Indicates that the MS, MSD and RPD were out of statistical advisory limits.
(MSR) Indicates that the MS and RPD were out of statistical advisory limits.
(MSDR) Indicates that the MSD and RPD were out of statistical advisory limits.
(DL) Indicates that the MS and MSD were diluted out and the percent recoveries of the spikes could not be calculated.
(LS) Indicates that statistical accuracy and precision data is not available for spike concentrations which are $<1 / 4$ of the sample amount. Care should be used in interpreting this data.
(J) Indicates estimated concentration due to internal standard areas or surrogate recoveries outside of control limits. A sample matrix effect is usually indicated.
(DW) Indicates Dry Weight.
Analytical Reporting Limits
The reporting limits listed for non-aqueous samples in the analytical report section are Practical Quantitation Limits (PQLs). These PQLs are based upon a typical standard weight used for a non-aqueous sample. The reporting limit for a sample may be different from the PQL listed depending upon the actual weight of sample used, the samples moisture content and any dilutions used during the analysis.



## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)

09/10/2001 6130 Wilcox Rd. Dublin, OH 43016

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

Sample Number

701756 SBIO02:HMW24D:S005020:428
701757 SBI002:HMW24DD:S005020:428
701758 SBI002:FB1:W082101:428
701759 SBI002:TB1:W082101:428

Date Taken 08/21/2001 08/21/2001 08/22/2001 08/21/2001 08/22/2001 08/21/2001 08/22/2001

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted only entirety.

Enclosure


## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016
$09 / 10 / 2001$

Job Number: 01.15261
Client Project ID: South Bend Indiana SBI002


SAMPLE DESCRIPTION SBI002:HMW24D:S005020:428

DATE/TIME TAKEN 08/21/2001 07:00

| Dry Weight | 85.2 | $\%$ | 08/28/2001 |  | 1486 |  | ming |  | 2540 G |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 09/04/2001 |  | 1254 | Complete | emd | SW | 60108 |
| Arsenic, ICP | 9.2 | mg/kg dw | 09/04/2001 | 909 | 2989 | <7.6 | emd | SW | 6010B |
| Barium, ICP | 833 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/04/2001 | 909 | 2920 | $<1.5$ | end | SW | 6010B |
| Cadmium, ICP | $<2.2$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/04/2001 | 909 | 2902 | $<2.2$ | emd | SW | 6010B |
| Chromium, ICP | 26 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/04/2001 | 909 | 2890 | $<3.1$ | emd | SW | 6010B |
| Lead, ICP | 5,970 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/04/2001 | 909 | 2891 | $<6.1$ | emd | SW | 6010B |
| Mercury, CVAA | 0.558 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 614 | 632 | $<0.018$ | epk | SW | 7471A |
| Selenium, ICP | $<7.6$ | $\mathrm{mg} / \mathrm{kg} \mathrm{d} w$ | 09/04/2001 | 909 | 2969 | <7.6 | emd | SW | 6010B |
| Silver, ICP | $<3.1$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/04/2001 | 909 | 2922 | $<3.1$ | end | SW | 6010B |
| ICP Digestion, Nonaqueous | Complete |  | 08/23/2001 | 909 |  | Complete | mrt | SW | 3050B |
| Mercury Digestion, Non-Aq | Complete |  | 08/24/2001 | 614 |  | Complete | clm | SW | 7471A |
| VOLATILE COMPOUNDS-8260 NON-Aq |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/23/2001 |  | 1481 | Complete | bmh |  |  |
| Acetone | $<117$ | ug/kg dw | 08/23/2001 |  | 1481 | $<117$ | bmh | SW | 8260A |
| Benzene | $<5.9$ | ug/kg dw | 08/23/2001 |  | 1481 | $<5.9$ | bmh | SW | 8260A |
| tert-Butylbenzene | $<5.9$ | ug/kg dw | 08/23/2001 |  | 1481 | $<5.9$ | bmh | SW | 8260A |
| sec-Butylbenzene | $<5.9$ | ug/kg dw | 08/23/2001 |  | 1481 | $<5.9$ | bmh | SW | 8260A |
| n -Butylbenzene | $<5.9$ | ug/kg dw | 08/23/2001 |  | 1481 | $<5.9$ | bmh | Sh | 8260A |
| Bromochloromethane | $<5.9$ | ug/kg dw | 08/23/2001 |  | 1481 | $<5.9$ | bmh | SW | 8260A |
| Bromodichloromethane | $<5.9$ | ug/kg dw | 08/23/2001 |  | 1481 | $<5.9$ | bmh | SW | 8260A |
| Bromoform | $<5.9$ | ug/kg dw | 08/23/2001 |  | 1481 | $<5.9$ | bmh | SH | 8260A |
| Bromobenzene | $<5.9$ | ug/kg dw | 08/23/2001 |  | 1481 | <5.9 | bmh | SW | 8260A |
| 2-Butanone (MEK) | $<59$ | ug/kg dw | 08/23/2001 |  | 1481 | <59 | bmh | SH | 8260A |
| Carbon disulfide | <5.9 | ug/kg dw | 08/23/2001 |  | 1481 | $<5.9$ | bmh | SW | 8260A |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

09/10/2001

Job Number: 01.15261


SAMPLE NO. SAMPLE DESCRIPTION 701756

SBIOO2:HMW24D:SO05020:428

DATE/TIME TAKEN 08/21/2001 07:00

| Carbon tetrachloride | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chlorobenzene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| Chloroethane | $<11.7$ | $u g / \mathrm{kg}$ dw | 08/23/2001 | 1481 | $<11.7$ | bmh | SW | 8260A |
| 2-Chlorotoluene | $<5.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | $<5.9$ | bmb | SW | 8260A |
| 4-Chlorotoluene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| Chloroform | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | sw | 8260A |
| Chloromethane | $<11.7$ | ug/kg dw | 08/23/2001 | 1481 | $<11.7$ | brih | SW | 8260A |
| Dibromochloromethane | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | brih | SW | 8260A |
| Dibromomethane | <5.9 | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| Dichlorodifluoromethane | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.9$ | $\dot{u g} / \mathrm{kg}$ dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | < 5.9 | bmh | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| 1,1-Dichloroethane | $<5.9$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | <5.9 | bmh | Sw | 8260A |
| 1,2-Dichloroethane | <5.9 | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<5.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| 2,2-Dichloropropane | $<5.9$ | $u g / \mathrm{kg}$ dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | <5.9 | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | Sw | 8260A |
| trans-1,3-Dichloropropene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| Ethylbenzene | <5.9 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | <5.9 | bmh | SW | 8260A |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

09/10/2001

Job Number: 01.15261

SAMPLE NO. SAMPLE DESCRIPTION
701756 SBIOO2:HMW24D:S005020:428

| Hexachlorobutadiene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $n$-Hexane | $<23.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | $<23.5$ | bmh | SW | 8260A |
| 2-Hexanone | $<58.7$ | $u g / \mathrm{kg}$ dw | 08/23/2001 | 1481 | $<58.7$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| p-Isopropyltoluene | <5.9 | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | Sw | 8260A |
| Bromomethane | $<11.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | $<11.7$ | bmat | SW | 8260A |
| Methylene Chloride | $<11.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | $<11.7$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<58.7$ | ug/kg dw | 08/23/2001 | 1481 | $<58.7$ | bmh | SW | 8260A |
| n-Propylbenzene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| Styrene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| Naphthalene | <5.9 | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | <5.9 | bmh | SW | 8260A |
| Tetrachloroethene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| Toluene | $<5.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| 1,2,4-Trichiorobenzene | $<5.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | <5.9 | bmh | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | <5.9 | brih | SW | 8260A |
| Trichloroethene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | <5.9 | bmh | SW | 8260A |
| Trichlorofluoromethane | $<5.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | <5.9 | bmh | SW | 8260A |
| 1,2,3-Trichloropropane | <5.9 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | <5.9 | bmh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | Sw | 8260A |
| Vinyl Acetate | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| Vinyl Chloride | $<2.3$ | ug/kg dw | 08/23/2001 | 1481 | <2.3 | bmh | SW | 8260 A |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman

HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.15261
Client Project ID: South Bend Indiana SBI002



09/10/2001
imit
Initials Method Reference
DATE/TIME TAKEN 08/21/2001 07:00

| Xylenes, Total | $<5.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | < 5.9 | bmh | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d4-1,2-Dichloroethane (surr) | 97 | $\%$ | 08/23/2001 | 1481 |  | bmh | SW 8260A |
| Dibromofluoromethane (surr) | 94 | \% | 08/23/2001 | 1481 |  | bmh | SW 8260A |
| d8-Toluene (gurr) | 95 | 8 | 08/23/2001 | 1481 |  | bmh | SW 8260A |
| Bromofluorobenzene (surr) | 94 | \% | 08/23/2001 | 1481 |  | bmh | SW 8260A |

SAMPLE NO. SAMPLE DESCRIPTION 701757 SBI002:HMW24DD:S005020:428

| 85.0 | 8 | 08/28/2001 |  | 1486 |  | mhg | SM | 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Complete |  | 09/04/2001 |  | 1254 | Complete | emd | SW | 6010B |
| $<12$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/04/2001 | 909 | 2989 | $<12$ | emd | SW | 6010B |
| 1,260 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/04/2001 | 909 | 2920 | $<1.5$ | emd | SW | 60108 |
| <2.4 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/04/2001 | 909 | 2902 | <2.4 | emd | sw | 60108 |
| 30.0 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/04/2001 | 909 | 2890 | $<3.2$ | emd | SW | 6010B |
| 13,600 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/04/2001 | 909 | 2891 | $<6.2$ | emd | SW | 6010B |
| 0.821 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 614 | 632 | $<0.019$ | epk | SW | 7471A |
| $<7.8$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/04/2001 | 909 | 2969 | $<7.8$ | emd | SW | 6010B |
| $<3.2$ | $\mathrm{mg} / \mathrm{kg}$ dw | 09/04/2001 | 909 | 2922 | $<3.2$ | emd | SW | 6010B |
| Complete |  | 08/23/2001 | 909 |  | Complete | mrt | SW | 3050B |
| Complete |  | 08/24/2001 | 614 |  | Complete | clm | SW | 7471A |

VOLATILE COMPOUNDS-8260 NOR-Aq

# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

09/10/2001

Job Number: 01.15261
Client Project ID: South Bend Indiana SBI002


| 8260 - SW846 (Non-aq) | Complete |  | 08/23/2001 | 1481 | Complete | bmh |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | $<118$ | ug/kg dw | 08/23/2001 | 1481 | <118 | bmh | SW 8260A |
| Benzene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| tert-Butylbenzene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| sec-Butylbenzene | $<5.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| n-Butylbenzene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | < 5.9 | bmh | SW 8260A |
| Bromochloromethane | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | <5.9 | bmh | SW 8260A |
| Bromodichloromethane | $<5.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | <5.9 | bmh | SW 8260A |
| Bromoform | <5.9 | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| Bromobenzene | <5.9 | ug/kg dw | 08/23/2001 | 1481 | <5.9 | bmh | SW 8260A |
| 2-Butanone (MEK) | $<59$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | $<59$ | bmh | SW 8260A |
| Carbon disulfide | <5.9 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | <5.9 | bmh | SW 8260A |
| Carbon tetrachloride | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | <5.9 | bma | SW 8260A |
| Chlorobenzene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| Chloroethane | $<11.8$ | ug/kg dw | 08/23/2001 | 1481 | $<11.8$ | bmh | SW 8260A |
| 2-Chlorotoluene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| 4-Chlorotoluene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| Chloroform | $<5.9$ | $u g / \mathrm{kg}$ dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| Chloromethane | $<11.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | $<11.8$ | bmh | SW 8260A |
| Dibromochloromethane | $<5.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| Dibromomethane | $<5.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| Dichlorodifluoromethane | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| 1;2-Dichlorobenzene | $<5.9$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| 1,3-Dichlorobenzene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| 1.4-Dichlorobenzene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | <5.9 | bmh | SW 8260A |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15261
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION 701757 <br> SBIO 02 :HMW24DD:S005020:428

DATE/TIME TAKEN 08/21/2001 07:00

| -,1-Dichloroethane | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane | <5.9 | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| 1,1-Dichloroethene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| Cis-1,2-Dichloroethene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| trans-1,2-Dichloroethene | < 5.9 | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| 1,2-Dichloropropane | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| 1,3-Dichloropropane | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| 2,2-Dichloropropane | <5.9 | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| 1,1-Dichloropropene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| Ethylbenzene | $<5.9$ | $u g / \mathrm{kg}$ dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| Hexachlorobutadiene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| n -Hexane | $<23.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | $<23.5$ | bmh | SW | 8260A |
| 2-Hexanone | $<58.8$ | ug/kg dw | 08/23/2001 | 1481 | $<58.8$ | bmh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| p -Isopropyltoluene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| Bromomethane | $<11.8$ | ug/kg dw | 08/23/2001 | 1481 | $<11.8$ | bmh | SW | 8260A |
| Methylene Chloride | $<11.8$ | ug/kg dw | 08/23/2001 | 1481 | $<11.8$ | bmh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<58.8$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | $<58.8$ | bmh | SW | 8260A |
| $n$-Propylbenzene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| Styrene | <5.9 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| Naphthalene | $<5.9$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | $<5.9$ | bmh | sw | 8260A |
| 1,1,2,2-Tetrachlo | <5.9 |  | 08/23/2001 | 1481 |  |  |  |  |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
09/10/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15261
Client Project ID: South Bend Indiana SBIOO2


SAMPLE NO. 701757

SAMPLE DESCRIPTION
SBIO02:HMW24DD:S005020:428

DATE/TIME TAKEN 08/21/2001 07:00

| Tetrachloroethene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Toluene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| 1,2,4-Trichlorobenzene | <5.9 | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| 1,1,1-Trichloroethane | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| 1,1,2-Trichloroethane | <5.9 | $u g / \mathrm{kg}$ dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| Trichloroethene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| Trichlorofluoromethane | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| 1,2,3-Trichloropropane | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bma | SW 8260A |
| 1,2,4-Trimethylbenzene | $<5.9$ | $u g / \mathrm{kg}$ dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| 1,3,5-Trimethylbenzene | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| Vinyl Acetate | $<5.9$ | ug/kg dw | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| Vinyl Chloride | $<2.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | $<2.4$ | bnh | SW 8260A |
| Xylenes, Total | $<5.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/23/2001 | 1481 | $<5.9$ | bmh | SW 8260A |
| d4-1,2-Dichloroethane (surr) | 95 | $\%$ | 08/23/2001 | 1481 |  | bmh | SW 8260A |
| Dibromofluoromethane (surr) | 91 | 8 | 08/23/2001 | 1481 |  | bmh | SW 8260A |
| d8-Toluene (surr) | 93 | 8 | 08/23/2001 | 1481 |  | bmh | SW 8260A |
| Bromofluorobenzene (surr) | 95 | \% | 08/23/2001 | 1481 |  | bmh | SW 8260A |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15261
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |

$\begin{array}{ll}\text { SAMPLE NO. } & \text { SAMPLE DESCRIPTION } \\ 701758 & \text { SBIOO2:FB1:W082101:428 }\end{array}$
DATE/TIME TAKEN 08/21/2001 17:00

| $\triangle$ CPMS TOTAL METALS | Complete |  | 08/29/2001 |  | 2486 | Complete | kmb |  | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | mg/L | 08/29/2001 | 1816 | 3595 | <0.0050 | kmb | SW | 6020 |
| Barium, ICPMS | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 08/29/2001 | 1816 | 3804 | $<0.0050$ | kmb | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 08/29/2001 | 1816 | 3474 | $<0.0010$ | kmb | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 08/29/2001 | 1816 | 3862 | $<0.0050$ | kmb | SW | 6020 |
| Lead, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 08/29/2001 | 1816 | 3552 | $<0.0010$ | kmb | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 08/23/2001 | 1375 | 1317 | $<0.0002$ | epk | Sw | 7470A |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/07/2001 | 735 | 571 | $<0.0050$ | jad | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 08/29/2001 | 1816 | 3807 | <0.0005 | kmb | Sw | 6020 |
| Metals Digestion, ICPMS | Complete |  | 08/28/2001 | 1816 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 08/24/2001 | 735 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 08/23/2001 | 1375 |  | Complete | clm | SW | 7470A |
| VOLATILE COMPOUNDS - 8260 |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/04/2001 |  | 3545 | Complete | dmg |  |  |
| Acetone | <20.0 | ug/L | 09/04/2001 |  | 3545 | $<20.0$ | dmg | SW | 8260A |
| Benzene | $<1.0$ | ug/L | 09/04/2001 |  | 3545 | $<1.0$ | dmg | SW | 8260A |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/04/2001 |  | 3545 | $<1.0$ | dimg | SW | 8260A |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/04/2001 |  | 3545 | <1.0 | ding | SW | 8260A |
| n-Butylbenzene | $<1.0$ | ug/L | 09/04/2001 |  | 3545 | $<1.0$ | dmg | SW | 8260A |
| Bromochloromethane | $<1.0$ | ug/L | 09/04/2001 |  | 3545 | $<1.0$ | dmg | SW | 8260A |
| Bromodichloromethane | $<1.0$ | ug/L | 09/04/2001 |  | 3545 | $<1.0$ | dmg | SW | 8260A |
| Bromoform | $<1.0$ | ug/L | 09/04/2001 |  | 3545 | $<1.0$ | dmg | SW | 8260A |
| Bromobenzene | <1.0 | ug/L | 09/04/2001 |  | 3545 | $<1.0$ | dmg | SW | 8260A |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/04/2001 |  | 3545 | $<12.5$ | dmg | SW | 8260A |
| Carbon disulfide | <1.0 | ug/L | 09/04/2001 |  | 3545 | <1.0 | dmg | SW | 8260A |

# TestAmerica, Incorporated 

ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.15261<br>Client Project ID: South Bend Indiana SBIOO2

09/10/2001

SAMPLE NO. 701758

SAMPLE DESCRIPTION
SBI002:FB1:W082101:428

Prep Run

|  |  | . |  | Prep | Run |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Date | Batch | Batch | Reporting | Analyst |  |
| Result | Flag | Units | Analyzed | Number | Number | Limit | Initials | Method Reference |


| Carbon tetrachloride | $<1.0$ | ug/L | 09/04/2001 | 3545 | $<1.0$ | ding | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chlorobenzene | $<1.0$ | ug/L | 09/04/2001 | 3545 | $<1.0$ | dmg | SW 8260A |
| Chloroethane | < 5.0 | ug/L | 09/04/2001 | 3545 | < 5.0 | dmg | SW 8260A |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/04/2001 | 3545 | $<1.0$ | ding | SW 8260A |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/04/2001 | 3545 | <1.0 | dimg | SW 8260A |
| Chloroform | $<1.0$ | ug/L | 09/04/2001 | 3545 | $<1.0$ | dimg | SW 8260A |
| Chloromethane | $<5.0$ | ug/L | 09/04/2001 | 3545 | <5.0 | dmg | SW 8260A |
| Dibromochloromethane | $<1.0$ | ug/L | 09/04/2001 | 3545 | $<1.0$ | dmg | SW 8260A |
| Dibromomethane | $<1.0$ | ug/L | 09/04/2001 | 3545 | $<1.0$ | dmg | SW 8260A |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/04/2001 | 3545 | $<1.0$ | dmg | SW 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/04/2001 | 3545 | $<5.0$ | ding | SW 8260A |
| 1,2-Dichlorobenzene | <1.0 | ug/L | 09/04/2001 | 3545 | <1.0 | dmg | SW 8260A |
| 1,3-Dichlorobenzene | <1.0 | ug/L | 09/04/2001 | 3545 | $<1.0$ | dmg | SW 8260A |
| 1,4-Dichlorobenzene | $<1.0^{\circ}$ | ug/L | 09/04/2001 | 3545 | $<1.0$ | dmg | SW 8260A |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/04/2001 | 3545 | $<1.0$ | dmg | SW 8260A |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/04/2001 | 3545 | $<1.0$ | dmg | SW 8260A |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/04/2001 | 3545 | $<1.0$ | dmg | SW 8260A |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/04/2001 | 3545 | $<1.0$ | dmg | SW 8260A |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/04/2001 | 3545 | $<1.0$ | dmg | SW 8260A |
| 1,2-Dichloropropane | <1.0 | ug/L | 09/04/2001 | 3545 | $<1.0$ | dimg | SW 8260A |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/04/2001 | 3545 | $<1.0$ | dmg | SW 8260A |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/04/2001 | 3545 | $<1.0$ | dmg | SW 8260A |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/04/2001 | 3545 | $<1.0$ | dmg | SW 8260A |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/04/2001 | 3545 | $<1.0$ | dmg | SW 8260A |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/04/2001 | 3545 | $<1.0$ | dmg | SW 8260A |
| Ethylbenzene | $<1.0$ | ug/L | 09/04/2001 | 3545 | $<1.0$ | dmg | SW 8260A |

DATE/TIME TAKEN 08/21/2001 17:00

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 09/10/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15261
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting | Analyst |


| SAMPLE NO. | SAMPLE DESCRIPTION | DATE/TIME TAKEN |
| :--- | :--- | :--- |
| 701758 | SBIOO2:FB1:W082101:428 | $08 / 21 / 2001$ 17:00 |

s.xachlorobutadiene
n-Hexane
2-Hexanone
Isopropylbenzene (Cumene)
p-Isopropyltoluene
Bromomethane
Methylene Chloride
Methyl t-butyl ether (MTBE)
4-Methyl-2-pentanone (MIBK)
n-Propylbenzene
Styrene
Naphthalene
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethene
Toluene
1,2,4-Trichlorobenzene
1,1,1-Trichloroethane
$1,1,2$-Trichloroethane
Trichloroethene
Trichlorofluoromethane
$1,2,3-T r i c h l o r o p r o p a n e ~$
$1,2,4-T r i m e t h y l b e n z e n e ~$
$1,3,5-T r i m e t h y l b e n z e n e ~$
Vinyl Acetate
Vinyl Chloride

| $<5.0$ | ug/L | $09 / 04 / 2001$ | 3545 | $<5.0$ | dmg | SW 8260A |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $<5.0$ | ug/L | $09 / 04 / 2001$ | 3545 | $<5.0$ | dmg | SW 8260A |
| $<12.5$ | ug/L | $09 / 04 / 2001$ | 3545 | $<12.5$ | dmg | SW 8260A |
| $<1.0$ | ug/L | $09 / 04 / 2001$ | 3545 | $<1.0$ | dmg | SW 8260A |
| $<1.0$ | ug/L | $09 / 04 / 2001$ | 3545 | $<1.0$ | dmg | SW 8260A |
| $<5.0$ | ug/L | $09 / 04 / 2001$ | 3545 | $<5.0$ | dmg | SW 8260A |
| $<5.0$ | ug/L | $09 / 04 / 2001$ | 3545 | $<5.0$ | dmg | SW 8260A |
| $<5.0$ | ug/L | $09 / 04 / 2001$ | 3545 | $<5.0$ | dmg | SW 8260A |
| $<12.5$ | ug/L | $09 / 04 / 2001$ | 3545 | $<12.5$ | dmg | SW 8260A |
| $<1.0$ | ug/L | $09 / 04 / 2001$ | 3545 | $<1.0$ | dmg | SW 8260A |
| $<1.0$ | ug/L | $09 / 04 / 2001$ | 3545 | $<1.0$ | dmg | SW 8260A |
| $<5.0$ | ug/L | $09 / 04 / 2001$ | 3545 | $<5.0$ | dmg | SW 8260A |
| $<1.0$ | ug/L | $09 / 04 / 2001$ | 3545 | $<1.0$ | dmg | SW 8260A |
| $<1.0$ | ug/L | $09 / 04 / 2001$ | 3545 | $<1.0$ | dmg | SW 8260A |
| $<1.0$ | ug/L | $09 / 04 / 2001$ | 3545 | $<1.0$ | dmg | SW 8260A |
| $<1.0$ | ug/L | $09 / 04 / 2001$ | 3545 | $<1.0$ | dmg | SW 8260A |
| $<5.0$ | ug/L | $09 / 04 / 2001$ | 3545 | $<5.0$ | dmg | SW 8260A |
| $<1.0$ | ug/L | $09 / 04 / 2001$ | 3545 | $<1.0$ | dmg | SW 8260A |
| $<1.0$ | ug/L | $09 / 04 / 2001$ | 3545 | $<1.0$ | dmg | SW 8260A |
| $<1.0$ | ug/L | $09 / 04 / 2001$ | 3545 | $<1.0$ | dmg | SW 8260A |
| $<1.0$ | ug/L | $09 / 04 / 2001$ | 3545 | $<1.0$ | dmg | SW 8260A |
| $<5.0$ | ug/L | $09 / 04 / 2001$ | 3545 | $<5.0$ | dmg | SW 8260A |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

09/10/2001

Job Number: 01.15261
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
701758

SBI002: FB1:W082101:428

| Xylenes | $<1.0$ | $u g / L$ | $09 / 04 / 2001$ | 3545 | <1.0 | dmg | SW 8260A |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| d4-1,2-Dichloroethane (surr) | 112 | $*$ | $09 / 04 / 2001$ | 3545 | dmg | SW 8260A |  |
| Dibromofluoromethane (surr) | 105 | $\%$ | $09 / 04 / 2001$ | 3545 | dmg | SW 8260A |  |
| d8-Toluene (surr) | 100 | $\%$ | $09 / 04 / 2001$ | 3545 | dmg | SW 8260A |  |
| Bremofluorobenzene (surr) | 109 |  | $09 / 04 / 2001$ | 3545 | dmg | SW 8260A |  |

DATE/TIME TAKEN 08/21/2001 17:00

# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin) 09/10/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15261
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 701759 | SBIOO2:TBI:W082101:428 | $08 / 21 / 2001$ |


| LLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8260 - SW846 (AQ) | Complete |  | 08/27/2001 | 3525 | Complete | mrh |  |
| Acetone | <20.0 | ug/L | 08/27/2001 | 3525 | $<20.0$ | mrh | SW 8260A |
| Benzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| tert-Butylbenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| sec-Butylbenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| n-Butylbenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| Bromochloromethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW 8260A |
| Bromodichloromethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| Bromoform | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| Bromobenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW 8260A |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 08/27/2001 | 3525 | $<12.5$ | mrh | SW 8260A |
| Carbon disulfide | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW 8260A |
| Carbon tetrachloride | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| Chlorobenzene | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| Chloroethane | <5.0 | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | SW 8260A |
| 2-Chlorotoluene | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW 8260A |
| 4-Chlorotoluene | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW 8260A |
| Chloroform | $\bullet<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| Chloromethane | $<5.0$ | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | SW 8260A |
| Dibromochloromethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| Dibromomethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260R |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| 1,2-Dibromo-3-chloropropane | <5.0 | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | SW 8260A |
| 1,2-Dichlorobenzene | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| 1,3-Dichlorobenzene | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.15261
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. | SAMPLE DESCRIPTION |
| :--- | :--- |
| 701759 | SBIOO2:TBI:W082101:428 |

DATE/TIME TAKEN 08/21/2001

| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1-Dichloroethane | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,2-Dichloroethane | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | Sw | 8260A |
| trans-1,2-Dichloroethene | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,2-Dichloropropane | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | Sw | 8260A |
| 2,2-Dichloropropane | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | $m \mathrm{mh}$ | SW | 8260A |
| 1,1-Dichloropropene | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Ethylbenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Hexachlorobutadiene | $<5.0$ | ug/L | 08/27/2001 | 3525 | <5.0 | mrh | SW | 8260A |
| n -Hexane | <5.0 | ug/L | 08/27/2001 | 3525 | <5.0 | mrh | SW | 8260A |
| 2-Hexanone | $<12.5$ | ug/L | 08/27/2001 | 3525 | $<12.5$ | mrh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| p-Isopropyltoluene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Bromomethane | $<5.0$ | ug/L | 08/27/2001 | 3525 | <5.0 | mrh | SW | 8260A |
| Methylene Chloride | $<5.0$ | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | <5.0 | ug/L | 08/27/2001 | 3525 | <5.0 | mrh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 08/27/2001 | 3525 | $<12.5$ | marh | SW | 8260A |
| n-Propylbenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | B260A |
| Styrene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mra | SW | 8260A |
| Naphthalene | $<5.0$ | ug/L | 08/27/2001 | 3525 | <5.0 | mrh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | <1.0 | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW | 8260A |

## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)
$09 / 10 / 2001$
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15261
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |

SAMPLE NO. SAMPLE DESCRIPTION DATE/TIME TAKEN 701759

| _,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrin | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tetrachloroethene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| Toluene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| 1,2,4-Trichlorobenzene | < 5.0 | ug/L | 08/27/2001 | 3525 | $<5.0$ | $m \times \mathrm{h}$ | SW 8260A |
| 1,1,1-Trichloroethane | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrs | SW 8260A |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| Trichloroethene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| Trichlorofluoromethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| 1,2,3-Trichloropropane | $<5.0$ | $\underline{u g / L}$ | 08/27/2001 | 3525 | $<5.0$ | mrh | SW 8260A |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| Vinyl Acetate | $<5.0$ | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | SW 8260A |
| Vinyl Chloride | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| Xylenes | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| d4-1,2-Dichloroethane (surr) | 101 | \% | 08/27/2001 | 3525 |  | mrh | SW 8260A |
| Dibromofluoromethane (surr) | 102 | \% | 08/27/2001 | 3525 |  | mrh | SW 8260A |
| d8-Toluene (surr) | 99 | \% | 08/27/2001 | 3525 |  | mrh | SW 8260A |
| Bromofluorobenzene (surr) | 101 | \% | 08/27/2001 | 3525 |  | mrh | SW 8260A |

## QUALITY CONTROL FLAG DEFINITIONS

Job Number: 01.15261
(*) Indicates an out-of-control QC. The analytical data was reported based on other supporting quality control information.
(Note) Indicates to review the notes and comments section of the analytical report as there is additional information concerning this analytical result.
(MS) Indicates that the Matrix Spike (MS) was out of statistical advisory limits.
(MSD) Indicates that the Matrix Spike Duplicate (MSD) was out of statistical advisory limits.
(RPD) Indicates that the Relative Percent Difference (RPD) for the MS/MSD pair was outside of statistical advisory limits.
(SS) Indicates that the MS and MSD were out of statistical advisory limits.
(SSR) Indicates that the MS, MSD and RPD were out of statistical advisory limits.
(MSR) Indicates that the MS and RPD were out of statistical advisory limits.
(MSDR) Indicates that the MSD and RPD were out of statistical advisory limits.
(DIL) Indicates that the MS and MSD were diluted out and the percent recoveries of the spikes could not be calculated.
(LS) Indicates that statistical accuracy and precision data is not available for spike concentrations which are $<1 / 4$ of the sample amount. Care should be used in interpreting this data.
(J) Indicates estimated concentration due to internal standard areas or surrogate recoveries outside of control limits. A sample matrix effect is usually indicated.
(DW) Indicates Dry Weight.
Analytical Reporting Limits
The reporting limits listed for non-aqueous samples in the analytical report section are Practical Quantitation Limits (PQLs). These PQLs are based upon a typical standard weight used for a non-aqueous sample. The reporting limit for a sample may be different from the PQL listed depending upon the actual weight of sample used, the samples moisture content and any dilutions used during the analysis.
1526



REPORT TO: KEVIN WILDMNN
client: Soerth Sevo
Client: AREA A

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| RELINQUISHED BY: |
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| COOLER TEMPERATURE |
| AS RECEIVED ${ }^{\circ} \mathrm{C}:$ |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

09/18/2001
Job Number: 01.15323

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

Sample
Number
Sample Description
701886 SBI002:MW16D:S010020:480
701887 SBI002:MW16D:S041055:480
701888 SBI002:HMW19D:S080095:428
701889 SBIO02:HMW19D:S120130:428
701890
701891

Date Taken

08/22/2001
08/22/2001 08/23/2001
08/22/2001 08/23/2001
08/22/2001 08/23/2001
08/22/2001 08/23/2001
08/22/2001 08/23/2001

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted only in its entirety.

Enclosure


## TestAmerica, Incorporated

PAGE 2 of 31

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH. 43016

09/18/2001

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002


SAMPLE DESCRIPTION
SBI002:MW16D:S010020:480

DATE/TIME TAKEN 08/22/2001 15:25

| Dry Weight | 89.0 | 8 | 08/28/2001 |  | 1486 |  | mhg | SM 2540 G. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prep, BNA Non-Aq | Complete |  | 08/24/2001 | 955 |  | Complete | rec |  | 625; SW 3540C | SW 3545 |
| Prep, TPH 418.1 Nonaq | COMPLETE |  | 08/27/2001 | 597 |  | Complete | sub |  | 9071 |  |
| Prep, TPH DRO Nonaq | Complete |  | 08/24/2001 | 200 |  | Complete | rec |  |  |  |
| VOLATILE COMPOUNDS-8260 |  |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/24/2001 |  | 1484 | Complete | dmg |  |  |  |
| Acetone | $<112$ | ug/kg dw | 08/24/2001 |  | 1484 | $<112$ | dimg | SW | 8260A |  |
| Benzene | <5.6 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | $<5.6$ | dmg | SW | 8260A |  |
| tert-Butylbenzene | <5.6 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | < 5.6 | dmg | SW | 8260A |  |
| sec-Butylbenzene | $<5.6$ | ug/kg dw | 08/24/2001 |  | 1484 | $<5.6$ | dmg | SW | 8260A |  |
| n-Butylbenzene | $<5.6$ | ug/kg dw | 08/24/2001 |  | 1484 | <5.6 | dmg | SW | 8260A |  |
| Bromochloromethane | <5.6 | ug/kg dw | 08/24/2001 |  | 1484 | $<5.6$ | dmg | SW | 8260A |  |
| Bromodichloromethane | <5.6 | ug/kg dw | 08/24/2001 |  | 1484 | < 5.6 | dmg | SW | 8260A |  |
| Bromoform | <5.6 | ug/kg dw | 08/24/2001 |  | 1484 | <5.6 | dmg | SW | 8260A |  |
| Eromobenzene | $<5.6$ | ug/kg dw | 08/24/2001 |  | 1484 | <5.6 | dimg | SW | 8260A |  |
| 2-Butanone (MEK) | $<56$ | ug/kg dw | 08/24/2001 |  | 1484 | $<56$ | dmg | SW | 8260A |  |
| Carbon dieulfide | $<5.6$ | ug/kg dw | 08/24/2001 |  | 1484 | $<5.6$ | dmg | SW | 8260A |  |
| Carbon tetrachloride | $<5.6$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/24/2001 |  | 1484 | $<5.6$ | dimg | SW | 8260A |  |
| Chlorobenzene | $<5.6$ | ug/kg dw | 08/24/2001 |  | 1484 | <5.6 | ding | SW | 8260A |  |
| Chloroethane | $<11.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | $<11.2$ | dimg | SW | 8260A |  |
| 2-Chlorotoluene | $<5.6$ | ug/kg dw | 08/24/2001 |  | 1484 | < 5.6 | dimg | SW | 8260A |  |
| 4-Chlorotoluene | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | <5.6 | dmg | SW | 8260A |  |
| Chloroform | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | $<5.6$ | dmg | SW | 8260A |  |
| Chloromethane | $<11.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | $<13.2$ | dmg | SW | 8260A |  |
| Dibromochloromethane | <5.6 | ug/kg dw | 08/24/2001 |  | 1484 | <5.6 | dmg |  | 8260A |  |

TestAmerica, Incorporated

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## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |

SAMPLE NO. SAMPLE DESCRIPTION 701886

SBI002:MW16D:S010020:480

| -sbromomethane | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.6$ | dmg | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dichlorodifluoromethane | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.6$ | dmg | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | <5.6 | $u \mathrm{~g} / \mathrm{kg}$ dw | 08/24/2001 | 1484 | $<5.6$ | dmg | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.6$ | $u g / \mathrm{kg}$ dw | 08/24/2001 | 1484 | $<5.6$ | dmg | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.6$ | dmg | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | <5.6. | dmg | SW | 8260A |
| 1,1-Dichloroethane | <5.6 | ug/kg dw | 08/24/2001 | 1484 | $<5.6$ | dmg | SW | 8260A |
| 1,2-Dichloroethane | <5.6 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.6$ | dmg | SW | 8260A |
| 1,1-Dichloroethene | $<5.6$ | ug/kg dw | 08/24/2001 | 1484 | $<5.6$ | dimg | SW | 8260A |
| Cis-1,2-Dichloroethene | $<5.6$ | ug/kg dw | 08/24/2001 | 1484 | <5.6 | dimg | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.6$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.6$ | dmg | SW | 8260A |
| 1,2-Dichloropropane | $<5.6$ | ug/kg dw | 08/24/2001 | 1484 | $<5.6$ | dmg | SW | 8260A |
| 1,3-Dichloropropane | $<5.6$ | $u g / \mathrm{kg}$ dw | 08/24/2001 | 1484 | $<5.6$ | dmg | SW | 8260A |
| 2,2-Dichloropropane | <5.6 | ug/kg dw | 08/24/2001 | 1484 | $<5.6$ | dmg | SW | 8260A |
| 1,1-Dichloropropene | $<5.6$ | ug/kg dw | 08/24/2001 | 1484 | <5.6 | dmg | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.6$ | ug/kg dw | 08/24/2001 | 1484 | $<5.6$ | dmg | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.6$ | ug/kg dw | 08/24/2001 | 1484 | $<5.6$ | ding | SW | 8260A |
| Ethylbenzene | $<5.6$ | ug/kg dw | 08/24/2001 | 1484 | $<5.6$ | dmg | SW | 8260A |
| Hexachlorobutadiene | $<5.6$ | ug/kg dw | 08/24/2001 | 1484 | $<5.6$ | dmg | SW | 8260A |
| n-Hexane | $<22.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<22.5$ | dimg | SW | 8260A |
| 2-Hexanone | $<56.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<56.2$ | dmg | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.6$ | dmg | SW | 8260A |
| p-Isopropyltoluene | $<5.6$ | ug/kg dw | 08/24/2001 | 1484 | $<5.6$ | dmg | SW | 8260A |
| Bromomethane | <11.2 | ug/kg dw | 08/24/2001 | 1484 | $<11.2$ | dmg | SW | 8260A |
| Methylene Chloride | $<11.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{d} w$ | 08/24/2001 | 1484 | $<11.2$ | dmg | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.6$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | <5.6 | dmg | SW | 8260A |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman<br>HULI \& ASSOC. (Dublin)<br>09/18/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 701886 | SBI002:MW16D:S010020:480 | $08 / 22 / 2001$ 15:25 |


| 4-Methyl-2-pentanone (MIBK) | $<56.2$ |  | ug/kg dw | 08/24/2001 |  | 1484 | <56.2 | dmg | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n-Propylbenzene | $<5.6$ |  | ug/kg dw | 08/24/2001 |  | 1484 | <5.6 | dmg | SW | 8260A |
| Styrene | $<5.6$ |  | ug/kg dw | 08/24/2001 |  | 1484 | <5.6 | dmg | SW | 8260A |
| Naphthalene | <5.6 |  | ug/kg dw | 08/24/2001 |  | 1484 | $<5.6$ | dmg | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.6$ |  | ug/kg dw | 08/24/2001 |  | 1484 | $<5.6$ | dmg | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | <5.6 | - | ug/kg dw | 08/24/2001 |  | 1484 | <5.6 | dimg | SW | 8260A |
| Tetrachloroethene | 157 |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | $<5.6$ | dimg | SW | 8260A |
| Toluene | <5.6 |  | ug/kg dw | 08/24/2001 |  | 1484 | $<5.6$ | dmg | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.6$ |  | ug/kg dw | 08/24/2001 |  | 1484 | $<5.6$ | dmg | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.6$ |  | ug/kg dw | 08/24/2001 |  | 1484 | $<5.6$ | dmg | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.6$ |  | ug/kg dw | 08/24/2001 |  | 1484 | $<5.6$ | ding | SW | 8260A |
| Trichloroethene | <5.6 |  | ug/kg dw | 08/24/2001 |  | 1484 | <5.6 | dmg | SW | 8260A |
| Trichlorofluoromethane | $<5.6$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | <5.6 | dimg | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.6$ |  | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | $<5.6$ | dmg | SW | 8260A |
| 1,2,4-Trimethylbenzene | <5.6 |  | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | $<5.6$ | dmg | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.6$ |  | ug/kg dw | 08/24/2001 |  | 1484 | $<5.6$ | dmg | SW | 8260A |
| Vinyl Acetate | $<5.6$ |  | $u g / \mathrm{kg}$ dw | 08/24/2001 |  | 1484 | $<5.6$ | dmg | SW | 8260A |
| Vinyl Chloride | $<2.2$ |  | ug/kg dw | 08/24/2001 |  | 1484 | $<2.2$ | dmg | SW | 8260A |
| Xylenes, Total | $<5.6$ |  | ug/kg dw | 08/24/2001 |  | 1484 | <5.6 | dmg | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 91 |  | 4 | 08/24/2001 |  | 1484 |  | dmg | SW | 8260A |
| Dibromofluoromethane (surr) | 96 |  | 8 | 08/24/2001 |  | 1484 |  | dmg | SW | 8260A |
| di-Toluene (surr) | 110 |  | \% | 08/24/2001 |  | 1484 |  | dimg | SW | 8260A |
| Bromofluorobenzene (surr) | 123 | Note | $\%$ | 08/24/2001 |  | 1484 |  | dmg | SW | 8260A |
| BASE NEUT. COMPS. -8270 Non-aq |  |  |  |  |  |  |  |  |  |  |
| Acenaphthene | <371 |  | ug/kg dw | 08/28/2001 | 955 | 1476 | <371 | jrw | SW | 8270 C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>09/18/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 701886 | SBI002:MW16D:S010020:480 | $08 / 22 / 2001$ 15:25 |


| Acenaphthylene | $<371$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | sw | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Anthracene | $<371$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW | 8270C |
| Benzo(a)anthracene | 829 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW | 8270C |
| Benzo (b) fluoranthene | 944 | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW | 8270C |
| Benzo(k) fluoranthene | $<371$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW | 8270C |
| Benzo(a) pyrene | 721 | $u \mathrm{~g} / \mathrm{kg} d w$ | 08/28/2001 | 955 | 1476 | $<185$ | jrw | SW | 8270C |
| Benzyl alcohol | $<371$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW | 8270C |
| Benzyl butyl phthalate | $<371$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | $<371$ | jrw | S* | 8270C |
| Bis (2-chloroethyl)ether | $<371$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW | 8270C |
| Bis (2-chloroethoxy) methane | $<371$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW | 8270C |
| Bis (2-ethylhexyl) phthalate | $<371$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | $<371$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<371$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW | 8270C |
| 4-Chloroaniline | $<371$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW | 8270C |
| 2-Chloronaphthalene | $<371$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW | 8270C |
| Chrysene | 790 | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW | 8270C |
| Dibenzo(a, h) anthracene | $<185$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<185$ | jrw | SW | 8270 C |
| Dibenzofuran | $<371$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW | 8270c |
| 1,2-Dichlorobenzene | $<371$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW | 82700 |
| 1,3-Dichlorobenzene | $<371$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW | 8270C |
| 1,4-Dichlorobenzene | $<371$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<742$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | $<742$ | jrw | SW | 8270C |
| Diethyl phthalate | <371 | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW | 8270C |
| Dimethyl phthalate | $<371$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | sw | 8270C |
| 2,4-Dinitrotoluene | $<371$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW | 8270 C |
| 2,6-Dinitrotoluene | $<371$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW | 8270C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

09/18/2001

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Date | Batch | Batch | Reporting Analyst |  |
| Result Flag Units Analyzed | Number | Number | Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 701886 SBI002:MW16D:S010020:480

DATE/TIME TAKEN 08/22/2001 15:25

| Di-n-octylphthalate | <371 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fluoranthene | 1,450 | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW 8270C |
| Fluorene | <371 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW 8270C |
| Hexachlorobenzene | <371 | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW 8270C |
| Hexachloro-1,3-butadiene | <371 | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW 8270C |
| Hexachlorocyclopentadiene | $<742$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<742$ | jrw | SW 8270C |
| Hexachloroethane | $<371$ | ug/kg dw | 08/28/2001 | 955 | 1476 | <371 | jrw | SW 8270C |
| Indeno (1,2,3-cd) pyrene | $<371$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW 8270C |
| Isophorone | $<371$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW 8270C |
| Naphthalene | $<371$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW 8270C |
| Nitrobenzene | $<371$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW 8270C |
| N-Nitrosodi-n-propylamine | $<371$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | Sw 8270C |
| Phenanthrene | 667 | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW 8270C |
| Pyrene | 1,290 | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW 8270C |
| 1,2,4-Trichlorobenzene | <371 | ug/kg dw | 08/28/2001 | 955 | 1476 | <371 | jrw | SW 8270C |
| Surrogate: d5-Nitrobenzene | 82 | 8 | 08/28/2001 | 955 | 1476 |  | jıw | SW 8270C |
| Surrogate: 2-Fluorobiphenyl | 96 | $\%$ | 08/28/2001 | 955 | 1476 |  | jrw | SW 8270C |
| Surrogate: d14-Terphenyl | 83 | \% | 08/28/2001 | 955 | 1476 |  | jrw | SW 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,850$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<1,850$ | jrw | SW 8270C |
| 4-Chloro-3-methylphenol | $<371$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW 8270C |
| 2-Chlorophenol | $<371$ | $\mathrm{ug} / \mathrm{kg}$ dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | sw 8270C |
| 2,4-Dichlorophenol | $<371$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | $<371$ | jrw | SW 8270C |
| 2,4-Dimethylphenol | $<371$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | Sw 8270C |
| 2-Methyl-4,6-dinitrophenol | <371 | ug/kg dw | 08/28/2001 | 955 | 1476 | <371 | jrw | SW 8270C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) 09/18/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 701886 | SBIOO2:MW16D:S010020:480 | $08 / 22 / 2001$ 15:25 |


| 2-Methylphenol | $<371$ | ug/kg dw | 08/28/2001 | 955 | 1476 | <371 | jrw |  | 8270 C |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| meta \& para-Methylphenol | $<371$ | ug/kg dw | 08/28/2001 | 955 | 1476 | <371 | jrw | Sw | 8270 C |  |
| 2-Nitrophenol | <371 | ug/kg dw | 08/28/2001 | 955 | 1476 | <371 | jr | Sw | 8270 C |  |
| Pentachlorophenol | <371 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | <371 | jrw | SW | 82700 |  |
| Phenol | <371 | ug/kg dw | 08/28/2001 | 955 | 1476 | <371 | jrw | SW | 82700 |  |
| 2,4,5-Trichlorophenol | <371 | ug/kg dw | 08/28/2001 | 955 | 1476 | $<371$ | jrw | Sw | 82700 |  |
| 2,4,6-Trichlorophenol | <371 | ug/kg dw | 08/28/2001 | 955 | 1476 | <371 | jrw | sw | 8270 C |  |
| Surrogate: d6-Phenol | 63 | $\%$ | 08/28/2001 | 955 | 1476 |  | jrw | sw | 82700 |  |
| Surrogate: 2-Fluorophenol | 46 | \% | 08/28/2001 | 955 | 1476 |  | jrw | sw | 8270 C |  |
| Surrogate: Tribromophenol | 77 | \% | 08/28/2001 | 955 | 1476 |  | jrw | sw | 82700 |  |
| TPH - DRO Non-Aqueous | 408 | mg/kg dw | 09/03/2001 | 200 | 289 | $<11$ | meb | W | 8015M |  |
| TPH - FTIR Non-aq | <56 | $\mathrm{mg} / \mathrm{kg}$ dw | 08/27/2001 | 597 | 629 | <56 | 260 |  |  |  |
| SAMPLE NO. 701887 | SAMPLE SBI002: | STION | $5: 480$ |  |  |  |  | E/ | TIME | $\begin{aligned} & \text { TAKEN } \\ & 15: 45 \end{aligned}$ |



## TestAmerica, Incorporated

PAGE 8 of 31

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
09/18/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 701887 | SBI002:MW16D:S041055:480 |

DATE/TIME TAKEN 08/22/2001 15:45

| Acetone | $<107$ | ug/kg dw | 08/24/2001 | 1484 | $<107$ | dmg | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benzene | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| tert-Butylbenzene | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| sec-Butylbenzene | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| n-Butylbenzene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| Bromochloromethane | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| Bromodichloromethane | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.4$ | dimg | SW | 8260A |
| Bromoform | <5.4 | ug/kg dw | 08/24/2001 | 1484 | <5.4 | dmg | SW | 8260A |
| Bromobenzene | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| 2-Butanone (MEK) | $<54$ | ug/kg dw | 08/24/2001 | 1484 | $<54$ | dmg | SW | 8260A |
| Carbon disulfide | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| Carbon tetrachloride | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| Chlorobenzene | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| Chloroethane | $<10.7$ | ug/kg dw | 08/24/2001 | 1484 | $<10.7$ | dmg | SW | 8260A |
| 2-Chlorotoluene | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| 4-Chlorotoluene | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| Chloroform | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | <5.4 | ding | SW | 8260A |
| Chloromethane | $<10.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<10.7$ | dmg | SW | 8260A |
| Dibromochloromethane | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dimg | SW | 8260A |
| Dibromomethane | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | <5.4 | dmg | SW | 8260A |
| Dichlorodifluoromethane | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | <5.4 | dmg | SW | 8260A |
| 2,2-Dibromo-3-chloropropane | $<5.4$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| 1,4-Dichlorobenzene | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| 1,1-Dichloroethane | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | <5.4 | dmg | SW | 8260A |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
09/18/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15323
Client Project ID: South Bend Indiana SBIOO2


SAMPLE NO. 701887

SAMPLE DESCRIPTION
SBI002:MW16D:S041055:480

DATE/TIME TAKEN 08/22/2001 15:45

| 1,2-Dichloroethane | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1-Dichloroethene | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| cis-1,2-Dichloroethene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| 1,2-Dichloropropane | <5.4 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| 1,3-Dichloropropane | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| 2,2-Dichloropropane | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| 1,1-Dichloropropene | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dimg | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| Ethylbenzene | $<5.4$ | $u g / \mathrm{kg}$ dw | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| Hexachlorobutadiene | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| $n$-Hexane | $<21.5$ | ug/ kg dw | 08/24/2001 | 1484 | $<21.5$ | dmg | SW | 8260A |
| 2-Hexanone | $<53.7$ | ug/kg dw | 08/24/2001 | 1484 | $<53.7$ | dmg | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| p-Isopropyltoluene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| Bromomethane | $<10.7$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<10.7$ | dmg | SW | 8260A |
| Methylene Chloride | $<10.7$ | ug/ kg dw | 08/24/2001 | 1484 | $<10.7$ | dmg | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dmg | SV | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<53.7$ | ug/kg dw | 08/24/2001 | 1484 | $<53.7$ | dmg | SW | 8260A |
| n-Propylbenzene | $<5.4$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.4$ | dmg | sw | 8260A |
| Styrene | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dmg | Sw | 8260A |
| Naphthalene | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dmg | Sw | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | <5.4 | dmg | Sw | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.4$ | ug/kg dw | 08/24/2001 | 1484 | $<5.4$ | dmg | SW | 8260A |
| Tetrachloroethene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | <5.4 | dmg | sw | 8260A |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
09/18/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION 701887 <br> SBI002:MW16D:S041055:480

| Toluene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | $<5.4$ | dmg | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,4-Trichlorobenzene | $<5.4$ | $u g / \mathrm{kg}$ dw | 08/24/2001 |  | 1484 | $<5.4$ | dmg | SW | 8260A |
| 1,1,1-Trichloroethane | $<5.4$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | <5.4 | ding | SW | 8260A |
| 1,1,2-Trichloroethane | <5.4 | ug/kg dw | 08/24/2001 |  | 1484 | $<5.4$ | dmg | SW | 8260A |
| Trichloroethene | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | $<5.4$ | dmg | SW | 8260A |
| Trichlorofluoromethane | <5.4 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | $<5.4$ | dmg | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | $<5.4$ | dmg | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<5.4$ | $u g / \mathrm{kg}$ dw | 08/24/2001 |  | 1484 | $<5.4$ | dmg | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.4$ | ug/kg dw | 08/24/2001 |  | 1484 | $<5.4$ | dmg | SW | 8260A |
| Vinyl Acetate | $<5.4$ | ug/kg dw | 08/24/2001 |  | 1484 | <5.4 | dmg | SW | 8260A |
| Vinyl Chloride | $<2.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | <2.1 | dmg | SW | 8260A |
| Xylenes, Total | $<5.4$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | <5.4 | dmg | SW | 8260A |
| d4-1,2-Dichloroethane (aurr) | 102 | \% | 08/24/2001 |  | 1484 |  | dmg | SW | 8260A |
| Dibromofluoromethane (surr) | 97 | \% | 08/24/2001 |  | 1484 |  | dmg | SW | 8260A |
| d8-Toluene (surr) | 93 | 8 | 08/24/2001 |  | 1484 |  | dmg | SW | 8260A |
| Bromofluorobenzene (surr) | 92 | 8 | 08/24/2001 |  | 1484 |  | dmg | SW | 8260A |
| BASE NEUT. COMPS.-8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | $<354$ | jrw | SW | 8270C |
| Acenaphthylene | <354 | ug/kg dw | 08/28/2001 | 955 | 1476 | $<354$ | jıw | SW | 8270C |
| Anthracene | <354 | ug/kg dw | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 8270C |
| Benzo (a) anthracene | <354 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | $<354$ | jrw | SW | 8270C |
| Benzo(b) fluoranthene | $<354$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<354$ | jrw | SW | 8270C |
| Benzo(k) fluoranthene | <354 | ug/kg dw | 08/28/2001 | 955 | 1476 | <354 | jrw | sw | 8270C |
| Benzo (a) pyrene | $<177$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | $<177$ | jrw | SW | 8270 C |
| Benzyl alcohol | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 8270C |

TestAmerica, Incorporated

PAGE 11 of 31

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)

09/18/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01. 15323
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION 701887 <br> SBI002:MW16D:S041055:480

| wenzyl butyl phthalate | $<354$ | ug/kg dw | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bis (2-chloroethyl)ether | $<354$ | ug/kg dw | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 8270 C |
| Bis (2-chloroethoxy) methane | $<354$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | $<354$ | jrw | SW | 8270C |
| Bis (2-ethylhexyl) phthalate | $<354$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<354$ | jrw | SW | 8270 C |
| 2,2'-oxybis(1-Chloropropane) | $<354$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<354$ | jrw | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<354$ | ug/kg dw | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 8270C |
| 4-Chloroaniline | $<354$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<354$ | jrw | SW | 8270C |
| 2-Chloronaphthalene | $<354$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | $<354$ | jrw | SW | 8270 C |
| Chrysene | $<354$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | $<354$ | jrw | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<177$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<177$ | jrw | SW | 82700 |
| Dibenzofuran | $<354$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<354$ | jrw | SW | 8270C |
| 1,2-Dichlorobenzene | $<354$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 8270 C |
| 1,3-Dichlorobenzene | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 8270C |
| 1,4-Dichlorobenzene | $<354$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | $<354$ | jrw | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<709$ | $u \mathrm{~g} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | $<709$ | jrw | SW | 82700 |
| Diethyl phthalate | $<354$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | $<354$ | jıw | SW | 8270C |
| Dimethyl phthalate | $<354$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<354$ | jrw | SW | 8270 C |
| 2,4-Dinitrotoluene | $<354$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<354$ | jrw | SW | 82700 |
| 2,6-Dinitrotoluene | $<354$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<354$ | jrw | SW | 8270C |
| Di-n-octylphthalate | $<354$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<354$ | jrw | SW | 82700 |
| Fluoranthene | <354 | ug/kg dw | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 8270 C |
| Fluorene | $<354$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<354$ | jrw | SW | 8270C |
| Hexachlorobenzene | <354 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<354$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<354$ | jrw | SW | 8270C |
| Hexachlorocyclopentadiene | $<709$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<709$ | jrw | SW | 8270 C |
| Hexachloroethane | $<354$ | ug/kg dw | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 8270C |

# ANALYTICAL REPORT 

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |

## SAMPLE NO. SAMPLE DESCRIPTION 701887 <br> SBI002:MW16D:S041055:480

DATE/TIME TAKEN 08/22/2001 15:45

| Indeno(1,2,3-cd) pyrene | <354 | ug/kg dw | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Isophorone | <354 | ug/kg dw | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 8270C |
| Naphthalene | <354 | ug/kg dw | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 8270C |
| Nitrobenzene | $<354$ | ug/kg dw | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | <354 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | <354 | jrw | Sw | 8270C |
| Phenanthrene | <354 | ug/kg dw | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 8270 C |
| Pyrene | <354 | ug/kg dw | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | <354 | ug/kg dw | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 91 | 8 | 08/28/2001 | 955 | 1476 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 99 | 8 | 08/28/2001 | 955 | 1476 |  | jrw | SW | $8270{ }^{\text {c }}$ |
| Surrogate: dl4-Terphenyl | 119 | 8 | 08/28/2001 | 955 | 1476 |  | jrw | SW | 8270C |
| ACID COMPOUNDS - 8270 Non-aq |  |  |  |  |  |  |  |  |  |
| Benzoic Acid | $<1,770$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<1,770$ | jrw | SW | 8270C |
| 4-Chloro-3-methylphenol | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 8270C |
| 2-Chlorophenol | $<354$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | $<354$ | jrw | SW | 8270C |
| 2,4-Dichlorophenol | $<354$ | $u g / \mathrm{kg}$ dw | 08/28/2001 | 955 | 1476 | $<354$ | jrw | SW | 82700 |
| 2,4-Dimethylphenol | $<354$ | ug/kg dw | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<354$ | ug/kg dw | 08/28/2001 | 955 | 1476 | $<354$ | jrw | SW | 8270C |
| 2-Methylphenol | $<354$ | ug/kg dw | 08/28/2001 | 955 | 1476 | <354 | jxw | SW | 82700 |
| meta \& para-Methylphenol | <354 | ug/kg dw | 08/28/2001 | 955 | 1476 | $<354$ | jrw | SW | 8270 C |
| 2-Nitrophenol | $<354$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 8270C |
| Pentachlorophenol | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 8270C |
| Phenol | <354 | ug/kg dw | 08/28/2001 | 955 | 1476 | $<354$ | jrw | SW | 8270C |
| 2,4,5-Trichlorophenol | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 82700 |
| 2,4,6-Trichlorophenol | <354 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/28/2001 | 955 | 1476 | <354 | jrw | SW | 82700 |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002

09/18/2001

## prep Run

| Date | Batch | Batch Reporting | Analyst |
| :--- | :--- | :--- | :--- | :--- |
| Analyzed | Number | Number Limit | Initials Method Reference |

701887

SAMPLE DESCRIPTION
SBI002:MW16D:S041055:480
DATE/TIME TAKEN 08/22/2001 15:45
Surrogate: d6-Phenol
Surrogate: 2-Fluorophenol
Surrogate: Tribromophenol
TPH - DRO Non-Aqueous
TPH - FTIR Non-aq

| 82 | \& | $08 / 28 / 2001$ | 955 | 1476 |  | jrw | SW 8270C |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 76 | $\%$ | $08 / 28 / 2001$ | 955 | 1476 |  | jrw | SW 8270C |
| 94 | $\%$ | $08 / 28 / 2001$ | 955 | 1476 |  | jrw | SW 8270C |
| $<11$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | $09 / 02 / 2001$ | 200 | 288 | $<11$ | meb | SW 8015M |
| $<54$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | $08 / 27 / 2001$ | 597 | 629 | $<54$ | 260 | 418.1 |


| SAMPLE NO. | SAMPLE DESCRIPTION | DATE/TIME TAKEN |
| :--- | :--- | :--- |
| 701888 | SBI002:HMW19D:S080095:428 | $08 / 22 / 2001$ 07:30 |


| Dry Weight | 90.5 | \% | 08/28/2001 |  | 1486 |  | mhg | SM 2540 G . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 09/17/2001 |  | 1269 | Complete | emd | SW 6010B |
| Arsenic, ICP | $<3.6$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/17/2001 | 910 | 3010 | $<3.6$ | emd | SW 6010日 |
| Barium, ICP | 8.83 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/17/2001 | 910 | 2941 | $<0.73$ | emd | SW 6010B |
| Cadmium, ICP | <1.1 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/17/2001 | 910 | 2923 | <1.1 | ema | SW 6010日 |
| Chromium, ICP | 2.8 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/17/2001 | 910 | 2911 | $<1.4$ | emd | SW 6010B |
| Lead, ICP | $<2.9$ | $\mathrm{mg} / \mathrm{kg}$ dw | 09/17/2001 | 910 | 2912 | <2.9 | emd | SW 6010B |
| Mercury, CVAA | $<0.009$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 617 | 633 | $<0.009$ | epk | SW 7471A |
| Selenium, ICP | $<3.6$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/17/2001 | 910 | 2990 | $<3.6$ | emd | SW 6010B |
| Silver, ICP | <1.4 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/17/2001 | 910 | 2943 | <1.4 | emd | SW 6010B |
| ICP Digestion, Nonaqueous | Complete |  | 08/29/2001 | 910 |  | Complete | clm | SW 3050B |
| Mercury Digeation, Non-Aq | Complete |  | 08/29/2001 | 617 |  | Complete | clm | SW 7471A |

[^41]
## TestAmerica, Incorporated

# ANALYTICAL REPORT 

Kevin Wildman HULL \& ASSOC. (Dublin)

09/18/2001

## 6130 Wilcox Rd.

Dublin, OH 43016

Job Number: 01.15323
Client Project ID: South Bend Indiana SBIO02


## SAMPLE NO. 701888 <br> SAMPLE DESCRIPTION <br> SBIO02:HMW19D:S080095:428

DATE/TIME TAKEN 08/22/2001 07:30

| 8260 - SW846 (Non-aq) | Complete |  | 08/24/2001 | 1484 | Complete | dmg |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | <110 | ug/kg dw | 08/24/2001 | 1484 | <110 | dmg | SW | 8260A |
| Benzene | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | ding | SW | 8260A |
| tert-Butylbenzene | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | < 5.5 | dmg | SW | 8260A |
| sec-Butylbenzene | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | dimg | SW | 8260A |
| n-Butylbenzene | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | <5.5 | dmg | SW | 8260A |
| Bromochloromethane | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | <5.5 | dmg | SW | 8260A |
| Bromodichloromethane | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | <5.5 | ding | SW | 8260A |
| Bromoform | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| Bromobenzene | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 2-Butanone (MEK) | <55 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<55$ | dmg | SW | 8260A |
| Carbon disulfide | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| Carbon tetrachloride | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| Chlorobenzene | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | <5.5 | dmg | SW | 8260A |
| Chloroethane | $<11.0$ | ug/kg dw | 08/24/2001 | 1484 | $<11.0$ | dmg | SW | 8260A |
| 2-Chlorotoluene | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | <5.5 | dmg | SW | 8260A |
| 4-Chlorotoluene | <5.5 | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| Chloroform | <5.5 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| Chloromethane | $<11.0$ | ug/kg dw | 08/24/2001 | 1484 | <11.0 | dmg | SW | 8260A |
| Dibromochloromethane | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| Dibromomethane | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dimg | SW | 8260A |
| Dichlorodifluoromethane | <5.5 | ug/ kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 1,2-Dichlorobenzene | <5.5 | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 1,3-Dichlorobenzene | < 5.5 | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 1,4-Dichlorobenzene | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | <5.5 | ding | SW | 8260A |

# TestAmerica, Incorporated 

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## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLEE DESCRIPTION
701888 $\quad$ SBI002:HMW19D:S080095:428

DATE/TIME TAKEN
08/22/2001 07:30

| 1,1-Dichloroethane | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 1,1-Dichloroethene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | ding | SW | 8260A |
| Cis-1,2-Dichloroethene | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | <5.5 | dmg | Sw | 8260A |
| trans-1,2-Dichloroethene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | dimg | SW | 8260A |
| 1,2-Dichloropropane | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 1,3-Dichloropropane | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 2,2-Dichloropropane | $<5.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | < 5.5 | dmg | SW | 8260A |
| 1,1-Dichloropropene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| cis-1,3-Dichloropropene | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dimg | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | <5.5 | dmg | SW | 8260A |
| Ethylbenzene | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| Hexachlorobutadiene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | <5.5 | dimg | SW | 8260A |
| n -Hexane | <22.1 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | <22.1 | dmg | SW | 8260A |
| 2-Hexanone | <55.2 | ug/kg dw | 08/24/2001 | 1484 | $<55.2$ | ding | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | <5.5 | dimg | SW | 8260A |
| p-Isopropyltoluene | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | sw | 8260A |
| Bromomethane | $<11.0$ | ug/kg dw | 08/24/2001 | 1484 | $<11.0$ | dmg | SW | 8260A |
| Methylene Chloride | $<11.0$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<11.0$ | dmg | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 4-Methyl-2-pentanone (MIAK) | $<55.2$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<55.2$ | dmg | sw | 8260A |
| n-Propylbenzene | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| Styrene | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | <5.5 | dimg | SW | 8260A |
| Naphthalene | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | <5.5 | ug/kg dw | 08/24/2001 | 1484 | <5.5 | dmg | SW | 8260A |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
09/18/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 701888

SAMPLE DESCRIPTION
DATE/TIME TAKEN
SBI002:HMW19D:S080095:428

| Tetrachloroethene | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Toluene | <5.5 | ug/kg dw | 08/24/2001 | 1484 | < 5.5 | dmg | SW 8260A |
| 1,2,4-Trichlorobenzene | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | <5.5 | dmg | SW 8260A |
| 1,1,1-Trichloroethane | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | <5.5 | dmg | SW 8260A |
| 1,1,2-Trichloroethane | <5.5 | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW 8260A |
| Trichloroethene | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW 8260A |
| Trichlorofluoromethane | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | < 5.5 | dmg | SW 8260A |
| 1,2,3-Trichloropropane | <5.5 | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | ding | SW 8260A |
| 1,2,4-Trimethylbenzene | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | <5.5 | dmg | SW 8260A |
| 1,3,5-Trimethylbenzene | <5.5 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | dmg | SW 8260A |
| Vinyl Acetate | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | dmg | SW 8260A |
| Vinyl Chloride | $<2.2$ | ug/kg dw | 08/24/2001 | 1484 | $<2.2$ | dmg | SW 8260A |
| Xylenes, Total | $<5.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | dmg | SW 8260A |
| d4-1,2-Dichloroethane (surr) | 101 | \% | 08/24/2001 | 1484 |  | dmg | SW 8260A |
| Dibromofluoromethane (surr) | 98 | \% | 08/24/2001 | 1484 |  | dmg | SW 8260A |
| d8-Toluene (surr) | 94 | \% | 08/24/2001 | 1484 |  | dmg | SW 8260A |
| Bromofluorobenzene (surr) | 91 | $\%$ | 08/24/2001 | 1484 |  | dimg | SW 8260A |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 09/18/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002


```
SAMPLE NO. SAMPLE DESCRIPTION 701889
SBI002:HMW19D:S120130:428
```

DATE/TIME TAKEN
08/22/2001 07:40

| Lry Weight | 91.5 | \% | 08/28/2001 |  | 1486 |  | mhg | SM | 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 09/17/2001 |  | 1269 | Complete | emd | SW | 6010B |
| Arsenic, ICP | 5.7 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/17/2001 | 910 | 3010 | $<3.6$ | emd | SW | 6010B |
| Barium, ICP | 16.3 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/17/2001 | 910 | 2941 | $<0.72$ | emd | SW | 6010日 |
| Cadmium, ICP | <1.1 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/17/2001 | 910 | 2923 | $<1.1$ | emd | SW | 6010B |
| Chromium, ICP | 5.1 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/17/2001 | 910 | 2911 | $<1.4$ | emd | SW | 6010B |
| Lead, ICP | 8 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/17/2001 | 910 | 2912 | <2.8 | emd | SW | 6010B |
| Mercury, CVAA | 0.012 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 08/30/2001 | 617 | 633 | $<0.009$ | epk | SW | 7471A |
| Selenium, ICP | $<3.6$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/17/2001 | 910 | 2990 | $<3.6$ | emd | SW | 6010B |
| Silver, ICP | $<1.4$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/17/2001 | 910 | 2943 | $<1.4$ | emd | SW | 6010B |
| ICP Digestion, Nonaqueous | Complete |  | 08/29/2001 | 910 |  | Complete | clm | SW | 3050B |
| Mercury Digestion, Non-Aq | Complete |  | 08/29/2001 | 617 |  | Complete | clm | SW | 7471A |
| VOLATILE COMPOUNDS-8260 Non-Aq |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 08/24/2001 |  | 1484 | Complete | dmg |  |  |
| Acetone | $<109$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | $<109$ | dmg | SW | 8260A |
| Benzene | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | $<5.5$ | dmg | SW | 8260A |
| tert-Butylbenzene | $<5.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | $<5.5$ | dmg | SW | 8260A |
| sec-Butylbenzene | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | <5.5 | dmg | SW | 8260A |
| n-Butylbenzene | <5.5 | ug/kg dw | 08/24/2001 |  | 1484 | $<5.5$ | dmg | SW | 8260A |
| Bromochloromethane | <5.5 | ug/kg dw | 08/24/2001 |  | 1484 | $<5.5$ | ding | SW | 8260A |
| Bromodichloromethane | < 5.5 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | $<5.5$ | dmg | SW | 8260A |
| Bromoform | <5.5 | ug/kg dw | 08/24/2001 |  | 1484 | <5.5 | dmg | SW | 8260A |
| Bromobenzene | < 5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 |  | 1484 | <5.5 | dmg | SW | 8260A |
| 2-Butanone (MEK) | <55 | ug/kg dw | 08/24/2001 |  | 1484 | <55 | dmg | SW | 8260A |
| Carbon disulfide | <5.5 | ug/kg dw | 08/24/2001 |  | 1484 | <5.5 | dmg | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) 09/18/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01. 15323
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 701889

SAMPLE DESCRIPTION
SBIO02:HMW19D:S120130:428

## DATE/TIME TAKEN

 08/22/2001 07:40| Carbon tetrachloride | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chlorobenzene | <5.5 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | <5.5 | dmg | SW | 8260A |
| Chloroethane | $<10.9$ | ug/kg dw | 08/24/2001 | 1484 | $<10.9$ | dmg | Sw | 8260A |
| 2-Chlorotoluene | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 4-Chlorotoluene | $<5.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| Chloroform | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| Chloromethane | $<10.9$ | ug/kg dw | 08/24/2001 | 1484 | $<10.9$ | dmg | SW | 8260A |
| Dibromochloromethane | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | < 5.5 | dmg | SW | 8260A |
| Dibromomethane | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | < 5.5 | dmg | SW | 8260A |
| Dichlorodifluoromethane | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | <5.5 | dmg | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.5$ | $u g / \mathrm{kg}$ dw | 08/24/2001 | 1484 | <5.5 | dmg | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 1,4-Dichlorobenzene | <5.5 | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 1,1-Dichloroethane | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | <5.5 | dmg | SW | 8260A |
| 1,2-Dichloroethane | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 1,1-Dichloroethene | <5.5 | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dimg | SW | 8260 A |
| cis-1,2-Dichloroethene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | <5.5 | dmg | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.5$ | $u g / \mathrm{kg}$ dw | 08/24/2001 | 1484 | <5.5 | dmg | SW | 8260A |
| 1,2-Dichloropropane | $<5.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | <5.5 | dmg | SW | 8260A |
| 1,3-Dichloropropane | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 2,2-Dichloropropane | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 1,1-Dichloropropene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | ding | Sw | 8260A |
| cis-1, 3-Dichloropropene | <5.5 | ug/kg dw | 08/24/2001 | 1484 | <5.5 | dimg | SW | 8260A |
| trans-1,3-Dichloropropene | <5.5 | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | ding | SW | 8260A |
| Ethylbenzene | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | <5.5 | dmg | SW | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CR | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 701889 |  | SBIOO2: HM | 19 D | S12 | 30:428 |  |  |  | $08 /$ | $2 / 2001$ | 1 07:40 |


| mexachlorobutadiene | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | < 5.5 | dmg | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n -Hexane | $<21.9$ | $u g / \mathrm{kg}$ dw | 08/24/2001 | 1484 | $<21.9$ | dmg | SW | 8260A |
| 2-Hexanone | $<54.6$ | ug/kg dw | 08/24/2001 | 1484 | $<54.6$ | ding | SW | 8260A |
| Isopropylbenzene (Cumene) | < 5.5 | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| p-Isopropyltoluene | < 5.5 | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| Bromomethane | $<10.9$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | <10.9 | dmg | SW | 8260A |
| Methylene Chloride | $<10.9$ | ug/kg dw | 08/24/2001 | 1484 | $<10.9$ | dmg | SW | 8260A |
| Methyl t-butyl ether (MTBE) | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<54.6$ | ug/kg dw | 08/24/2001 | 1484 | <54.6 | dimg | SW | 8260A |
| n-Propylbenzene | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| styrene | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dimg | SW | 8260A |
| Naphthalene | $<5.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | < 5.5 | $u g / \mathrm{kg} d w$ | 08/24/2001 | 1484 | $<5.5$ | dimg | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | ding | SW | 8260A |
| Tetrachloroethene | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | <5.5 | dmg | SW | 8260A |
| Toluene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | <5.5 | dimg | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.5$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 1,1,1-Trichloroethane | <5.5 | $\mathrm{ug} / \mathrm{kg}$ dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| Trichlaroethene | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| Trichlorofluoromethane | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.5$ | $u g / \mathrm{kg}$ dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| 1,2,4-Trimethylbenzene | <5.5 | ug/kg dw | 08/24/2001 | 1484 | <5.5 | dmg | SW | 8260A |
| 1,3,5-Trimethylbenzene | <5.5 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| Vinyl Acetate | $<5.5$ | ug/kg dw | 08/24/2001 | 1484 | $<5.5$ | dmg | SW | 8260A |
| Vinyl Chloride | <2.2 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 08/24/2001 | 1484 | <2.2 | dmg | SW | 8260A |

[^42]
## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

09/18/2001

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002


DATE/TIME TAKEN 08/22/2001 07:40

| Xylenes, Total | <5.5 | ug/kg dw | 08/24/2001 | 1484 | < 5.5 | dmg | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d4-1,2-Dichloroethane (surr) | 99 | \% | 08/24/2001 | 1484 |  | dmg | SW | 8260A |
| Dibromofluoromethane (surr) | 96 | \% | 08/24/2001 | 1484 |  | dmg | SW | 8260A |
| ds-Toluene (surr) | 93 | \% | 08/24/2001 | 1484 |  | dmg | SW | 8260A |
| Bromofluorobenzene (surr) | 92 | $\%$ | 08/24/2001 | 1484 |  | dmg | SW | 8260A |

SAMPLE NO. SAMPLE DESCRIPTION
701890 $\quad$ SBI002:FB1:W082201:428

## DATE/TIME TAKEN

 08/22/2001 17:00

## TestAmerica, Incorporated

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Bumbed | Number | Number | Limit | Initials Method Reference |  |


| SAMPLE NO. $\quad$ SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 701890 | SBIOO2:FBI:W082201:42 |

DATE/TIME TAKEN
08/22/2001 17:00

| - 5 ep, TPH - 418.1 aq | COMPLETE |  | 08/29/2001 | 599 |  | Complete |  | EPA 418.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prep, TPH DRO Aqueous | Complete |  | 08/23/2001 | 119 |  | Complete | rec |  |
| VOLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 08/27/2001 |  | 3525 | Complete | mr ${ }^{\text {m }}$ |  |
| Acetone | $<20.0$ | ug/L | 08/27/2001 |  | 3525 | $<20.0$ | mrh | SW 8260A |
| Benzene | <1.0 | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | SW 8260A |
| tert-Butylbenzene | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | <1.0 | mrh | SW 8260A |
| sec-Butylbenzene | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | <1.0 | mrh | SW 8260A |
| n -Butylbenzene | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | SW 8260A |
| Bromochloromethane | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | <1.0 | mrh | SW 8260A |
| Bromodichloromethane | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | SW 8260A |
| Bromoform | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | SW 8260A |
| Bromobenzene | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | <1.0 | mrh | SW 8260A |
| 2-Eutanone (MEK) | $<12.5$ | ug/L | 08/27/2001 |  | 3525 | $<12.5$ | mrh | SW 8260A |
| Carbon disulfide | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | SW 8260A |
| Carbon tetrachloride | $<1.0$ | ug/L | 08/27/2001 |  | $3525^{\circ}$ | $<1.0$ | mrh | SW 8260A |
| Chlorobenzene | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | SW 8260A |
| Chloroethane | <5.0 | ug/L | 08/27/2001 |  | 3525 | $<5.0$ | mrh | SW 8260A |
| 2-Chlorotoluene | <1.0 | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | SW 8260A |
| 4-Chlorotoluene | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | SW 8260A |
| Chloroform | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | SW 8260A |
| Chloromethane | < 5.0 | ug/L | 08/27/2001 |  | 3525 | $<5.0$ | mrh | SW 8260A |
| Dibromochloromethane | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | SW 8260A |
| Dibromomethane | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | SW 8260A |
| Dichlorodifluoromethane | <1.0 | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | SW 8260A |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

09/18/2001

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |
| Result Flag Units | Date | Batyzed | Batch | Reporting Analyst |  |
| Number | Number | Limit | Initials Method Reference |  |  |

SAMPLE DESCRIPTION
SBI002:FB1:W082201:428

DATE/TIME TAKEN
08/22/2001 17:00

| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichlorobenzene | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,3-Dichlorobenzene | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | max | SW | 8260A |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | $m \mathrm{~m}$ | SW | 8260A |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW | 8260A |
| 1.1-Dichloroethene | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Cis-1,2-Dichloroethene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| trans-1,2-Dichloroethene | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW | 8260A |
| 2,2-Dichloropropane | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,1-Dichloropropene | <1.0 | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW | 8260A |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW | 8260A |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mr ${ }^{\text {m }}$ | SW | 8260A |
| Ethylbenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Hexachlorobutadiene | $<5.0$ | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | SW | 8260A |
| n -Hexane | <5.0 | ug/L | 08/27/2001 | 3525 | <5.0 | mrh | SW | 8260A |
| 2-Hexanone | $<12.5$ | ug/L | 08/27/2001 | 3525 | $<12.5$ | mrh | Sw | 8260A |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | math | SW | 8260A |
| p-Isopropyltoluene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Bromomethane | $<5.0$ | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | sw | 8260A |
| Methylene Chloride | $<5.0$ | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 08/27/2001 | 3525 | $<12.5$ | mrh | SW | 8260A |
| n-Propylbenzene | <1.0 | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW | 8260A |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 09/18/2001
6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 701890 |  | SBI002: F | 1:W0 | 220 | 428 |  |  |  | 08/ | $2 / 2001$ | 17:00 |


| styrene | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Naphthalene | $<5.0$ | ug/L | 08/27/2001 |  | 3525 | <5.0 | mrh | SW. | 8260A |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | $m \mathrm{~m}$ | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | SW | 8260A |
| Tetrachloroethene | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | SW | 8260A |
| Toluene | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 08/27/2001 |  | 3525 | $<5.0$ | mrh | SW | 8260A |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | SW | 8260A |
| Trichloroethene | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | SW | 8260A |
| Trichlorofluoromethane | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 08/27/2001 |  | 3525 | $<5.0$ | mrih | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,3,5-Trimethylbenzene | <1.0 | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | sw | 8260A |
| Vinyl Acetate | <5.0 | ug/L | 08/27/2001 |  | 3525 | $<5.0$ | mrh | Sw | 8260A |
| Vinyl Chloride | <1.0 | ug/L | 08/27/2001 |  | 3525 | $<1.0$ | mrh | SW | 8260A |
| Xylenes | <1.0 | ug/L | 08/27/2001 |  | 3525 | <1.0 | mrh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 102 | \% | 08/27/2001 |  | 3525 |  | mrh | SW | 8260A |
| Dibromofluoromethane (surr) | 102 | \% | 08/27/2001 |  | 3525 |  | mirh | SW | 8260A |
| d8-Toluene (surr) | 98 | 4 | 08/27/2001 |  | 3525 |  | mrh | SW | 8260A |
| Bromofluorobenzene (surr) | 101 | \% | 08/27/2001 |  | 3525 |  | mrh | SW | 8260A |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270 C |
| Acenaphthylene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270 C |
| Anthracene | <10 | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin) 09/18/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | SCRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 701890 |  | SBI002:F | 1 : W0 | 8220 |  |  |  |  | 08 | 2/2001 | 1 17:00 |


| Benzo (a) anthracene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | Sw | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benzo (b) fluoranthene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |
| Benzo (k) fluoranthene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |
| Benzo(a) pyrene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | <10 | jrw | SW | 8270 C |
| Benzyl alcohol | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270 C |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270 C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270 C |
| 2-Chloronaphthalene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270 C |
| Chrysene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |
| Dibenzofuran | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270 C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | <10 | jıw. | SW | 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |
| 1،4-Dichlorobenzene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 08/29/2001 | 1260 | 2672 | $<50$ | jrw | SW | 8270C |
| Diethyl phthalate | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jiw | SW | 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 08/29/2001 | 1260 | 2572 | $<10$ | jrw | SW | 8270 C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | <10 | jrw | SW | 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |
| Fluoranthene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270 C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

09/18/2001

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002


DATE/TIME TAKEN 08/22/2001 17:00

| Fluorene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hexachlorobenzene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 08/29/2001 | 1260 | 2672 | $<20$ | jrw | SW | 8270 C |
| Hexachloroethane | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | <10 | jıw | SW | 8270C |
| Indeno (1, 2,3-cd) pyrene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |
| Isophorone | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 82700 |
| Naphthalene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |
| Nitrobenzene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 82700 |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |
| Phenanthrene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270 C |
| Pyrene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 75 | $\%$ | 08/29/2001 | 1260 | 2672 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 84 | \% | 08/29/2001 | 1260 | 2672 |  | jrw | SW | 8270C |
| Surrogate: d14-Terphenyl | 103 | \% | 08/29/2001 | 1260 | 2672 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 08/29/2001 | 1260 | 2672 | $<50$ | j2w | SW | 8270C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |
| 2-Chlorophenol | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |
| 2.4-Dichlorophenol | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 08/29/2001 | 1260 | 2572 | $<10$ | jrw | SW | 82700 |
| 2-Methyl-4.6-dinitrophenol | $<10$ | ug/L | 08/29/2001 | 1250 | 2672 | $<10$ | jrw | SW | 8270C |
| 2-Methylphenol | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270C |
| meta \& para-Methylphenol | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW | 8270 C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002

|  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE NO. | SAMPLE DE | CRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 701890 | SBI002:F | :W0 | 2201 | 428 |  |  |  | 08/2 | $2 / 2001$ | 1 17:00 |


| 2-Nitrophenol | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jxw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pentachlorophenol | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW 8270c |
| Phenol | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW 8270C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 08/29/2001 | 1260 | 2672 | $<10$ | jrw | SW 8270C |
| Surrogate: d6-Phenol | 72 | \% | 08/29/2001 | 1260 | 2672 |  | jrw | SW 8270C |
| Surrogate: 2-Fluorophenol | 69 | \% | 08/29/2001 | 1260 | 2672 |  | jrw | SW 8270C |
| Surrogate: Tribromophenol | 73 | $\%$ | 08/29/2001 | 1260 | 2672 |  | jrw | SW 8270C |
| TPH - DRO AQUEOUS | $<1$ | mg/L | 08/24/2001 | 119 | 205 | $<1$ | meb | SW 8015M |
| TPH - Method 418.1 (AQ) | $<0.2$ | mg/L | 08/29/2001 | 599 | 718 | <0.2 | 260 | EPA 418.1 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)<br>09/18/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting | Analyst |  |
| Rumber | Number | Limit | Initials Method Reference |  |  |  |


| SAMPLE NO. | SAMPLE DESCRIPTION |
| :--- | :--- |
| 701891 | SBIOO2:TB1:W082201:428 |

DATE/TIME TAKEN 08/22/2001

| 8260 - SWB46 (AQ) | Complete |  | 08/27/2001 | 3525 | Complete | mrh |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | $<20.0$ | ug/L | 08/27/2001 | 3525 | <20.0 | mrh | SW | 8260A |
| Benzene | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | Sw | 8260A |
| tert-Butylbenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| sec-Butylbenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW | 8260A |
| n-Butylbenzene | <1.0 | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW | 8260A |
| Bromochloromethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Bromodichloromethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW | 8260A |
| Bromoform | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Bromobenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 08/27/2001 | 3525 | $<12.5$ | mrh | SW | 8260A |
| Carbon disulfide | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Carbon tetrachloride | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Chlorobenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Chloroethane | $<5.0$ | ug/L | 08/27/2001 | 3525 | < 5.0 | mrh | SW | 8260A |
| 2-Chlorotoluene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 4-Chlorotoluene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Chloroform | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Chloromethane | $<5.0$ | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | SW | 8260A |
| Dibromochloromethane | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Dibromomethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | $m \mathrm{mh}$ | SW | 8260A |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | <5.0 | ug/L | 08/27/2001 | 3525 | <5.0 | mrh | SW | 8260A |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,3-Dichlorobenzene | <1.0 | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW | 8260A |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 09/18/2001
6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002


| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1-Dichloroethane | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| 1,2-Dichloroethane | <1.0 | ug/L | 08/27/2001 | 3525 | <1.0 | $m \times h$ | SW 8260A |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrin | SW 8260A |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW 8260A |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW 8260A |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW 8260A |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| 2,2-Dichloropropane | <1.0 | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW 8260A |
| 1,1-Dichloropropene | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| cis-1,3-Dichloropropene | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | moth | SW 8260A |
| trans-1,3-Dichloropropene | <1.0 | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW 8260A |
| Ethylbenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| Hexachloxobutadiene | $<5.0$ | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | SW 8260A |
| n -Hexane | $<5.0$ | ug/L | 08/27/2001 | 3525 | <5.0 | $m \mathrm{~m}$ | SW 8260A |
| 2-Hexanone | $<12.5$ | ug/L | 08/27/2001 | 3525 | $<12.5$ | mrh | SW 8260A |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW 8260A |
| p-Isopropyltoluene | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW 8260A |
| Bromomethane | $<5.0$ | ug/L | 08/27/2001 | 3525 | <5.0 | mrh | SW 8260A |
| Methylene Chloride | $<5.0$ | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | SW 8260A |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 08/27/2001 | 3525 | <5.0 | mrh | SW 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 08/27/2001 | 3525 | $<12.5$ | mrh | SW 8260A |
| $n$-Propylbenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| Styrene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW 8260A |
| Naphthalene | $<5.0$ | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | SW 8260A |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | <1.0 | mrh | SW 8260A |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

## Kevin Wildman

HULI \& ASSOC. (Dublin) 09/18/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15323
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analyed | Number | Number Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION DATE/TIME TAKEN 701891

SBI002:TBI:W082201:428

| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mr | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tetrachloroethene | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Toluene | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | SW | 8260A |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Trichloroethene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Trichlorofluoromethane | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,2,3-Trichloropropane | < 5.0 | ug/L | 08/27/2001 | 3525 | $<5.0$ | mrh | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | SW | 8260A |
| Vinyl Acetate | $<5.0$ | ug/L | 08/27/2003 | 3525 | $<5.0$ | mrh | SW | 8260A |
| Vinyl Chloride | $<1.0$ | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrn | SW | 8260A |
| Xylenes | <1.0 | ug/L | 08/27/2001 | 3525 | $<1.0$ | mrh | Sw | 8260A |
| d4-1,2-Dichloroethane(surr) | 102 | \% | 08/27/2001 | 3525 |  | mrh | SW | 8260A |
| Dibromofluoromethane (surr) | 101 | \% | 08/27/2001 | 3525 |  | mrh | SW | 8260A |
| dis-Toluene (surr) | 99 | 4 | 08/27/2001 | 3525 |  | mrh | SW | 8260A |
| Bromofluorobenzene (surr) | 102 | \% | 08/27/2001 | 3525 |  | mirh | SW | 8260A |

## QUALITY CONTROL FLAG DEFINITIONS

PAGE 30 of 31

Job Number: 01.15323
(*) Indicates an out-of-control QC. The analytical data was reported based on other supporting quality control information.
(Note) Indicates to review the notes and comments section of the analytical report as there is additional information concerning this analytical result.
(MS) Indicates that the Matrix Spike (MS) was out of statistical advisory limits.
(MSD) Indicates that the Matrix Spike Duplicate (MSD) was out of statistical advisory limits.
(RPD) Indicates that the Relative Percent Difference (RPD) for the MS/MSD pair was outside of statistical advisory limits.
(SS) Indicates that the MS and MSD were out of statistical advisory limits.
(SSR) Indicates that the MS, MSD and RPD were out of statistical advisory limits.
(MSR) Indicates that the MS and RPD were out of statistical advisory limits.
(MSDR) Indicates that the MSD and RPD were out of statistical advisory limits.
(DL) Indicates that the MS and MSD were diluted out and the percent recoveries of the spikes could not be calculated.
(LS) Indicates that statistical accuracy and precision data is not available for spike concentrations which are < 1/4 of the sample amount. Care should be used in interpreting this data.
(J) Indicates estimated concentration due to internal standard areas or surrogate recoveries outside of control limits. A sample matrix effect is usually indicated.
(DW) Indicates Dry Weight.
Analytical Reporting Limits
The reporting limits listed for non-aqueous samples in the analytical report section are Practical Quantitation Limits (PQLS). These PQLs are based upon a typical standard weight used for a non-aqueous sample. The reporting limit for a sample may be different from the PQL listed depending upon the actual weight of sample used, the samples moisture content and any dilutions used during the analysis.

## NOTES AND COMMENTS

TestAmerica Job Number: 1.15323
Sample Number: 701886
Analysis: 8260 soil
Due to matrix interference, recovery of surrogate Bromofluorobenzene exceeded the recommended 74-121 \% range. Results were confirmed with replicate analysis.
$1.15323$



## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) . 09/24/2001 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.15744

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

Sample Number

703269 SBI002:MW17D:S005020:428
703270

Sample Description

SBI002:TB-1:W082901:428

Date
Taken
Date Received
$08 / 27 / 2001 \quad 08 / 30 / 2001$ $08 / 27 / 2001 \quad 08 / 30 / 2001$

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted only in its entirety.

Enclosure


## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 09/24/2001
6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.15744
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPIE D | CRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 703269 |  | SBI002:M | 17 | 0050 | : 428 |  |  |  | $08 /$ | 7/2001 | 1 10:00 |


| Dry Weight | 95.2 | $\%$ | 09/05/2001 |  | 1491 |  | mhg |  | 2540 G. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP NONAQUEOUS | Complete |  | 09/22/2001 |  | 1280 | Complete | emd | SW | 6010B |
| Arsenic, ICP | $<3.4$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/22/2001 | 916 | 3023 | $<3.4$ | emd | SW | 6010B |
| Barium, ICP | 22.1 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/22/2001 | 916 | 2954 | $<0.67$ | emd | SW | 6010日 |
| Cadmium, ICP | $<1.0$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/22/2001 | 916 | 2936 | $<1.0$ | emd | SW | 5010B |
| Chromium, ICP | 4.7 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/22/2001 | 916 | 2924 | <1.4 | emd | SW | 6010b |
| Lead, ICP | 13.4 | $\mathrm{mg} / \mathrm{kg} \mathrm{d} w$ | 09/22/2001 | 916 | 2925 | <2.7 | emd | SW | 6010B |
| Mercury, CVAA | 0.038 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/10/2001 | 625 | 642 | $<0.008$ | epk | SW | 7471A |
| Selenium, ICP | $<3.4$ | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/22/2001 | 916 | 3003 | <3. 4 | emd | SW | 6010B |
| Silver, ICP | <1. 4 | $\mathrm{mg} / \mathrm{kg} \mathrm{dw}$ | 09/22/2001 | 916 | 2956 | <1.4 | emd | SW | 6010B |
| ICP Digestion, Nonaqueous | Complete |  | 09/06/2001 | 916 |  | Complete | clm | Sw | 3050B |
| Mercury Digestion, Non-Aq | Complete |  | 09/07/2001 | 625 |  | Complete | clm | SW | 74.71A |
| VOLATILE COMPOUNDS-8260 NOR-Aq |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (Non-aq) | Complete |  | 09/01/2001 |  | 1494 | Complete | jxc |  |  |
| Acetone | <105 | ug/kg dw | 09/01/2001 |  | 1494 | $<105$ | jxc | SW | 8260A |
| Benzene | $<5.3$ | ug/kg dw | 09/01/2001 |  | 1494 | $<5.3$ | jxc | SW | 8260A |
| tert-Butylbenzene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 09/01/2001 |  | 1494 | $<5.3$ | jxc | SW | 8260A |
| sec-Butylbenzene | <5.3 | ug/kg dw | 09/01/2001 |  | 1494 | $<5.3$ | jxc | SW | 8260A |
| n-Butylbenzene | $<5.3$ | ug/kg dw | 09/01/2001 |  | 1494 | $<5.3$ | jxe | SW | 8260A |
| Bromochloromethane | $<5.3$ | $\mathrm{ug} / \mathrm{kg}$ dw | 09/01/2001 |  | 1494 | $<5.3$ | jxc | SW | 8260A |
| Bromodichloromethane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 09/01/2001 |  | 1494 | $<5.3$ | jxc | SW | 8260A |
| Bromoform | $<5.3$ | ug/kg dw | 09/01/2001 |  | 1494 | $<5.3$ | jxc | SW | 8260A |
| Bromobenzene | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 09/01/2001 |  | 1494 | $<5.3$ | jxc | SW | 8260A |
| 2-Butanone (MEK) | $<53$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 09/01/2001 |  | 1494 | $<53$ | jxc | SW | 8260A |
| Carbon disulfide | $<5.3$ | ug/kg dw | 09/01/2001 |  | 1494 | $<5.3$ | jxc | Sh | 8260A |

## ANALYTICAL REPORT

Kevin Wildman
$\begin{array}{ll}\text { HULL \& ASSOC. (Dublin) } \\ 61: 30 \text { Wilcox Rd. } & 09 / 24 / 2001\end{array}$
Dublin, OH 43016

Job Number: 01.15744
Client Project ID: South Bend Indiana SBIO02


SAMPLE NO. 703269

SAMPLE DESCRIPTION
SBI002:MW17D:S005020:428

DATE/TIME TAKEN 08/27/2001 10:00

| -arbon tetrachloride | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chlorobenzene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 09/01/2001 | 1494 | <5.3 | jxc | SW | 8260A |
| Chloroethane | $<10.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 09/01/2001 | 1494 | <10.5 | jxc | SW | 8260A |
| 2-Chlorotoluene | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| 4-Chlorotoluene | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | <5.3 | jxc | SW | 8260A |
| chloroform | <5.3 | ug/kg dw | 09/01/2001 | 1494 | <5.3 | jxc | SW | 8260A |
| Chloromethane | $<10.5$ | ug/kg dw | 09/01/2001 | 1494 | $<10.5$ | jxc | SW | 8260A |
| Dibromochloromethane | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | <5.3 | jxc | Sw | 8260A |
| Dibromomethane | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| Dichlorodifluoromethane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | <5.3 | jxc | SW | 8260A |
| 1,2-Dichlorobenzene | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| 1,3-Dichlorobenzene | $<5.3$ | $u g / \mathrm{kg}$ dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| 1,4-Dichlorobenzene | <5.3 | ug/kg dw | 09/01/2001 | 1494 | <5.3 | jxc | sw | 8260A |
| 1,1-Dichloroethane | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| 1,2-Dichloroethane | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| 1,1-Dichloroethene | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| cis-1,2-Dichloroethene | <5.3 | ug/kg dw | 09/01/2001 | 1494 | < 5.3 | jxc | SW | 8260A |
| trans-1,2-Dichloroethene | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| 1,2-Dichloropropane | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | <5.3 | jxc | SW | 8260A |
| 1,3-Dichloropropane | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| 2,2-Dichloropropane | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| 1,1-Dichloropropene | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| cis-1.3-Dichloropropene | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| trans-1,3-Dichloropropene | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| Ethylbenzene | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | <5.3 | jxc | SW | 8260A |

# TestAmerica, Incorporated 

PAGE 4 of 9

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15744
Client Project ID: South Bend Indiana SBI002

|  |  | Resuit | Flag | Units | Date <br> Analyzed | Prep Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { SAMPLE } \\ & 703269 \end{aligned}$ | NO. | SAMPLE D <br> SBIO02:M | $\begin{aligned} & \text { SCRI } \\ & \text { L7D: } \end{aligned}$ | $\begin{aligned} & \text { PTION } \\ & \text { SOO } \end{aligned}$ | $\text { : } 428$ |  |  |  | $\begin{aligned} & \text { DAT } \\ & 08 / \end{aligned}$ | /TIME TAKEN $7 / 200110: 00$ |


| Hexachlorobutadiene | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | <5.3 | jxc | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n -Hexane | $<21.0$ | $u g / \mathrm{kg}$ dw | 09/01/2001 | 1494 | $<21.0$ | jxc | SW | 8260A |
| 2-Hexanone | <52.5 | ug/kg dw | 09/01/2001 | 1494 | < 52.5 | jxc | SW | 8260A |
| Isopropylbenzene (Cumene) | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| p-Isopropyltoluene | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| Bromomethane | $<10.5$ | ug/kg dw | 09/01/2001 | 1494 | $<10.5$ | jxc | SW | 8260A |
| Methylene Chloride | $<10.5$ | ug/kg dw | 09/01/2001 | 1494 | <10.5 | jxc | SW | 8260A |
| Methyl t-butyl ether (MTBE) | <5.3 | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<52.5$ | $u g / \mathrm{kg} \mathrm{dw}$ | 09/01/2001 | 1494 | $<52.5$ | jxc | SW | 8260A |
| n-Propylbenzene | < 5.3 | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| Styrene | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | B260A |
| Naphthalene | $<10.5$ | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| 1,1,2,2-Tetrachloroethane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| Tetrachloroethene | <5.3 | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| Toluene | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 09/01/2001 | 1494 | <5.3 | jxe | SW | 8260A |
| 1,1,1-Trichloroethane | 10 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| 1,1,2-Trichloroethane | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| Trichloroethene | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | sw | 8260A |
| Trichlorofluoromethane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 09/01/2001 | 1494 | <5.3 | jxc | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| 1,2,4-Trimethylbenzene | <5.3 | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| 1,3,5-Trimethylbenzene | $<5.3$ | ug/kg dw | 09/01/2001 | 1494 | $<5.3$ | jxc | SW | 8260A |
| Vinyl Acetate | <5.3 | ug/kg dw | 09/01/2001 | 1494 | <5.3 | jxc | SW | 8260A |
| Vinyl Chloride | $<2.1$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | .09/01/2001 | 1494 | $<2.1$ | jxc | SW | 8260A |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman HULI \& ASSOC. (Dublin)
$09 / 24 / 2001$

Job Number: 01.15744
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION DATE/TIME TAKEN 703269 SBI002:MWI7D:S005020:428

| . Ines, Total | $<5.3$ | $\mathrm{ug} / \mathrm{kg} \mathrm{dw}$ | 09/01/2001 | 1494 | < 5.3 | jxec | SW 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d4-1,2-Dichloroethane (surr) | 99 | $\%$ | 09/01/2001 | 1494 |  | jxc | SW 8260A |
| Dibromofluoromethane (surr) | 98 | \% | 09/01/2001 | 1494 |  | jxc | SW 8260A |
| ds-Toluene (surr) | 96 | \% | 09/01/2001 | 1494 |  | jxc | SW 8260A |
| Bromofluorobenzene (surr) | 111 | \% | 09/01/2001 | 1494 |  | jxc | SW 8260A |

TestAmerica, Incorporated

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>09/24/2001<br>6130 Wilcox Rd.

Dublin, OH 43016

Job Number: 01.15744
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 703270 | SBIOO2:TB-I:W082901:428 | $08 / 27 / 2001$ |


| 8260-SW846 (AQ) | Complete |  | 09/06/2001 | 3548 | Complete | mrh |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | $<20.0$ | ug/L | 09/06/2001 | 3548 | <20.0 | mrh | SW 8260A |
| Benzene | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW 8260A |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW 8260A |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/06/2001 | 3548 | <1.0 | mrh | SW 8260A |
| n-Butylbenzene | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW 8260A |
| Bromochloromethane | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW 8260A |
| Bromodichloromethane | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW 8260A |
| Bromoform | <1.0 | ug/L | 09/06/2001 | 3548 | <1.0 | mrh | SW 8260A |
| Bromobenzene | $<1.0$ | ug/L | 09/06/2001 | 3548 | <1.0 | mrh | SW 8260A |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/06/2001 | 3548 | $<12.5$ | mrh | SW 8260A |
| Carbon disulfide | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW 8260A |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/06/2001 | 3548 | <1.0 | mrh | SW 8260A |
| Chlorobenzene | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW 8260A |
| Chloroethane | <5.0 | ug/L | 09/06/2001 | 3548 | <5.0 | mrh | SW 8260A |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW 8260A |
| 4-Chiorotoluene | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW 8260A |
| Chloroform | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW 8260A |
| Chloromethane | $<5.0$ | ug/L | 09/06/2001 | 3548 | $<5.0$ | mrh | SW 8260A |
| Dibromochloromethane | $<1.0$ | ug/L | 09/06/2001 | 3548 | <1.0 | mrh | SW 8260A |
| Dibromomethane | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW 8260A |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW 8260A |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/06/2001 | 3548 | <5.0 | mrh | SW 8260A |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW 8260A |
| 1,3-Dichlorobenzene | <1.0 | ug/L | 09/06/2001 | 3548 | <1.0 | mrh | SW 8260A |

# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

## Kevin Wildman

HULL \& ASSOC. (Dublin)
09/24/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.15744
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | IIO |  |  |  |  | DAT | /TIME | TAKEN |
| 703270 |  | SBI002:TB | -1:W | 829 | : 428 |  |  |  | 08/ | 7/200 |  |


| -. --Dichlorobenzene | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<2.0$ | mrh | SW | 8260A |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW | 8260A |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW | 8260A |
| cis-1,2-Dichloroethene | $<1.0$ | $\mathrm{ug} / \mathrm{L}$ | 09/06/2001 | 3548 | $<1.0$ | mrh | SW | 8260A |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/06/2001 | 3548 | <1.0 | mrh | SW | 8260A |
| 1,2-Dichloropropane | <1.0 | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW | 8260A |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mre | SW | 8260A |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW | 8260A |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW | 8260A |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/06/2001 | 3548 | <1.0 | mrh | SW | 8260A |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW | 8260A |
| Ethylbenzene | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW | 8260A |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/06/2001 | 3548 | $<5.0$ | mrh | SW | 8260A |
| n -Hexane | $<5.0$ | ug/L | 09/06/2001 | 3548 | <5.0 | mrh | SW | 8260A |
| 2-Hexanone | $<12.5$ | ug/L | 09/06/2001 | 3548 | $<12.5$ | mrh | SW | 8260A |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW | 8260A |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/06/2001. | 3548 | $<1.0$ | mrh | SW | 8260A |
| Bromomethane | $<5.0$ | ug/L | 09/06/2001 | 3548 | $<5.0$ | mrh | SW | 8260A |
| Methylene Chloride | $<5.0$ | ug/L | 09/06/2001 | 3548 | < 5.0 | mrh | SW | 8260A |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/06/2001 | 3548 | <5.0 | mrh | SW | 8260A |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/06/2001 | 3548 | $<12.5$ | mrh | SW | 8260A |
| n-propylbenzene | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW | 8260A |
| Styrene | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW | 8260A |
| Naphthalene | < 5.0 | ug/L | 09/06/2001 | 3548 | <5.0 | mrh | SW | 8260A |
| 1,1,1,2-Tetrachloroethane | <1.0 | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW | 8260A |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

09/24/2001

Job Number: 01.15744
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 703270

SAMPLE DESCRIPTION
SBI002:TB-1:W082901:428

DATE/TIME TAKEN 08/27/2001

| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | $m \mathrm{~m}$ | SW | 8260A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tetrachloroethene | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW | 8260A |
| Toluene | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW | 8260A |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/06/2001 | 3548 | < 5.0 | mrh | sw | 8260A |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW | 8260A |
| 1,1,2-Trichloroethane | <1.0 | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW | 8260A |
| Trichloroethene | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW | 8260A |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW | 8260A |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/06/2001 | 3548 | $<5.0$ | mra | SW | 8260A |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | sw | 8260A |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW | 8260A |
| Vinyl Acetate | $<5.0$ | ug/L | 09/06/2001 | 3548 | $<5.0$ | mrh | SW | 8260A |
| Vinyl Chloride | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW | 8260A |
| Xylenes | $<1.0$ | ug/L | 09/06/2001 | 3548 | $<1.0$ | mrh | SW | 8260A |
| d4-1,2-Dichloroethane (surr) | 103 | \% | 09/06/2001 | 3548 |  | mrh | SW | 8260A |
| Dibromofluoromethane (surr) | 103 | 8 | 09/06/2001 | 3548 |  | mrh | SW | 8260A |
| ds-Toluene (surr) | 100 | 8 | 09/06/2001 | 3548 |  | mrh | SW | 8260A |
| Bromofluorobenzene (surr) | 106 | \% | 09/06/2001 | 3548 |  | mrh | SW | 8260A |

## QUALITY CONTROL FLAG DEFINITIONS ${ }^{\text {PAGE } 9 \text { of } 9}$

Job Number: 01.15744
(*) Indicates an out-of-control QC. The analytical data was reported based on other supporting quality control information.
(Note) Indicates to review the notes and comments section of the analytical report as there is additional information concerning this analytical result.
(MS) Indicates that the Matrix Spike (MS) was out of statistical advisory limits.
(MSD) Indicates that the Matrix Spike Duplicate (MSD) was out of statistical advisory limits.
(RPD) Indicates that the Relative Percent Difference (RPD) for the MS/MSD pair was outside of statistical advisory limits.
(SS) Indicates that the MS and MSD were out of statistical advisory limits.
(SSR) Indicates that the MS, MSD and RPD were out of statistical advisory limits.
(MSR) Indicates that the MS and RPD were out of statistical advisory limits.
(MSDR) Indicates that the MSD and RPD were out of statistical advisory limits.
(DL) Indicates that the MS and MSD were diluted out and the percent recoveries of the spikes could not be calculated.
(LS) Indicates that statistical accuracy and precision data is not available for spike concentrations which are < 1/4 of the sample amount. Care should be used in interpreting this data.
(J) Indicates estimated concentration due to internal standard areas or surrogate recoveries outside of control limits. A sample matrix effect is usually indicated.
(DW) Indicates Dry Weight.
Analytical Reporting Limits
The reporting limits listed for non-aqueous samples in the analytical report section are Practical Quantitation Limits (PQLs). These PQLs are based upon a typical standard weight used for a non-aqueous sample. The reporting limit for a sample may be different from the PQL listed depending upon the actual weight of sample used, the samples moisture content and any dilutions used during the analysis.

TestAmerica, Inc. Dayton Division

EXCEEDENCE REPORT
09/24/2001 15:40

No permits specified for job 01. 15419
$1.15744$


## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016
Job Number: 01.17437

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

Sample

## Number

Sample Description
Date
Date
Taken
Received
708596
708597
708598
708599
708600
708601
708602
708603
708604
708605
708606
SBI002:HMW6D:G092001:523
SBI002:HMW4S:G092001:523
SBI002:HMW6S:G092001:523
SBIO02:HMW3S:G092001:523
SBI002:MW14:G092001:523
SBI002:HMW24D:G092001:523
SBI002:HMW20S:G092001:503
SBI002:FB1:G092001:523
SBI002:FB2:G092001:523
SBI002:HMW5S:G092001:523
SBI002:SB1:G092001:523

| $09 / 20 / 2001$ | $09 / 21 / 2001$ |
| :--- | :--- |
| $09 / 20 / 2001$ | $09 / 21 / 2001$ |
| $09 / 20 / 2001$ | $09 / 21 / 2001$ |
| $09 / 20 / 2001$ | $09 / 21 / 2001$ |
| $09 / 20 / 2001$ | $09 / 21 / 2001$ |
| $09 / 20 / 2001$ | $09 / 21 / 2001$ |
| $09 / 20 / 2001$ | $09 / 21 / 2001$ |
| $09 / 20 / 2001$ | $09 / 21 / 2001$ |
| $09 / 20 / 2001$ | $09 / 21 / 2001$ |
| $09 / 20 / 2001$ | $09 / 21 / 2001$ |
| $09 / 20 / 2001$ | $09 / 21 / 2001$ |

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.
Reproduction of this analytical report is permitted only in its entirety.

Enclosure


# TestAmerica, Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>10/12/2001<br>6130 Wilcox Rd.

Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method R | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE NO. | SAMPLE D | CRI | IIO |  |  |  |  | DAT | /TIME | TAKEN |
| 708596 | SBI002:H | N6D: | G092 | : 523 |  |  |  | $09 /$ | 0/200 | 1 07:55 |



# TestAmerica, Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 708596 | SBI002:HMW6D:G092001:523 | $09 / 20 / 2001$ 07:55 |


| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | dmg | S | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carbon disulfide | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260日 |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Chloroethane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260 B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260 B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| Chloroform | <1.0 | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | ding | SW | 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | ding | Sw | 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260日 |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | Sw | 82608 |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>10/12/2001

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |

SAMPLE NO. 708596

SAMPLE DESCRIPTION
SBIOO2:HMW6D:G092001:523

| trans-1,3-Dichloropropene | <1.0 | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | Sw | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| Hexachlorobutadiene | <5.0 | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 82608 |
| n -Hexane | $<5.0$ | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 8260B |
| 2-Hexanone | <12.5 | ug/L | 09/26/2001 | 3608 | $<12.5$ | dmg | SW | 82608 |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW | 8260b |
| p-Isopropyltoluene | <1.0 | ug/L | 09/26/2001 | 3608 | $<2.0$ | ding | SW | 8260B |
| Bromomethane | < 5.0 | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dimg | SW | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 8260B |
| 4-Methyl-2-pentanone (MTBK) | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | dmg | SW | 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| Naphthalene | $<5.0$ | ug/L | 09/26/2001 | 3608 | < 5.0 | dmg | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 8260B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 8260B |
| Tetrachloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Toluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |
| Trichloroethene | 6.7 | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 82608 |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260 B |
| 1,3,5-Trimethylbenzene | $<1.0$ | $u g / L$ | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |

## TestAmerica, Incorporated

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## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.17437


## SAMPLE NO. SAMPLE DESCRIPTION

 708596SBI002:HMW6D:G092001:523

DATE/TIME TAKEN 09/20/2001 07:55

| Vinyl Acetate | <5.0 | ug/L | 09/26/2001 |  | 3608 | <5.0 | dmg | Sw | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| Xylenes | <1.0 | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 82608 |
| d4-1,2-Dichloroethane (surr) | 110 | $\%$ | 09/26/2001 |  | 3608 |  | dmg | SW | 8260B |
| Dibromofluoromethane (surr) | 105 | \% | 09/26/2001 |  | 3608 |  | dmg | SW | 8260B |
| ds-Toluene (surr) | 97 | 8 | 09/26/2001 |  | 3608 |  | dmg | SW | 8260B |
| Bromofluorobenzene (surr) | 103 | $\%$ | 09/26/2001 |  | 3608 |  | dmg | SW | 8260B |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 82700 |
| Acenaphthylene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Anthracene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Benzo(a) anthracene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Benzo (k) fluoranthene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Benzo (a) pyrene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | Sw | $8270{ }^{\text {c }}$ |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| 4-Chloroaniline | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Chrysene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |

# TestAmerica, Incorporated 

PAGE 6 of 56 ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: . 01.17437

## Client Project ID: South Bend Indiana SBI002



| Dibenzo (a, h) anthracene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzofuran | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/29/2001 | 1279 | 2710 | $<50$ | jes | SW | 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 82700 |
| Dimethyl phthalate | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | Sw | 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | Sw | 8270C |
| Fluoranthene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jсs | SW | 8270C |
| Fluorene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Hexachlorobenzene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 82700 |
| Hexachlorocyclopentadiene | <20 | ug/L | 09/29/2001 | 1279 | 2710 | $<20$ | jcs | SW | 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jсs | SW | 8270 C |
| Indeno(1, 2, 3-cd) pyrene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Isophorone | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 82700 |
| Naphthalene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270c |
| Nitrobenzene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Phenanthrene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | Sw | 8270 C |
| Pyrene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 89 | $\%$ | 09/29/2001 | 1279 | 2710 |  | jcs | SW | 8270 C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

 HULL \& ASSOC. (Dublin)10/12/2001 6130 Wilcox Rd. Dublin, OH 43016

## Job Number: 01.17437

Client Project ID: South Bend Indiana SBI002


| Surrogate: 2-Fluorobiphenyl | 87 | $\%$ | 09/29/2001 | 1279 | 2710 |  | jcs | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: d14-Terphenyl | 54 | * | 09/29/2001 | 1279 | 2710 |  | jes | SW | 82700 |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<52$ | ug/L | 09/29/2001 | 1279 | 2710 | $<52$ | jcs | SW | 82700 |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |
| 2-Chlorophenol | <10 | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2-Methylphenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | Sw | 8270C |
| 2-Nitrophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Pentachlorophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Phenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | $8270{ }^{\text {c }}$ |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Surrogate: d6-Phenol | 67 | 8 | 09/29/2001 | 1279 | 2710 |  | jes | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 72 | $\%$ | 09/29/2001 | 1279 | 2710 |  | jcs | SW | 8270 C |
| Surrogate: Tribromophenol | 71 | \% | 09/29/2001 | 1279 | 2710 |  | jcs | SW | 8270C |
| TPH - GRO (Aqueous) | <1 | $\mathrm{mg} / \mathrm{L}$ | 10/02/2001 |  | 86 | <1 | meb | SW | 8015M |

## TestAmerica, Incorporated

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## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION 708597 . <br> SBIO 02 :HMW4S:G092001:523

DATE/TIME TAKEN
09/20/2001 08:15


## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch Reporting Analyst |

SAMPLE NO. 708597

SAMPLE DESCRIPTION
SBI002:HMW4S:G092001:523

DATE/TIME TAKEN 09/20/2001 08:15

| 2-Butanone (MEK) | . $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carbon disulfide | <1.0 | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |
| Carbon tetrachloride | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Chloroethane | < 5.0 | ug/L | 09/26/2001 | 3608 | <5.0 | ding | SW | 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 4-Chlorotoluene | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Chloroform | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | Sw | 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/26/2001 | 3608 | < 5.0 | dmg | sw | 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 82608 |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | <5.0 | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260日 |
| 1,2-Dichlorobenzene | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 1,3-Dichlorobenzene | <1.0 | ug/L | 09/26/2001 | 3608 | <1.0 | dimg | SW | 8260 B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | ding | SW | 8260B |
| 1,1-Dichloroethane | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $\leqslant 1.0$ | dmg | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Cis-1.2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| trans-1,2-Dichloroethene | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260 B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | sw | 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| cis-1,3-Dichloropropene | <1.0 | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |

# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 708597 | SBIOO2:HMW4S:G092001:523 |

DATE/TIME TAKEN 09/20/2001 08:15

| trang-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dang | SW | 8.260 B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 82608 |
| n -Hexane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | amg | SW | 82608 |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | dimg | SW | 8260B |
| Isopropylbenzene (Cumene) | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | sW | 8260 B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | ding | SW | 82608 |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260 B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | dmg | SW | 8260B |
| n-Propylbenzene | $<2.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260 B |
| Naphthalene | $\leqslant 5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260 B |
| Tetrachloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |
| Toluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | ding | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 8260 B |
| Trichloroethene | 4.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dimg | SW | 8260B |
| 1,2,4-Trimethy1benzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW | 8260 B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260 B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  |  | Prep Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch |  |
| Reporting Analyst |  |  |  |  |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |
| :--- | :--- |
| 708597 | SBIOO2:HMW4S:G092001:523 09/20/2001 08:15 |

SBI002:HMW4S:G092001:523

| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 |  | 3608 | $<5.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl chloride | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| Xylenes | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | <1.0 | dmg | SW | 8260B |
| d4-1,2-Dichioroethane (surr) | 111 | \% | 09/26/2001 |  | 3608 |  | dmg | SW | 8260B |
| Dibromofluoromethane (surr) | 105 | \% | 09/26/2001 |  | 3608 |  | dmg | SW | 8260B |
| d8-Toluene (surr) | 96 | 8 | 09/26/2001 |  | 3608 |  | dimg | SW | 8260B |
| Bromofluorobenzene (surr) | 104 | 8 | 09/26/2001 |  | 3608 |  | ding | SW | 8260 B |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Acenaphthylene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Benzo(b) fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Benzo(k) fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Benzo (a) pyxene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Benzyl butyl phthalate | <10 | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| bia(2-Chloroethyl) ether | $<10$ | $\underline{u g / L}$ | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Chrysene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |

# TestAmerica, Incorporated 

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001 6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION<br>SBI002:HMW4S:GO92001:523

DATE/TIME TAKEN 09/20/2001 08:15

| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzofuran | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | <10 | jcs | SW 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 3,3'-Dichlorobenzidine | $<52$ | ug/L | 09/28/2001 | 1279 | 2710 | <52 | jcs | SW 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/28/2001 | 2279 | 2710 | $<10$ | jcs | SW 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | Sw 8270C |
| Fluorene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Hexachlorocyclopentadiene | $<21$ | ug/L | 09/28/2001 | 1279 | 2710 | $<21$ | jes | SW 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Indeno (1,2,3-cd) pyrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Isophorone | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Naphthalene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Nitrobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jos | SW 8270c |
| Phenanthrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2720 | $<10$ | jcs | SW 8270C |
| Pyrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Surrogate: d5-Nitrobenzene | 80 | $\%$ | 09/28/2001 | 1279 | 2710 |  | jcs | SW 8270C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 708597

SAMPLE DESCRIPTION
SBI002:HMW4S:G092001:523

DATE/TIME TAKEN
09/20/2001 08:15

| Surrogate: 2-Fluorobiphenyl | 85 | \% | 09/28/2001. | 1279 | 2710 |  | jcs | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: d14-Terphenyl | 61 | \% | 09/28/2001 | 1279 | 2710 |  | jes | SW | 8270 C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | <52 | ug/L | 09/28/2001 | 1279 | 2710 | <52 | jcs | SW | 82700 |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | Sw | 8270C |
| 2-Chlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$. | jes | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | $8270{ }^{\text {c }}$ |
| 2-Methylphenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| 2-Nitrophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Pentachlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | $8270{ }^{\circ}$ |
| Phenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jся | SW | 8270C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Surrogate: d6-Phenol | 61 | 8 | 09/28/2001 | 1279 | 2710 |  | jcs | SW | 8270C |
| Surrogate: 2-Fluorophenol | 68 | 8 | 09/28/2001 | 1279 | 2710 |  | jes | SW | 8270 C |
| Surrogate: Tribromophenol | 54 | \% | 09/28/2001 | 1279 | 2710 |  | jes | SW | $8270{ }^{\text {c }}$ |
| TPH - GRO (Aqueous) | $<1$ | mg/L | 10/02/2001 |  | 86 | $<1$ | meb | SW | 8015M |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$10 / 12 / 2001$

Job Number: 01.17437

## Client Project ID: South Bend Indiana SBI002



DATE/TIME TAKEN 09/20/2001 07:40


# TestAmerica，Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin，OH 43016

Job Number：01．17437
Client Project ID：South Bend Indiana SBI002


10／12／2001

Limit

SAMPLE DESCRIPTION
SBI002 ：HMW6S：G092001：523

Initials Method Reference
DATE／TIME TAKEN 09／20／2001 07：40

| 2－Butanone（MEK） | $<12.5$ | ug／L | 09／26／2001 | 3608 | $<12.5$ | dmg | Sw | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carbon disulfide | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Carbon tetrachloride | $<1.0$ | ug／L | 09／26／2001 | 3608 | ＜1．0 | dmg | SW | 8260日 |
| Chlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Chloroethane | $<5.0$ | ug／L | 09／26／2001 | 3608 | $<5.0$ | dmg | SW | 8260日 |
| 2－Chlorotoluene | $<1.0$ | ug／L | 09／26／2001 | 3608 | ＜1．0 | dmg | SW | 8260B |
| 4－Chlorotoluene | $<1.0$ | ug／L | 09／26／2001 | 3608 | ＜1．0 | ding | SW | 8260B |
| Chloroform | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Chloromethane | $<5.0$ | ug／L | 09／26／2001 | 3608 | ＜5．0 | dmg | SW | 8260B |
| Dibromochloromethane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Dibromomethane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1，2－Dibromo－3－chloropropane | $<5.0$ | ug／L | 09／26／2001 | 3608 | $<5.0$ | dmg | SW | 8260B |
| 1，2－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3608 | ＜1．0 | dmg | SW | 82608 |
| 1，3－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3608 | ＜1．0 | dmg | Sw | 8260B |
| 1，4－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1，1－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3608 | ＜1．0 | dmg | SW | 8260B |
| 1，1－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Cis－1，2－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW | 8260 B |
| trans－1，2－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW | 8260 B |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1，1－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| cis－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3608 | ＜1．0 | dmg | SW | 8260日 |

# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>10/12/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Rumber | Number | Limit | Initials Method Reference |  |  |

## SAMPLE NO. SAMPLE DESCRIPTION 708598 SBI002:HMW6S:G092001:523

| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | drng | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Hexachlorobutadiene | <5.0 | ug/L | 09/26/2001 | 3608 | <5.0 | ding | SW | 8260日 |
| n-Hexane | $<5.0$ | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | dmg | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dimg | SW | 8260B |
| p-Isopropyitoluene | <1.0 | ug/L | 09/26/2001 | 3608 | <1. 0 | dmg | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260 B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dimg | Sw | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | dmg | SW | 82608 |
| $n$-Propylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | Sw | 8260B |
| Styrene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| Naphthalene | $<5.0$ | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3608 | $<1.0$ | dmg | Sw | 8260 B |
| Tetrachloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Toluene | <1.0 | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/26/2001 | 3608 | <5.0 | ding | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2-Trichloroethane | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Trichloroethene | 4.1 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | sw | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260日 |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 360B | $<1.0$ | dimg | SW | 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |

# TestAmerica, Incorporated 

ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analyzed | Number | Number Limit | Initials Method Reference |  |  |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 708598 | SBI002:HMW6S:G092001:523 | $09 / 20 / 2001$ 07:40 |


| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 |  | 3608 | $<5.0$ | dmg | SW | 8260 B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | <1.0 | dmg | SW | 8260B |
| Xylenes | <1.0 | ug/L | 09/26/2001 |  | 3608 | <1.0 | dmg | SW | 8260B |
| d4-1,2-Dichloroethane (eurr) | 111 | \% | 09/26/2001 |  | 3608 |  | dmg | SW | 8260B |
| Dibromofluoromethane (surr) | 105 | \% | 09/26/2001 |  | 3608 |  | dmg | SW | 8260B |
| d8-Toluene (surr) | 99 | 8 | 09/26/2001 |  | 3608 |  | dmg | SW | 82608 |
| Bromofluorobenzene (surr) | 100 | 8 | 09/26/2001 |  | 3608 |  | dmg | SW | 8260B |
|  |  |  |  |  |  |  |  |  |  |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Acenaphthylene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Anthracene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/29/2001 | 1.279 | 2710 | $<10$ | jes | SW | 8270C |
| Benzo(k) fluoranthene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | j¢s | SW | 8270C |
| Benzo(a) pyrene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | <10 | јсв | SW | 82700 |
| Benzyl alcohol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| bis(2-Chloroethyl)ether | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 82700 |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 2,2'-oxybis(1-Chloropropane) | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| 4-Chloroaniline | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Chrysene | <10 | ug/L | 09/29/2001 | 1279 | 2710 | <10 | jcs | SW | 8270 C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | SCRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 708598 |  | SBIO 02 : HM | N6S | O92 | : 523 |  |  |  | 09/ | 0/2001 | 07:40 |


| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ |  | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzofuran | $<10$ |  | ug/L | 09/29/2001 | 1279 | 2710 | <10 | jes | SW | 8270 C |
| 1,2-Dichlorobenzene | $<10$ |  | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 82700 |
| 1,3-Dichlorobenzene | $<10$ |  | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 1,4-Dichlorobenzene | $<10$ |  | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<50$ |  | ug/L | 09/29/2001 | 1279 | 2710 | $<50$ | jes | SW | 8270C |
| Diethyl phthalate | $<10$ |  | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Dimethyl phthalate | $<10$ |  | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2,4-Dinitrotoluene | $<10$ |  | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2,6-Dinitrotoluene | $<10$ |  | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Di-n-octylphthalate | $<10$ |  | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Fluoranthene | <10 |  | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Fluorene | $<10$ |  | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Hexachlorobenzene | $<10$ |  | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Hexachloro-1,3-butadiene | $<10$ |  | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Hexachlorocyclopentadiene | $<20$ |  | ug/L | 09/29/2001 | 1279 | 2710 | <20 | jcs | SW | 8270 C |
| Hexachloroethane | $<10$ |  | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Indeno (1,2,3-cd)pyrene | $<10$ |  | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Isophorone | $<10$ |  | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Naphthalene | $<10$ |  | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Nitrobenzene | $<10$ |  | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | Sw | 8270C |
| N-Nitrosodi-n-propylamine | $<10$ |  | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Phenanthrene | $<10$ |  | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Pyrene | $<10$ |  | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<10$ |  | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 88 | note | \% | 09/29/2001 | 1279 | 2710 |  | jes | SW | 8270 C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBIO02

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Rumber Number | Limit | Initials Method Reference |  |  |  |

## SAMPLE NO. SAMPLE DESCRIPTION 708598 <br> SBI002 : HMW6S: G092001:523

DATE/TIME TAKEN 09/20/2001 07:40

| Surrogate: 2-Fluorobiphenyl | 66 | 8 | 09/29/2001 | 1279 | 2710 |  | jes | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: di4-Terphenyl | 41 | \% | 09/29/2001 | 1279 | 2710 |  | jes | SW | 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/29/2001 | 1279 | 2710 | $<50$ | jcs | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2-Chlorophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 82700 |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2-Methylphenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| 2-Nitrophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Pentachlorophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jсв | SW | 8270 C |
| Phenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Surrogate: d6-Phenol | 73 | 4 | 09/29/2001 | 1279 | 2710 |  | jes | SW | 82700 |
| Surrogate: 2-Fluorophenol | 73 | \% | 09/29/2001 | 1279 | 2710 |  | jes | SW | 82700 |
| Surrogate: Tribromophenol | 63 | \% | 09/29/2001 | 1279 | 2710 |  | jes | sw | 8270C |
| TPH - GRO (Aqueous) | <1 | $\mathrm{mg} / \mathrm{L}$ | 10/02/2001 |  | 86 | <1 | meb | Sw | 8015M |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION
708599
DATE/TIME TAKEN
09/20/2001 08:30

| ICPMS TOTAL METALS | Complete |  | 10/03/2001 |  | 2583 | Complete | kmb | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | 0.0189 | mg/L | 10/03/2001 | 1851 | 3715 | $<0.0050$ | krib | SW | 6020 |
| Barium, ICPMS | 0.0814 | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3923 | $<0.0050$ | kmb | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | mg/L | 10/03/2001 | 1851 | 3594 | $<0.0010$ | kmb | SW | 6020 |
| Chromium, ICPMS (0.005) | 0.0127 | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | - 1851 | 3992 | $<0.0050$ | kmb | Sw | 6020 |
| Lead, ICPMS | 0.0313 | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3672 | $<0.0010$ | kmb | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/26/2001 | 1417 | 1363 | $<0.0002$ | epk | SW | 7470A |
| Selenium, gFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 754 | 579 | $<0.0050$ | 1nh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3929 | $<0.0005$ | kmb | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/27/2001 | 1851 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 754 |  | Complete | murt | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/25/2001 | 1417 |  | Complete | epk | SW | 7470A |
| VOLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/26/2001 |  | 3608 | Complete | dmg |  |  |
| Acetone | <20.0 | ug/L | 09/26/2001 |  | 3608 | $<20.0$ | dmg | SW | 8260B |
| Benzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| tert-Butylbenzene | <1.0 | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| sec-Butylbenzene | <1.0 | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260b |
| n-Butylbenzene | <1.0 | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| Bromochloromethane | <1.0 | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dimg | SW | 82608 |
| Bromodichloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dimg | SW | 8260 B |
| Bromoform | $<1.0$ | $\underline{u g / L}$ | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| Bromobenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| 2-Butanone (MEK) | <12.5 | ug/L | 09/26/2001 |  | 3608 | $<12.5$ | dmg | SW | 8260B |
| Carbon disulfide | <1.0 | ug/L | 09/26/2001 |  | 3608 | <1.0 | dmg | SW | 82608 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>10/12/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 708599 | SBIOO2:HMW3S:G092001:523 |


| Carbon tetrachloride | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Chloroethane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW 8260B |
| Chloroform | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Chloromethane | <5.0 | ug/L | 09/26/2001 | 3608 | $<5.0$ | dimg | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW 8260日 |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | S* 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 1.2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Cis-1,2-Dichloroethene | 1.6 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| trans-1,2-Dichloroethene | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260E |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW 8260B |
| Ethylbenzene | <1.0 | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW 8260B |

# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 708599

SAMPLE DESCRIPTION
SBI002:HMW3S:G092001:523

10/12/2001

Initials Method Reference

DATE/TIME TAKEN
09/20/2001 08:30

| Hexachlorobutadiene | < 5.0 | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW 8260 B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n -Hexane | <5.0 | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | dmg | SW 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW 8260B |
| p-Isopropyltoluene | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW 8260日 |
| Methylene Chloride | < 5.0 | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW 8260 B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | dmg | SW 8260日 |
| n-Propylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW 8260 B |
| Styrene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Naphthalene | <5.0 | ug/L | 09/26/2001 | 3608 | <5.0 | dimg | SW 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Tetrachloroethene | 1.2 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260b |
| Toluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SN 82608 |
| Trichloroethene | 13.8 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 82608 |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260 B |
| 1,2,3-Trichloropropane | <5.0 | ug/L | 09/26/2001 | 3608 | $<5.0$ | ding | SW 8260 B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 82608 |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 708599 SBI002:HMW3S:G092001:523

DATE/TIME TAKEN 09/20/2001 08:30

| xylenes | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg |  | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d4-1,2-Dichloroethane (surr) | 108 | 8 | 09/26/2001 | 3608 |  | dmg | sw | 8260B |
| Dibromofluoromethane (surr) | 103 | \% | 09/26/2001 | 3608 |  | dmg | Sw | 8260B |
| ds-Toluene (surr) | 96 | \% | 09/26/2001 | 3608 |  | dmg | Sw | 8260B |
| Bromofluorobenzene (surr) | 100 | \% | 09/26/2001 | 3608 |  | dmg | sw | ${ }^{82608}$ |
| TPH - GRO (Aqueous) | <1 | mg/L | 10/02/2001 | 86 | <1 | meb | Sw | 8015M |

## SAMPLE NO. SAMPLE DESCRIPTION $708600 \quad$ SBI002:MW14:G092001:523

| ICPMS TOTAL METALS | Complete |  | 10/03/2001 |  | 2583 | Complete | kmb | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | <0.0050 | mg/L | 10/03/2001 | 1851 | 3715 | $<0.0050$ | kemb | SW | 6020 |
| Barium, ICPMS | 0.0443 | mg/L | 10/03/2001 | 1851 | 3923 | $<0.0050$ | kmb | SW | 6020 |
| Cadmium, ICPMS | <0.0010. | mg/L | 10/03/2001 | 1851 | 3594 | $<0.0010$ | kmb | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | mg/L | 10/03/2001 | 1851 | 3992 | $<0.0050$ | kmb | SW | 6020 |
| Lead, ICPMS | 0.0018 | mg/L | 10/03/2001 | 1851 | 3672 | $<0.0010$ | kmb | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/26/2001 | 1417 | 1363 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | mg/L | 09/28/2001 | 754 | 579 | $<0.0050$ | 1nh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | mg/L | 10/03/2001 | 1851 | 3929 | $<0.0005$ | kmb | Sw | 6020 |
| Metala Digestion, ICPMS | Complete |  | 09/27/2001 | 1851 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 754 |  | Complete | mrt | SW | 3020 |
| Manual Mercury Digestion | Complete |  | 09/25/2001 | 1417 |  | Complete | epk | SW | 47 |

## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBIOO2

|  |  |  | Prep | Run |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |

## SAMPLE NO. SAMPLE DESCRIPTION 708600

SBIO02:MW14:G092001:523

## DATE/TIME TAKEN

 09/20/2001 08:45| 8260 - SW846 (AQ) | Complete |  | 09/26/2001 | 3608 | Complete | dmg |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | <20.0 | ug/L | 09/26/2001 | 3608 | <20.0 | dmg | SW 8260b |
| Benzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | S* 8260B |
| tert-Butylbenzene | <1.0 | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW 8260B |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| n-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Bromochloromethane | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Bromoform | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Bromobenzene | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW 8260B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | dmg | SW 8260B |
| Carbon disulfide | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW 8260日 |
| Chlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Chloroethane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW 8260B |
| 2-Chlorotoluene | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Chloroform | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$10 / 12 / 2001$

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |

SAMPLE NO. 708600

SAMPLE DESCRIPTION
SBIO02:MW14:G092001:523

DATE/TIME TAKEN 09/20/2001 08:45

| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | Sw | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3608 | $<1.0$ | dmg | SW | 8260 B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW | 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dimg | SW | 82608 |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260 B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 82608 |
| Hexachlorobutadiene | < 5.0 | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260B |
| n -Hexane | <5.0 | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260b |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | dmg | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/26/2001. | 3608 | $<1.0$ | dmg | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dimg | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 82608 |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | dmg | SW | 82608 |
| n-Propylbenzene | $<1.0$ | $\mathrm{ug} / \mathrm{L}$ | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 82608 |
| Styrene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | Sw | 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 8260日 |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW | 82608 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HUL工 \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: '01.17437
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
708600

DATE/TIME TAKEN 09/20/2001 08:45

| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 8260b |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tetrachloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Toluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | Sw | 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | . ug/L | 09/26/2001 | 3608 | < 5.0 | dmg | SW | 8260B |
| 1,1,1-Trichloroethane | 3.7 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 82608 |
| Trichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 8260b |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 82608 |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 82608 |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | ding | SW | 8260B |
| Kylenes | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dimg | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 109 | \% | 09/26/2001 | 3608 |  | dmg | SW | 82608 |
| Dibromofluoromethane (surr) | 105 | \% | 09/26/2001 | 3608 |  | dmg | SW | 82601 |
| d8-Toluene (surr) | 101 | * | 09/26/2001 | 3608 |  | dmg | SW | 8260 B |
| Bromofluorobenzene (surr) | 100 | \% | 09/26/2001 | 3608 |  | dmg | SW | 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman

HULL \& ASSOC. (Dublin)<br>$10 / 12 / 2001$<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Date | Batch | Batch Reporting Analyst |  |
| Result Flag Units | Analyzed | Number Number Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION
708601 SBI002:HMW24D:G092001:523

DATE/TIME TAKEN 09/20/2001 08:50

| ICPMS TOTAL METALS | Complete |  | 10/03/2001 |  | 2583 | Complete | kmb | Sw | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | mg/L | 10/03/2001 | 1851 | 3715 | $<0.0050$ | kmb | SW | 6020 |
| Barium, ICPMS | 0.0556 | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3923 | $<0.0050$ | kmb | Sw | 6020 |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3594 | $<0.0010$ | kmb | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3992 | $<0.0050$ | kmb | SW | 6020 |
| Lead, ICPMS | 0.0017 | mg/L | 10/03/2001 | 1851 | 3672 | $<0.0010$ | kmb | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/26/2001 | 1417 | 1363 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | mg/L | 09/28/2001 | 754 | 579 | $<0.0050$ | 1 nh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | mg/L | 10/03/2001 | 1851 | 3929 | $<0.0005$ | kmb | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/27/2001 | 1851 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/25/2001 | 754 |  | Complete | mrat | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/25/2001 | 1417 |  | Complete | epk | SW | 7470A |
| VOLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/26/2001 |  | 3608 | Complete | dmg |  |  |
| Acetone | $<20.0$ | ug/L | 09/26/2001 |  | 3608 | <20.0 | dmg | SW | 8260B |
| Benzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dimg | SW | 8260B |
| sec-Butylbenzene | <1. 0 | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| $n-$ Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 82608 |
| Bromochloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260日 |
| Eromodichloromethane | <1.0 | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| Bromoform | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dimg | SW | 8260B |
| Bromobenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 |  | 3608 | $<12.5$ | dmg | SW | 8260B |
| Carbon disulfide | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION 708601

DATE/TIME TAKEN 09/20/2001 08:50

| Carbon tetrachloride | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 82608 |
| Chloroethane | <5.0 | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 82608 |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260 B |
| Chloroform | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW | 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | amg | SW | 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 1,2-Dibromo-3-chloropropane | <5.0 | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | Sw | 82608 |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260 B |
| 1,3-Dichlorobenzene | $\leqslant 1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloroethane | <1.0 | $\mathrm{ug} / \mathrm{L}$ | 09/26/2001 | 3608 | <1.0 | dmg | SW | 82608 |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Cis-1,2-Dichioroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | sw | 8260日 |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW | 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | Sw | 8260B |
| 2,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | Sw | 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW | 8260B |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW | 82608 |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 708601

SAMPLE DESCRIPTION
SBIO 02 : HMW2 4D: G092001: 523

DATE/TIME TAKEN
09/20/2001 08:50


## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |

## SAMPLE NO. SAMPLE DESCRIPTION

 708601SBI 002 : HMW24D: G092001:523
DATE/TIME TAKEN 09/20/2001 08:50

| XYlenes | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | sw | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d4-1,2-Dichloroethane (surr) | 108 | 8 | 09/26/2001 | 3608 |  | dmg | SW | 82608 |
| Dibromofluoromethane (surr) | 104 | 8 | 09/26/2001 | 3608 |  | dmg | Sw | 82608 |
| d8-Toluene (surr) | 96 | $\%$ | 09/26/2001 | 3608 |  | dmg | SW | 82608 |
| Bromofluorobenzene (surr) | 98 | 8 | 09/26/2001 | 3608 |  | dmg | SW | 82608 |

## SAMPLE NO. SAMPLE DESCRIPTION 708602 SBIO02:HMW20S:G092001:503



# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
10/12/2001
6130 Wilcox Rd.

Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analyzed | Number | Number | Limit | Initials Method Reference |  |

SAMPLE NO. SAMPLE DESCRIPTION 708602

SBI002:HMW20S:G092001:503

DATE/TIME TAKEN 09/20/2001 09:30

| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | ding | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carbon disulfide | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Chloroethane | $<5.0$ | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | sw | 8260B |
| 2-chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Chloroform | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/26/2001 | 3608 | < 5.0 | dmg | SW | 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/26/2001 | 3608 | <5.0 | dimg | SW | 82608 |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260 B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1.1-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | sw | 8260B |
| trans-1, 2-Dichloroethene | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | Sw | 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |

# TestAmerica, Incorporated 

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# ANALYTICAL REPORT 

Kevin Wildman HULL \& ȦSSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analyed | Number | Number | Limit | Initials Method Reference |  |

SAMPLE NO. SAMPLE DESCRIPTION
708602

| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260b |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW | 82608 |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260B |
| n -Hexane | <5.0 | ug/L | 09/26/2001 | 3608 | <5.0 | dimg | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | dmg | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260b |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260 B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | dmg | SW | 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Naphthalene | <5.0 | ug/L | 09/26/2001 | 3608 | $<5.0$ | dimg | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260b |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Tetrachloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| Toluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 82608 |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | Sw | 82608 |
| Trichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260b |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 82608 |
| 1,2,4-Trimethylbenzene | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,3,5-Trimethylbenzene | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17437
Client Project ID: South Bend Indiana SBIO02


DATE/TIME TAKEN 09/20/2001 09:30

| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 |  | 3608 | < 5.0 | dmg | S* | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 82608 |
| Xylenes | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 109 | \% | 09/26/2001 |  | 3608 |  | ding | Sw | 8260B |
| Dibromofluoromethane (surr) | 103 | \% | 09/26/2001 |  | 3608 |  | dmg | SW | 8260B |
| d8-Toluene (surr) | 97 | $\%$ | 09/25/2001 |  | 3608 |  | dmg | SW | 82608 |
| Bromofluorobenzene (surr) | 101 | 7 | 09/26/2001 |  | 3608 |  | dmg | SW | 82608 |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Acenaphthylene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $\leqslant 10$ | jcs | SW | 8270C |
| Benzo(a)anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Benzo (k) fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | <10 | jcs | SW | 8270C |
| Benzo (a) pyrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Benzyl alcohol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| bis(2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | c10 | jcs | SW | 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Chrysene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |

# TestAmerica, Incorporated 

ANALYTICAL REPORT

Kevin Wildman HULI \& ASSOC. (Dublin)

10/12/2001
6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

## SAMPLE NO 708602

SAMPLE DESCRIPTION SBI002 : HMW2 OS: G092001:503

| Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Batch | Batch | Reporting | Analyst |  |
| Number | Number | Limit | Initials | Method Reference |

Dibenzo ( $a, h$ ) anthracene
Dibenzofuran
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
3.3'-Dichlorobenzidine

Diethyl phthalate Dimethyl phthalate
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Di-n-octylphthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachloro-1, 3-butadiene
Hexachlorocyclopentadiene Hexachloroethane

Indeno(1,2,3-cd) pyrene
Isophorone
Naphthalene
Nitrobenzene
N -Nitrosodi-n-propylamine
Phenanthrene
Pyrene
1,2,4-Trichlorobenzene Surrogate: d5-Nitrobenzene
$<10$
$<10$
$<10$
$<10$
$<10$
$<50$
$<10$
$<10$
$<10$
$<10$
$<10$
$<10$
$<10$
$<10$
$<10$
$<20$
$<10$
$<10$
$<10$
$<10$
$<10$
$<10$
$<10$

| ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{ug} / \mathrm{L}$ | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 82700 |
| ug/L | 09/28/2001 | 1279 | 2710 | <50 | jes | SW | 8270 C |
| ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jсs | SW | 8270 C |
| ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |
| ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | Sw | 8270 C |
| ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | S* | 8270 C |
| ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| ug/L | 09/28/2001 | 1279 | 2710 | $<20$ | jes | SW | 8270 C |
| ug/L | 09/28/2001. | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | Sw | 8270 C |
| ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 82700 |
| ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |
| ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| \% | 09/28/2001 | 1279 | 2710 |  | jes | SW | 82700 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
708602

DATE/TIME TAKEN
09/20/2001 09:30

| Surrogate: 2-Fluorobiphenyl | 80 | $\%$ | 09/28/2001 | 1279 | 2710 |  | jes | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: di4-Terphenyl | 50 | 8 | 09/28/2001 | 1279 | 2710 |  | jes | SW | 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/28/2001 | 1279 | 2710 | $<50$ | jcs | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | $8270{ }^{\text {c }}$ |
| 2-Chlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 82700 |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 82700 |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 2-Methylphenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2-Nitrophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Pentachlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Phenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | sw | 8270C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | јся | SW | 82700 |
| Surrogate: d6-Phenol | 66 | 8 | 09/28/2001 | 1279 | 2710 |  | jes | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 69 | 8 | 09/28/2001 | 1279 | 2710 |  | jes | SW | 8270 C |
| Surrogate: Tribromophenol | 75 | \% | 09/28/2001 | 1279 | 2710 |  | jcs | SW | $8270 C$ |
| TPH - GRO (Aqueous) | <1 | mg/L | 10/02/2001 |  | 86 | <1 | meb | SW | 8015M |

# TestAmerica, Incorporated 

ANALYTICAL REPORT

Kevin Wildman

HULL \& ASSOC. (Dublin)<br>10/12/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION 708603 <br> SBIO02:FBI:G092001:523

## DATE/TIME TAKEN 09/20/2001 09:00



# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$10 / 12 / 2001$

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting | Analyst |  |  |

SAMPLE NO. SAMPLE DESCRIPTION
708603

| Bromodichloromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW $8 \mathbf{8 2 6 0 B}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bromoform | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW 8260b |
| Eromobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | ding | SW 8260B |
| Carbon disulfide | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dimg | SW 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Chloroethane | $<5.0$ | $u g / L$ | 09/26/2001 | 3608 | $<5.0$ | dmg | SW 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3508 | $<1.0$ | dmg | SW 8260B |
| Chioroform | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW 8260B |
| Chloromethane | <5.0 | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/26/2001 | 3608 | < 5.0 | dmg | SW 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 1,3-Dichlorcbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260日 |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW 8260B |

# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Rumber | Number Limit | Initials Method Reference |  |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 708603

SBIO02 : FBI : G092001:523

| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | Omg | SW 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW 8260 B |
| trans-1,3-Dichloropropene | <1.0. | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/26/2001 | 3608 | < 5.0 | dmg | SW 8260B |
| n -Hexane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | dmg | SW 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW 8260B |
| p-Isopropyltoluene | <1.0 | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3608 | < 5.0 | dmg | SW 8260 B |
| Methylene Chloride | < 5.0 | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW 8260B |
| Methyl t-butyl ether (MTBE) | < 5.0 | ug/L | 09/26/2001 | 3608 | $<5.0$ | cmg | SW 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | ding | SW 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Styrene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Naphthalene | <5.0 | ug/L | 09/26/2001 | 3608 | <5.0 | ding | SW 8260 B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<2.0$ | dmg | SW 8260 B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW 8260b |
| Tetrachloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW 8260B |
| Toluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW 8260 B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | cimg | SW 8260B |
| Trichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW 8260B |
| Trichlorofluoromethane | <1.0 | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW 8260B |

# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>$10 / 12 / 2001$<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Eatch | Batch | Reporting Analyst |  |
| Rumber | Number | Limit | Initials Method Reference |  |  |

## SAMPLE NO. 708603

SAMPLE DESCRIPTION
SBI002:FBI:G092001:523

| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/26/2001 |  | 3608 | $<5.0$ | dmg | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| Vinyl Acetate | <5.0 | ug/L | 09/26/2001 |  | 3608 | $<5.0$ | dimg | SW | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dimg | SW | 8260B |
| XYlenes | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 108 | 8 | 09/26/2001 |  | 3608 |  | dmg | SW | 82608 |
| Dibromofluoromethane (surr) | 100 | \% | 09/26/2001 |  | 3608 |  | dmg | SW | 82608 |
| d8-Toluene (surr) | 97 | \% | 09/26/2001 |  | 3608 |  | dmg | SW | 8260B |
| Bromofluorobenzene (surr) | 102 | $\%$ | 09/26/2001 |  | 3608 |  | dmg | SW | 8260日 |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SH | 8270 C |
| Acenaphthylene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Benzo (k) fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Benzo(a) pyrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |
| bis(2-Chloroethyl)ether | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| bis (2-Chioroethoxy) methane | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| bis (2-Ethylhexyl)phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 4-Bromophenyl phenyl ether. | <10 | ug/L | 09/28/2001 | 1279 | 2710 | <10 | jcs | SW | 8270C |

# TestAmerica, Incorporated 

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 708603 | SBIOO2:FB1:G092001:523 | $09 / 20 / 2001$ 09:00 |


| 4-Chloroaniline | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Chrysene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | <10 | jcs | SW | 8270 C |
| Dibenzofuran | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/28/2001 | 1279 | 2710 | $<50$ | jes | SW | 8270 C |
| Diethyl phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Dimethyl phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 82700 |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jсs | SW | 8270C |
| Fluorene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | Sw | 8270 C |
| Hexachlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | $8270{ }^{\text {c }}$ |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | sw | 82700 |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/28/2001 | 1279 | 2710 | <20 | jcs | SW | 8270 C |
| Hexachloroethane | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Indeno(1,2,3-cd) pyrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Isophorone | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Naphthalene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Nitrobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Phenanthrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |

## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method R | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CR | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 708603 |  | SBI002: FB | 1 : G0 | 92001 | 523 |  | . |  | $09 /$ | 0/2001 | 1 09:00 |



# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batch Reporting Analyst |  |  |
| Analyzed | Number | Number Limit | Initials Method Reference |  |

SAMPLE NO. SAMPLE DESCRIPTION DATE/TIME TAKEN 708603

SBI002:FB1:G092001:523
DAIE/TIME RAKEN 09/20/2001 09:00
Aroclor 1232
Aroclor 1242
Aroclor 1248
Aroclor 1254
Aroclor 1260
Surrogate:DCB/TCX
TPH - DRO AQUEOUS
TPH - GRO (Aqueous)
TPH - Method 418.1 (AQ)

| $<0.20$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 28 / 2001$ | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $<0.20$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 28 / 2001$ | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| $<0.20$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 28 / 2001$ | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| $<0.20$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 28 / 2001$ | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| $<0.20$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 28 / 2001$ | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| $76 / 58$ | F | $09 / 28 / 2001$ | 69 | 128 |  | mrb | SW 8082 |
| $<1$ | $\mathrm{mg} / \mathrm{L}$ | $09 / 26 / 2001$ | 125 | 213 | $<1$ | meb | $\mathrm{SW} 8015 M$ |
| $<1$ | $\mathrm{mg} / \mathrm{L}$ | $10 / 02 / 2001$ |  | 86 | $<1$ | meb | SW 8015 M |
| $<0.2$ | $\mathrm{mg} / \mathrm{L}$ | $09 / 28 / 2001$ | 604 | 725 | $<0.2$ | 260 | EPA 418.1 |

## SAMPLE NO 708604

DATE/TIME TAKEN
09/20/2001 14:00

| ICPMS TOTAL METALS | Complete |  | 20/04/2001 |  | 2586 | Complete | ekh | SW | 5020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | mg/L | 10/03/2001 | 1851 | 3715 | <0.0050 | kmb | Sw | 6020 |
| Barium, ICPMS | <0.0050 | $\mathrm{mg} / \mathrm{L}$ | 10/04/2001 | 1851 | 3927 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | mg/L | 10/03/2001 | 1851 | 3594 | $<0.0010$ | kmb | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | mg/L | 10/03/2001 | 1851 | 3992 | $<0.0050$ | kmb | SW | 6020 |
| Lead, ICPMS | $<0.0010$ | mg/L | 10/03/2001 | 1851 | 3672 | $<0.0010$ | kmb | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | mg/L | 09/26/2001 | 1417 | 1363 | $<0.0002$ | epk | Sw | 7470A |
| Selenium, GFAA | $<0.0050$ | mg/L | 09/28/2001 | 754 | 579 | $<0.0050$ | 1nh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3929 | $<0.0005$ | kmb | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/27/2001 | 1851 |  | Complete | clm | sw | 3010A |

# TestAmerica, Incorporated 

PAGE 43 of 56

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 708604

SBI002:FB2:G092001:523

DATE/TIME TAKEN 09/20/2001 14:00


## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TIO |  |  |  |  | DA | /TIME | TAKEN |
| 708604 |  | SBI002: FB | : GO | 200 |  |  |  |  | 09/ | 0/2001 | 14:00 |


| Chloroform | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260b |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chloromethane | $<5.0$ | ug/L | 09/26/2001 | 3608 | < 5.0 | dmg | SW | 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW | 82608 |
| Dibromomethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 82608 |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | ding | SW | 82608 |
| 1,2-Dibromo-3-chloropropane | < 5.0 | ug/L | 09/26/2001 | 3608 | <5.0 | dimg | SW | 82608 |
| 1,2-Dichlorobenzene | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 82608 |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 82608 |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |
| 1,1-Dichloroethane | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW | 82608 |
| Cis-1.2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |
| 1,2-Dichioropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 8260日 |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dimg | SW | 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260日 |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | Sw | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260B |
| n-Hexane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dimg | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3608 | <12.5 | dmg | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260 B |
| p-Isopropyltoluene | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260 B |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin，OH 43016

10／12／2001

Job Number：01．17437
Client Project ID：South Bend Indiana SBI002


| SAMPLE NO．SAMPLE DESCRIPTION | DATE／TIME TAKEN |  |
| :--- | :--- | :--- |
| 708604 | SBIOO2：FB2：G092001：523 | $09 / 20 / 2001$ 14：00 |


| Bromomethane | $<5.0$ | ug／L | 09／26／2001 | 3608 | ＜ 5.0 | dmg | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Methylene Chloride | $<5.0$ | ug／L | 09／26／2001 | 3608 | $<5.0$ | dmg | SW 8260B |
| Methyl t－butyl ether（MTBE） | $<5.0$ | ug／L | 09／26／2001 | 3608 | $<5.0$ | ding | SW 8260B |
| 4－Methyl－2－pentanone（MIBK） | $<12.5$ | ug／L | 09／26／2001 | 3608 | $<12.5$ | dmg | SW 8260日 |
| n－Propylbenzene | ＜1．0 | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Styrene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | ding | SW 8260B |
| Naphthalene | $<5.0$ | ug／L | 09／26／2001 | 3608 | ＜ 5.0 | dmg | SW 8260 B |
| 1，1，1，2－Tetrachioroethane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260日 |
| 1，1，2，2－Tetrachloroethane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260日 |
| Tetrachloroethene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Toluene | ＜1．0 | ug／L | 09／26／2001 | 3608 | $<1.0$ | ding | SW 8260日 |
| 1，2，4－Trichlorobenzene | $<5.0$ | ug／L | 09／26／2001 | 3608 | $<5.0$ | dmg | SW 8260日 |
| 1，1，1－Trichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3608 | ＜1．0 | dmg | SW 8260B |
| 1，1，2－Trichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Trichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260b |
| Trichlorofluoromethane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 1，2，3－Trichloropropane | $<5.0$ | ug／L | 09／26／2001 | 3608 | ＜5．0 | dmg | SW 8260B |
| 1，2，4－Trimethylbenzene | ＜1．0 | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260日 |
| 1，3，5－Trimethylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260 B |
| Vinyl Acetate | $<5.0$ | ug／L | 09／26／2001 | 3608 | $<5.0$ | dmg | SW 8260 B |
| Vinyl Chloride | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Xylenes | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| d4－1，2－Dichloroethane（surr） | 111 | \％ | 09／26／2001 | 3608 |  | dmg | SW 8260 B |
| Dibromofluoromethane（surr） | 106 | 8 | 09／26／2001 | 3608 |  | dmg | SW 8260日 |
| d8－Toluene（eurr） | 97 | \％ | 09／26／2001 | 3608 |  | ding | SW 8260B |
| Bromofiuorobenzene（surr） | 102 | $\%$ | 09／26／2001 | 3608 |  | dmg | SW 8260B |

## TestAmerica, Incorporated

# ANALYTICAL REPORT 

Kevin Wildman HULL \& ASSOC. (Dublin)

10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting | Analyst |  |
|  | Analy |  | Number | Number | Limit | Initials Method Reference |

SAMPLE NO.
708604

SAMPLE DESCRIPTION
SBI002:FB2: G092001:523

DATE/TIME TAKEN 09/20/2001 14:00

| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW 8270 C |
| Acenaphthylene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Anthracene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | <10 | jes | SW 8270C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Benzo (k) fluoranthene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Benzo(a) pyrene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jсs | SW 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 09/29/2002 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| 2,2'-oxybis(1-Chloropropane) | <10 | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| 2-Chloronaphthalene | <10 | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Chrysene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | Sw 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| 3,3'-Dichlorobenzidine | <50 | ug/L | 09/29/2001 | 1279 | 2710 | $<50$ | jcs | SW 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  |  |  |  |  |  | Prep Run |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batch Reporting Analyst |  |  |  |  |
| Analyzed | Number Number Limit | Initials Method Reference |  |  |  |  |

SAMPLE DESCRIPTION
DATE/TIME TAKEN 09/20/2001 14:00

| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Fluoranthene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Fluorene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | j¢ ${ }^{\text {j }}$ | SW | 8270 C |
| Hexachlorobenzene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SH | 8270 C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/29/2002 | 1279 | 2710 | $<20$ | jes | SW | 8270 C |
| Hexachloroethane | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Indeno(1,2,3-cd)pyrene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Isophorone | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Naphthalene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Nitrobenzene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 82700 |
| Phenanthrene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Pyrene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Surrogate: as-Nitrobenzene | 92 | 8 | 09/29/2001 | 1279 | 2710 |  | jcs | Sh | 8270 C |
| Surrogate: 2-Fluorobipheny2 | 94 | \% | 09/29/2001 | 1279 | 2710 |  | jes | S | 8270 C |
| Surrogate: d14-Terphenyl | 93 | $\%$ | 09/29/2001 | 1279 | 2710 |  | jes | SW | 8270 C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/29/2001 | 1279 | 2710 | $<50$ | jes | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SV | $8270{ }^{\text {c }}$ |
| 2-Chlorophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2,4-Dichlorophenol | <10 | $\mathrm{ug} / \mathrm{L}$ | 09/29/2001 | 1279 | 2710 | <10 | jcs | S | 82700 |

# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

Kèvin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$10 / 12 / 2001$

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002


DATE/TIME TAKEN 09/20/2001 14:00

| 2,4-Dimethylphenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 82700 |
| 2-Methylphenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 2 -Nitrophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Pentachlorophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Phenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Surrogate: d6-Phenol | 81 | 8 | 09/29/2001 | 1279 | 2710 |  | jcs | SW 8270C |
| Surrogate: 2-Fluorophenol | 81 | \% | 09/29/2001 | 1279 | 2710 |  | jcs | SW 8270C |
| Surrogate: Tribromophenol | 93 | \% | 09/29/2001 | 1279 | 2710 |  | jes | Sw 8270C |
| PCB's M 8082. Aqueous |  |  |  |  |  |  |  |  |
| Aroclor 1016 | $<0.20$ | ug/L | 09/28/2001 | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| Aroclor 1221 | $<0.20$ | ug/L | 09/28/2001 | 69 | 128 | $<0.20$ | mub | SW 8082 |
| Aroclor 1232 | $<0.20$ | ug/L | 09/28/2001 | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| Aroclor 1242 | $<0.20$ | ug/L | 09/28/2001 | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| Aroclor 1248 | $<0.20$ | ug/L | 09/28/2001 | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| Aroclor 1254 | $<0.20$ | ug/L | 09/28/2001 | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| Aroclor 1260 | $<0.20$ | ug/L | 09/28/2001 | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| Surrogate: DCB/TCX | 81/58 | ${ }_{6}$ | 09/28/2001 | 69 | 128 |  | mrb | SW 8082 |
| TPH - DRO AQUEOUS | <1 | mg/L | 09/27/2001 | 125 | 214 | $<1$ | meb | SW 8015M |
| TPH - GRO (Aqueous) | $<1$ | mg/L | 10/02/2001 |  | 86 | $<1$ | meb | SW 8015M |
| TPH - Method 418.1 (AQ) | $<0.2$ | mg/L | 09/28/2001 | 604 | 725 | $<0.2$ | 260 | EPA 418.1 |

## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)

10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number Limit | Initials Method Reference |  |  |

## SAMPLE NO. 708605

## SAMPLE DESCRIPTION

 SBI002:HMW5S:G092001:523DATE/TIME TAKEN 09/20/2001 08:05

| Prep, TPH - 418.1 aq | Complete |  | 09/27/2001 | 604 |  | Complete | 260 | EPA 418.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VOLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/26/2001 |  | 3608 | Complete | dimg |  |
| Acetone | <20.0 | ug/L | 09/26/2001 |  | 3608. | <20.0 | dimg | SW 8260B |
| Benzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | ding | SW 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW 8260B |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW 8260B |
| n-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW 8260B |
| Bromochloromethane | <1.0 | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | <1.0 | 'dimg | SW 8260B |
| Bromoform | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW 8260日 |
| Bromobenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW 8260B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 |  | 3608 | $<12.5$ | dmg | SW 8260B |
| Carbon disulfide | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW 8260B |
| Carbon tetrachioride | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $\leqslant 1.0$ | dmg | SW 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | ding | SW 8260B |
| Chloroethane | < 5.0 | ug/L | 09/26/2001 |  | 3608 | $<5.0$ | dmg | SW B260B |
| 2-Chlorotoluene | $<1.0$ | $\mathrm{ug} / \mathrm{L}$ | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW 8260B |
| 4-Chlorotoluene | <1.0 | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW 8260B |
| Chloroform | <1.0 | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW 8260 B |
| Chloromethane | $<5.0$ | ug/L | 09/26/2001 |  | 3608 | $<5.0$ | dimg | SW 82608 |
| Dibromochloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | <1.0 | dmg | SW 8260日 |
| Dibromomethane | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dimg | SW 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/26/2001 |  | 3608 | $<5.0$ | dmg | SW 8260b |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002


DATE/TIME TAKEN 09/20/2001 08:05

| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 1,4-Dichlorobenzene | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260 B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Cis-1,2-Dichloroethene | 1.6 | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW | 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260日 |
| 1,2-Dichloropropane | <1.0 | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | Sw | 82608 |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 2,2-Dichloropropane | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | B260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/26/2001 | 3608 | < 5.0 | dimg | Sw | 8260 B |
| n-Hexane | <5.0 | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | dmg | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW | 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260B |
| Methylene Chloride | <5.0 | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | Sw | 8260日 |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | dmg | SW | 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Styrene | <1.0 | ug/L | 09/26/2001 | 3608 | <1.0 | dimg | SW | 82608 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>$10 / 12 / 2001$<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units $\quad$ Date | Analyzed |  |  |
| Batch | Batch Reporting Analyst |  |  |
| Number Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION
708605

DATE/TIME TAKEN
09/20/2001 08:05

| Naphthalene | $<5.0$ | ug/L | 09/26/2001 |  | 3608 | <5.0 | ding | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | <1.0 | ug/L | 09/26/2001 |  | 3608 | <1.0 | dimg | SW 8260B |
| 1,1,2,2-Tetrachloroethane | <1.0 | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW 8260B |
| Tetrachloroethene | 1.3 | ug/L | 09/26/2001 |  | 3608 | <1.0 | dmg | SW 8260B |
| Toluene | <1.0 | ug/L | 09/26/2001 |  | 3608 | <1.0 | dmg | SW 8260B |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 09/26/2001 |  | 3608 | $<5.0$ | dmg | SW 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW 8260B |
| Trichloroethene | 14.2 | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/26/2001 |  | 3608 | <5.0 | dmg | SW 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dimg | SW 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 |  | 3608 | $<5.0$ | dmg | SW 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW 8260B |
| Xylenes | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW 8260B |
| d4-1,2-Dichloroethane (surr) | 109 | \% | 09/26/2001 |  | 3608 |  | dimg | SW 8260B |
| Dibromofluoromethane (surr) | 105 | 8 | 09/26/2001 |  | 3608 |  | dmg | SW 8260B |
| d8-Toluene (surr) | 97 | $\%$ | 09/26/2001 |  | 3608 |  | dmg | SW 8260B |
| Bromofluorobenzene (surr) | 101 | \% | 09/26/2001 |  | 3608 |  | dmg | SW 8260B |
| TPH - Method 418.1 (AQ) | $<0.2$ | mg/L | 09/28/2001 | 604 | 725 | $<0.2$ | 260 | EPA 418.1 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBIOO2

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { SAMPLE } \\ & 708606 \end{aligned}$ | NO. | SAMPIE D SBI002:SBI | :GOI | $\begin{aligned} & \text { PTION } \\ & 9200] \end{aligned}$ | $23$ |  |  |  | DAT | $\begin{aligned} & \text { /TIME } \\ & 0 / 2001 \end{aligned}$ | $\begin{aligned} & \text { TAKEN } \\ & 07: 30 \end{aligned}$ |

Prep, TPH - 418.1 aq
Complete
09/27/2001 604
Complete 260
EPA 418.1

VOLATILE COMPOUNDS - 8260 (AQ)
B260-SW846 (AQ)
Acetone
Benzene
tert-Butylbenzene
gec-Butylbenzene
n-Butylbenzene
Bromochloromethane
Bromodichloromethane
Bromoform
Bromobenzene
2-Butanone (MEK)
Carbon disulfide
Carbon tetrachloride
Chlorobenzene
Chloroethane
2-Chlorotoluene
4-Chlorotoluene
Chloroform
chloromethane
Dibromochloromethane
Dibromomethane
Dichlorodifluoromethane
1,2-Dibromo-3-chloropropane
c

| Complete |  | 09/27/2001 | 3609 | Complete | bmh |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <20.0 | ug/L | 09/27/2001 | 3609 | <20.0 | bmh | SW 8260 B |
| $<1.0$ | ug/L | 09/27/2001 | 3609 | $<1.0$ | bmh | SW 8260B |
| $<1.0$ | ug/L | 09/27/2001 | 3609 | $<1.0$ | bmh | SW 8260 B |
| $<1.0$ | ug/L | 09/27/2001 | 3609 | $<1.0$ | bmh | SW 8260B |
| <1.0 | ug/L | 09/27/2001 | 3609 | $<1.0$ | bruh | SW 8260B |
| $<1.0$ | ug/L | 09/27/2001 | 3609 | <1.0 | bmh | SW 8260 B |
| $<1.0$ | ug/L | 09/27/2001 | 3609 | <1.0 | bmh | SW 8260B |
| $<1.0$ | ug/L | 09/27/2001 | 3609 | $<1.0$ | bmh | SW 82608 |
| <1.0 | ug/L | 09/27/2001 | 3609 | $<1.0$ | bmh | SW 8260B |
| $<12.5$ | ug/L | 09/27/2001 | 3609 | $<12.5$ | bmh | SW 8260B |
| <1.0 | ug/L | 09/27/2001 | 3609 | $<1.0$ | brah | SW 8260b |
| $<1.0$ | ug/L | 09/27/2001 | 3609 | $<1.0$ | bmh | SW 8260B |
| <1.0 | ug/L | 09/27/2001 | 3609 | $<1.0$ | bmh | SW 8260 B |
| < 5.0 | ug/L | 09/27/2001 | 3609 | $<5.0$ | bmh | SW 8260b |
| $<1.0$ | ug/L | 09/27/2001 | 3609 | $<1.0$ | bmh | SW 8260B |
| $<1.0$ | ug/L | 09/27/2001 | 3609 | <1.0 | bmih | SW 8260B |
| <1.0 | ug/L | 09/27/2001 | 3609 | <1.0 | bmh | SW 8260B |
| $<5.0$ | ug/L | 09/27/2001 | 3609 | <5.0 | bmh | SW 8260B |
| $<1.0$ | ug/L | 09/27/2001 | 3609 | $<1.0$ | btah | SW 8260B |
| <1.0 | ug/L | 09/27/2001 | 3609 | $<1.0$ | bmh | SW 8260B |
| $<1.0$ | ug/L | 05/27/2001 | 3609 | $<1.0$ | bmh | SW 8260B |
| $<5.0$ | ug/L | 09/27/2001 | 3609 | $<5.0$ | bmh | SW |

10/12/2001

DATE/TIME TAKEN 09/20/2001 07:30

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17437
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batch | Reporting Analyst |
| Analyzed | Number | Number Limit | Initials Method Reference |

SAMPLE NO. SAMPLE DESCRIPTION 708606

| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3609 | $<1.0$ | bmh | SW | 82508 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3609 | <1.0 | bmh | SW | 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3609 | <1.0 | bmh | SW | 82608 |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/27/2001 | 3609 | <1.0 | bmin | SW | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/27/2001 | 3609 | $<1.0$ | bmh | SW | 8260B |
| 1.1-Dichloroethene | $<1.0$ | ug/L | 09/27/2001 | 3609 | $<1.0$ | bmh | SW | 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/27/2001 | 3609 | <1.0 | bmh | SW | 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/27/2001 | 3609 | $<1.0$ | bmh | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/27/2001 | 3609 | $<1.0$ | bmh | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/27/2001 | 3609 | $<1.0$ | bmh | SW | 8260日 |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/27/2001 | 3609 | $<1.0$ | bmh | SW | 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/27/2002 | 3609 | <1.0 | bmh | SW | 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/27/2001 | 3609 | <1.0 | bmh | SW | 8260B |
| trans-1,3-Dichloropropene | $<2.0$ | ug/L | 09/27/2001 | 3609 | $<1.0$ | bmh | SW | 8260b |
| Ethylbenzene | $<1.0$ | ug/L | 09/27/2001 | 3609 | $<1.0$ | bmh | SW | 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/27/2001 | 3609 | $<5.0$ | bmh | SW | 82608 |
| n -Hexane | $<5.0$ | ug/L | 09/27/2001 | 3609 | $<5.0$ | bmh | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/27/2001 | 3609 | $<12.5$ | bmh | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/27/2001 | 3609 | $<1.0$ | bmh | SW | 8260B |
| p-Isopropyltoluene | <1.0 | ug/L | 09/27/2001 | 3609 | $<1.0$ | bmh | SW | 82608 |
| Bromomethane | $<5.0$ | ug/L | 09/27/2001 | 3609 | $<5.0$ | bmh | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/27/2001 | 3609 | $<5.0$ | bmh | SW | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/27/2001 | 3609 | < 5.0 | bmh | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | <12.5 | ug/L | 09/27/2001 | 3609 | $<12.5$ | bmh | SW | 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/27/2001 | 3609 | <1.0 | bmin | SW | 82608 |
| Styrene | <1.0 | ug/L | 09/27/2001 | 3609 | <1.0 | bmh | SW | 82608 |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin). 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17437
Client Project ID: South Bend Indiana SBIO02

SAMPLE NO. SAMPLE DESCRIPTION DATE/TIME TAKEN

| Naphthalene | <5.0 | ug/L | 09/27/2001 |  | 3609 | $<5.0$ | bmh | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | <1.0 | ug/L | 09/27/2001 |  | 3609 | $<1.0$ | bmh | SW 8260B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/27/2001 |  | 3609 | $<1.0$ | bmh | SW 8250B |
| Tetrachloroethene | $<1.0$ | ug/L | 09/27/2001 |  | 3609 | $<1.0$ | bmh | SW 8260B |
| Toluene | $<1.0$ | ug/L | 09/27/2001 |  | 3609 | $<1.0$ | bmh | SW 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/27/2001 |  | 3609 | $<5.0$ | bmh | SW 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/27/2001 |  | 3609 | $<1.0$ | brah | SW 8260B |
| 1,1,2-Trichloroethane | <1.0 | ug/L | 09/27/2001 |  | 3609 | $<1.0$ | bmh | SW 8260B |
| Trichloroethene | 7.3 | ug/L | 09/27/2001 |  | 3609 | $<1.0$ | bmh | SW 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/27/2001 |  | 3609 | $<1.0$ | bmh | SW 8260B |
| 1,2,3-Trichloropropane | < 5.0 | ug/L | 09/27/2001 |  | 3609 | $<5.0$ | bmh | SW 8260B |
| 1,2,4-Trimethylbenzene | <1.0 | ug/L | 09/27/2001 |  | 3609 | $<1.0$ | bmh | SW 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/27/2001 |  | 3609 | $<1.0$ | bmh | SW 8260B |
| Vinyl Acetate | < 5.0 | $\mathrm{ug} / \mathrm{L}$ | 09/27/2001 |  | 3609 | <5.0 | bmh | SW 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/27/2001 |  | 3609 | $<1.0$ | bmh | SW 8260B |
| Xyienes | $<1.0$ | ug/L | 09/27/2001 |  | 3609 | <1.0 | bmh | SW 8260B |
| d4-1,2-Dichloroethane (surr) | 109 | \% | 09/27/2001 |  | 3609 | . | bmh | SW 8260B |
| Dibromofluoromethane (surr) | 105 | 8 | 09/27/2001 |  | 3609 |  | bmh | SW 8260日 |
| ds-Toluene (surr) | 97 | \% | 09/27/2001 |  | 3609 |  | bmh | SW 8260日 |
| Bromofluorobenzene (surr) | 100 | 8 | 09/27/2001 |  | 3609 |  | bmh | SW 8260B |
| TPH - Method 418.1 (AQ) | $<0.2$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 604 | 725 | <0.2 | 260 | EPA 418.1 |

## QUALITY CONTROL FLAG DEFINITIONS

PAGE 55 of 56

Job Number: 01.17437
(*) Indicates an out-of-control QC. The analytical data was reported based on other supporting quality control information.
(Note) Indicates to review the notes and comments section of the analytical report as there is additional information concerning this analytical result.
(MS) Indicates that the Matrix Spike (MS) was out of statistical advisory limits.
(MSD) Indicates that the Matrix Spike Duplicate (MSD) was out of statistical advisory limits.
(RPD) Indicates that the Relative Percent Difference (RPD) for the MS/MSD pair was outside of statistical advisory limits.
(SS) Indicates that the MS and MSD were out of statistical advisory limits.
(SSR) Indicates that the MS, MSD and RPD were out of statistical advisory limits.
(MSR) Indicates that the MS and RPD were out of statistical advisory limits.
(MSDR) Indicates that the MSD and RPD were out of statistical advisory limits.
(DL) Indicates that the MS and MSD were diluted out and the percent recoveries of the spikes could not be calculated.
(LS) Indicates that statistical accuracy and precision data is not available for spike concentrations which are $<1 / 4$ of the sample amount. Care should be used in interpreting this data.
(J) Indicates estimated concentration due to internal standard areas or surrogate recoveries outside of control limits. A sample matrix effect is usually indicated.
(DW) Indicates Dry Weight.
Analytical Reporting Limits
The reporting limits listed for non-aqueous samples in the analytical report section are Practical Quantitation Limits (PQLs). These PQLs are based upon a typical standard weight used for a non-aqueous sample. The reporting limit for a sample may be different from the PQL listed depending upon the actual weight of sample used, the samples moisture content and any dilutions used during the analysis.

## TestAmerica, Incorporated

PAGE 56 of 56
NOTES AND COMMENTS
TestAmerica Job Number: 01.17437
Sample Number: 708598
Analysis: 8270 BNADue to elevated levels of non-target compouds, the di2-peryleneinternal standard was below the recommended response level. Noeffected target compounds were detected.


## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/05/2001 6130 Wilcox Rd.
Dublin, OH 43016
Job Number: 01.17928

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

Sample
Number
Sample Description

Date Taken 09/26/2001 09/27/2001

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted only in its entirety.

Enclosure


# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HUUL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17928
Client Project ID: South Bend Inḍiana SBIOO2


## SAMPLE NO. SAMPLE DESCRIPTION

 710159SBIO02:HMW10S:G092601:505

DATE/TIME TAKEN 09/26/2001 13:30

| Prep, Base Neutral <br> Prep, Acid Extractable | Complete Complete |  | 10/01/2001 | 1281 |  | Complete | rec | EPA 625 | SW 3510C ; SW 352 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 10/01/2001 | 1281 |  | Complete | rec | EPA 625 | SW 3510C ; SW 352 |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |  |
| Acenaphthylene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |  |
| Anthracene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |  |
| Benzo (a)anthracene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |  |
| Benzo (b) fluoranthene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |  |
| Benzo(k) fluoranthene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |  |
| Benzo (a) pyrene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | Sw 8270C |  |
| Benzyl alcohol | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | S* 8270C |  |
| Benzyl butyl phthalate | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |  |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jTw | SW 8270C |  |
| bis(2-Chloroethoxy) methane | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |  |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |  |
| 2.2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |  |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |  |
| 4-Chloroaniline | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |  |
| 2-Chloronaphthalene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |  |
| Chrysene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |  |
| Dibenzo (a, h) anthracene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | Sw 8270C |  |
| Dibenzofuran | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |  |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |  |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |  |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 20/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |  |

## TestAmerica, Incorporated

PAGE 3 of 5

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
10/05/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17928
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 710159 | SBIOO2:HMWIOS:G092601:505 |

DATE/TIME TAKEN 09/26/2001 13:30

| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 10/03/2001 | 1281 | 2719 | $<50$ | jrw | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Diethyl phthalate | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW | 8270 C |
| Dimethyl phthalate | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW | 8270 C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW | 8270 C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW | 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jıw | SW | 8270 C |
| Fluoranthene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jxw | SW | 8270C |
| Fluorene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | <10 | jrw | SW | 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SN | 8270 C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 10/03/2001 | 1281 | 2719 | $<20$ | jrw | SW | 8270 C |
| Hexachloroethane | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW | 8270C |
| Indeno (1,2,3-cd) pyrene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jıw | SW | 8270C |
| Isophorone | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | j2w | SW | 8270C |
| Naphthaiene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW | 8270 C |
| Nitrobenzene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | <10 | jrw | SW | 8270 C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW | 82700 |
| Phenanthrene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | Sis | 8270C |
| Pyrene | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW | 8270 C |
| 1,2,4-Trichlorobenzene | <10 | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | Sw | 8270 C |
| Surrogate: d5-Nitrobenzene | 84 | 4 | 10/03/2001 | 1281 | 2719 |  | jıw | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 87 | 4 | 10/03/2001 | 1281 | 2719 |  | jrw | SW | 82700 |
| Surrogate: d14-Terphenyl | 44 | 8 | 10/03/2001 | 1281 | 2719 |  | jrw | SW | 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 10/03/2001 | 1281 | 2719 | $<50$ | jrw | SW | 8270 C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/05/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17928
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 710159

SAMPLE DESCRIPTION
SBIO02:HMW10S:G092601:505

DATE/TIME TAKEN 09/26/2001 13:30

| 4-Chloro-3-methylphenol | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Chlorophenol | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jıw | SW 8270C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |
| 2-Methylphenol | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |
| meta \& para-Methylphenol | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | <10 | jrw | SW 8270C |
| 2-Nitrophenol | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | Sw 8270C |
| Pentachlorophenol | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |
| Phenol | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $\leqslant 10$ | jrw | SW 8270C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 10/03/2001 | 1281 | 2719 | $<10$ | jrw | SW 8270C |
| Surrogate: d6-Phenol | 67 | \% | 10/03/2001 | 1281 | 2719 |  | jrw | SW 8270C |
| Surrogate: 2-Fluorophenol | 68 | $\%$ | 10/03/2001 | 1281 | 2719 |  | jrw | Sw 82700 |
| Surrogate: Tribromophenol | 80 | $\%$ | 10/03/2001 | 1281 | 2719 |  | jrw | SW 8270C |

## QUALITY CONTROL FLAG DEFINITIONS ${ }^{\text {PAGE } 5}$ of 5

Job Number: 01.17928
(*) Indicates an out-of-control QC. The analytical data was reported based on other supporting quality control information.
(Note). Indicates to review the notes and comments section of the analytical report as there is additional information concerning this analytical result.
(MS) Indicates that the Matrix Spike (MS) was out of statistical advisory limits.
(MSD) Indicates that the Matrix Spike Duplicate (MSD) was out of statistical advisory limits.
(RPD) Indicates that the Relative Percent Difference (RPD) for the MS/MSD pair was outside of statistical advisory limits.
(SS) Indicates that the MS and MSD were out of statistical advisory limits.
(SSR) Indicates that the MS, MSD and RPD were out of statistical advisory limits.
(MSR) Indicates that the MS and RPD were out of statistical advisory limits.
(MSDR) Indicates that the MSD and RPD were out of statistical advisory limits.
(DL) Indicates that the MS and MSD were diluted out and the percent recoveries of the spikes could not be calculated.
(LS) Indicates that statistical accuracy and precision data is not available for spike concentrations which are < I/4 of the sample amount. Care should be used in interpreting this data.
(J) Indicates estimated concentration due to internal standard areas or surrogate recoveries outside of control limits. A sample matrix effect is usually indicated.
(DW) Indicates Dry Weight.
Analytical Reporting Limits
The reporting limits listed for non-aqueous samples in the analytical report section are Practical Quantitation Limits (PQLs). These PQLs are based upon a typical standard weight used for a non-aqueous sample. The reporting limit for a sample may be different from the PQL listed depending upon the actual weight of sample used, the samples moisture content and any dilutions used during the analysis.


## ;'

## APPENDIX E

Laboratory Reports and Chain of Custody Forms for Groundwater Samples

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin; OH 43016

10/12/2001
Job Number: 01.16930

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

Sample
Number
Sample Description
Date
Taken
Date
Received
706767
706768 706769 706770 706771 706772 706773 706774 706775

SBIO02:HMW29D:G091401:505
SBI002:HNW29I:G091401:505 SBIO02:HMW28S:G09140I:505 SBI002:HMW32D:G091401:505 SBI002:TB1:091401 SBI002:HMW30D:G091401:505 SBIO02:HMW30I:G091401:505 SBIO02:HMW32I:G091401:505 SBI002:HMW28D:G091401:505

| $09 / 14 / 2001$ | $09 / 14 / 2001$ |
| :--- | :--- |
| $09 / 14 / 2001$ | $09 / 14 / 2001$ |
| $09 / 14 / 2001$ | $09 / 14 / 2001$ |
| $09 / 14 / 2001$ | $09 / 14 / 2001$ |
| $09 / 14 / 2001$ | $09 / 14 / 2001$ |
| $09 / 14 / 2001$ | $09 / 14 / 2001$ |
| $09 / 14 / 2001$ | $09 / 14 / 2001$ |
| $09 / 14 / 2001$ | $09 / 14 / 2001$ |
| $09 / 14 / 2001$ | $09 / 14 / 2001$ |

TestAmerica, Inc.
certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted only in -its entirety.

Enclosure


## TestAmerica, Incorporated

PAGE 2 of 54

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. $\quad$ SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 706767 | SBI002:HMW29D:G091401:505 |


| ICPMS TOTAL METALS | Complete |  | 09/26/2001 |  | 2562 | Complete | ekh | SW 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | mg/L | 09/26/2001 | 1844 | 3686 | <0.0050 | ekh | SW 6020 |
| Barium, ICPMS | 0.0483 | $\mathrm{mg} / \mathrm{L}$ | 09/26/2001 | 1844 | 3894 | <0.0050 | ekh | SW 6020 |
| Cadmium, ICPMS | $<0.0010$ | mg/L | 09/26/2001 | 1844 | 3565 | $<0.0010$ | ekh | SW 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/26/2001 | 1844 | 3965 | $<0.0050$ | ekh | SW 6020 |
| Lead, ICPMS | 0.0022 | $\mathrm{mg} / \mathrm{L}$ | 09/26/2001 | 1814 | 3643 | $<0.0010$ | ekh | SW 6020 |
| Mercury, CVAA | $<0.0002$ | mg/L | 09/25/2001 | 1413 | 1359 | $<0.0002$ | epk | SW 7470A |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/22/2001 | 746 | 575 | $<0.0050$ | jad | SW 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 09/26/2001 | 1844 | 3901 | <0.0005 | ekh | SW 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/25/2001 | 1844 |  | Complete | clm | SW 3010A |
| Metals Digestion, GFAA | Complete |  | 09/18/2001 | 746 |  | Complete | mrt | SW 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1413 |  | Complete | epk | SW 7470A |
| Prep, Base Neutral | Complete |  | 09/17/2001 | 1272 |  | Complete | lmc | EPA 625 ; SW 3510C ; SW 352 |
| Prep, Acid Extractable | Complete |  | 09/17/2001 | 1272 |  | Complete | 1 mc | EPA 625 ; SW 3510C ; SW 352 |
| Prep, TPH - 418.1 aq | Complete |  | 09/25/2001 | 601 |  | Complete | sub | EPA 418.1 |
| VOLATILE COMPOUNDS - 8260 |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/21/2001 |  | 3589 | Complete | eap |  |
| Acetone | <20.0 | ug/L | 09/21/2001 |  | 3589 | <20.0 | eap | SW 8260B |
| Benzene | $<1.0$ | ug/L | 09/21/2001 |  | 3589 | $<1.0$ | eap | SW 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/21/2001 |  | 3589 | $<1.0$ | eap | SW 8260B |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/21/2001 |  | 3589 | $<1.0$ | eap | SW 8260B |
| n-Butylbenzene | $<1.0$ | ug/L | 09/21/2001 |  | 3589 | $<1.0$ | eap | SW 8260B |
| Bromochloromethane | $<1.0$ | ug/L | 09/21/2001 |  | 3589 | $<1.0$ | eap | SW 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/21/2001 |  | 3589 | <1.0 | eap | SW 8260B |
| Bromoform | <1.0 | ug/L | 09/21/2001 |  | 3589 | $<1.0$ | eap. | SW 8260B |

## TestAmerica，Incorporated

## ANALYTICAL REPORT

Kevin Wildman

HULL \＆ASSOC．（Dublin）<br>10／12／2001<br>6130 Wilcox Rd．<br>Dublin，OH 43016

Job Number：01．16930
Client Project ID：South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO． | SAMPLE D | CR | PTION |  |  |  |  | DAT | ／TIME | TAKEN |
| $706767$ |  | SBIO02：HM | N29D | ：G091 | $1: 505$ |  |  |  | 09／ | 4／2001 | 1 08：15 |


| Bromobenzene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2－Butanone（MEK） | $<12.5$ | ug／L | 09／21／2001 | 3589 | $<12.5$ | eap | SW 8260B |
| Carbon disulfide | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260B |
| Chlorobenzene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260B |
| Chloroethane | $<5.0$ | ug／L | 09／21／2001 | 3589 | ＜5．0 | eap | SW 8260日 |
| 2－Chiorotoluene | $<1.0$ | ug／L | 09／21／2001 | 3589 | ＜1．0 | eap | SW 8260B |
| 4－Chlorotoluene | $<1.0$ | ug／L | 09／21／2001 | 3589 | ＜1．0 | eap | SW 8260B |
| Chloraform | $<1.0$ | ug／L | 09／21／2001 | 3589 | ＜1．0 | eap | SW 8260日 |
| Chloromethane | $<5.0$ | ug／L | 09／21／2001 | 3589 | ＜ 5.0 | eap | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug／L | 09／21／2001 | 3589 | ＜1．0 | eap | SW 8260B |
| Dibromomethane | ＜1．0 | ug／L | 09／21／2001 | 3589 | ＜1．0 | eap | SW 8260日 |
| Dichlorodifluoromethane | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260日 |
| 1，2－Dibromo－3－chloropropane | $<5.0$ | ug／L | 09／21／2001 | 3589 | ＜5．0 | eap | SW 8260B |
| 1，2－Dichlorobenzene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260B |
| 1，3－Dichlorobenzene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260B |
| 1，4－Dichlorobenzene | $<1.0$ | ug／L | 09／21／2001 | 3589 | ＜1．0 | eap | SW 8260B |
| 1，1－Dichloroethane | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SN 8260日 |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260B |
| 1，1－Dichloroethene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 82608 |
| cis－1，2－Dichloroethene | 3.7 | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260 B |
| trans－1，2－Dichloroethene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260B |
| 1，2－Dichloropropane | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260B |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 82608 |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260 B |
| 1，1－Dichloropropene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260B |

## TestAmerica，Incorporated

PAGE 4 of 54

## ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin，OH 43016

10／12／2001

Job Number： 01.16930
Client Project ID：South Bend Indiana SBIOO2

|  |  | Prep Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batch Reporting Analyst |  |
| Analy | Number | Number Limit | Initials Method Reference |

DATE／TIME TAKEN 09／14／2001 08：15

| cis－1，3－Dichloropropene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans－1，3－Dichloropropene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 82608 |
| Ethylbenzene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 82608 |
| Hexachlorobutadiene | ＜ 5.0 | ug／L | 09／21／2001 | 3589 | ＜5．0 | eap | SW | 82608 |
| n －Hexane | $<5.0$ | ug／L | 09／21／2001 | 3589 | $<5.0$ | eap | SW | 8260日 |
| 2－Hexanone | $<12.5$ | ug／L | 09／21／2001 | 3589 | $<12.5$ | eap | SW | 8260B |
| Isopropylbenzene（Cumene） | 2.8 | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 8260 B |
| p－Isopropyltoluene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 82608 |
| Bromomethane | $<5.0$ | ug／L | 09／21／2001 | 3589 | $<5.0$ | eap | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug／L | 09／21／2001 | 3589 | $<5.0$ | eap | SW | 8260B |
| Methyl t－butyl ether（MTBE） | $<5.0$ | ug／L | 09／21／2001 | 3589 | $<5.0$ | eap | SW | 8260B |
| 4－Methyl－2－pentanone（MIBK） | $<12.5$ | ug／L | 09／21／2001 | 3589 | $<12.5$ | eap | SW | 8260B |
| $n$－Propylbenzene | 3.4 | ug／L | 09／21／2001 | 3589 | ＜1．0 | eap | SW | 82608 |
| Styrene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 82608 |
| Naphthalene | $<5.0$ | ug／L | 09／21／2001 | 3589 | ＜5．0 | eap | SW | 8260日 |
| 1，1，1，2－Tetrachloroethane | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 8260 B |
| 1，1，2，2－Tetrachloroethane | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 8260 B |
| Tetrachloroethene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $\leqslant 1.0$ | eap | SW | 8260B |
| Toluene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 1，2，4－Trichlorobenzene | $<5.0$ | ug／L | 09／21／2001 | 3589 | $<5.0$ | eap | SW | 8260B |
| 1，1，1－Trichloroethane | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 1，1，2－Trichloroethane | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 82608 |
| Trichloroethene | 10.5 | ug／L | 09／21／2001 | 3589 | ＜1．0 | eap | SW | 82608 |
| Trichlorofluoromethane | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 8260日 |
| 1，2，3－Trichloropropane | $<5.0$ | ug／L | 09／21／2001 | 3589 | $<5.0$ | eap | SW | 8260日 |
| 1，2，4－Trimethylbenzene | $<1.0$ | ug／L | 09／21／2001 | 3589 | ＜1．0 | eap | SW | 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBIO02


| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/21/2001 |  | 3589 | $<1.0$ | eap | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Acetate | <5.0 | ug/L | 09/21/2001 |  | 3589 | <5.0 | eap | SW | 8260B |
| Vinyl Chloride | <1.0 | ug/L | 09/21/2001 |  | 3589 | $<1.0$ | eap | Sw | 8260B |
| Xylenes | $<1.0$ | ug/L | 09/21/2001 |  | 3589 | <1.0 | eap | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 94 | \% | 09/21/2001 |  | 3589 |  | eap | SW | 8260B |
| Dibromofluoromethane (surr) | 98 | \% | 09/21/2001 |  | 3589 |  | eap | SW | 82608 |
| d8-Toluene (surr) | 98 | \% | 09/21/2001 |  | 3589 |  | eap | SW | 8260B |
| Bromofluorobenzene (surr) | 102 | 4 | 09/21/2001 |  | 3589 |  | eap | SW | 8260B |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jıw | SW | 82700 |
| Acenaphthylene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Anthracene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Benzo(a)anthracene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Benzo( $k$ ) fluoranthene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Benzo (a) Pyrene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 82700 |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | Sw | 82700 |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | $8270{ }^{\text {c }}$ |
| bis (2-Ethylhexyl) phthalate | $<10$ | $\mathrm{ug} / \mathrm{L}$ | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2,2'-oxybis(1-Chloropropane) | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | <10 | jrw | SW | 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jxw | SW | 8270 C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.16930
Client Project ID: South Bend Indiana SBIO02


DATE/TIME TAKEN 09/14/2001 08:15

| Chrysene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | Sw 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jxw | SW 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jıw | SW 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/20/2001 | 1272 | 2701 | $<50$ | jrw | SW 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jıw | SW 8270C |
| Fluoranthene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| Fluorene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/20/2001 | 1272 | 2701 | $<20$ | jrw | SW 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | Sw 8270C |
| Indeno (1, 2, 3-cd) pyrene | $<10$ | ug/L | 09/20/.2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| Isophorone | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jıw | SW 8270C |
| Naphthalene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| Nitrobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270 C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| Phenanthrene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| Pyrene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW B270C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 706767 | SBIOO2 $:$ HMW29D:G091401:505 | $09 / 14 / 200108: 15$ |


| Surrogate: d5-Nitrobenzene | 88 | $t$ | 09/20/2001 | 1272 | 2701 |  | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorobiphenyl | 87 | \% | 09/20/2001 | 1272 | 2701 |  | jrw | SW 8270C |
| Surrogate: di4-Terphenyl | 43 | $\%$ | 09/20/2001 | 1272 | 2701 |  | jrw | SW 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/20/2001 | 1272 | 2701 | $<50$ | jrw | Sw 8270C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| 2-Chlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| 2-Methylphenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | <10 | jrw | Sw 8270C |
| 2-Nitrophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| Pentachlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| Phenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW B270C |
| Surrogate: d6-Phenol | 70 | \% | 09/20/2001 | 1272 | 2701 |  | jrw | SW 82700 |
| Surrogate: 2-Fluorophenol | 69 | \% | 09/20/2001 | 1272 | 2701 |  | jrw | SW 8270C |
| Surrogate: Tribromophenol | 61 | \% | 09/20/2001 | 1272 | 2701 |  | jxw | SW 8270C |
| TPH - Method 418.1 (AQ) | 7.5 | mg/L | 09/26/2001 | 601 | 721 | $<0.2$ | sub | EPA 418.1 |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002


SAMPLE DESCRIPTION
SBIOO2:HMW29I:G091401:505

DATE/TIME TAKEN
09/14/2001 08:30


# TestAmerica，Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
$\begin{array}{ll}\text { HULI \＆ASSOC．（Dublin）} \\ 6130 \text { Wilcox Rd．} & 10 / 12 / 2001\end{array}$ Dublin，OH 43016

Job Number：01．16930
Client Project ID：South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO． | SAMPLE DE | CRI | TIO1 |  |  |  |  | DAT | TIME | TAK |
| 706768 |  | SBIO02：HM | N29I | G09 | 1：505 |  |  |  | 09／ | 4／2001 | 08： |


| Bromobenzene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2－Butanone（MEK） | $<12.5$ | ug／L | 09／21／2001 | 3589 | $<12.5$ | eap | SW | 8260日 |
| Carbon disulfide | ＜1．0 | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 8260日 |
| Carbon tetrachloride | $<1.0$ | $\underline{u g / L}$ | 09／21／2001 | 3589 | ＜1．0 | eap | SW | 8260B |
| Chlorobenzene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| Chloroethane | $<5.0$ | $u g / L$ | 09／21／2001 | 3589 | $<5.0$ | eap | SW | 82608 |
| 2－Chlorotoluene | $<1.0$ | ug／L | 09／21／2001 | 3589 | ＜1．0 | eap | SW | 8260B |
| 4－Chlorotoluene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 82608 |
| Chioroform | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 82608 |
| Chloromethane | $<5.0$ | ug／L | 09／21／2001 | 3589 | $<5.0$ | eap | SW | 8260B |
| Dibromochloromethane | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| Dibromomethane | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug／L． | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 1，2－Dibromo－3－chloropropane | $<5.0$ | ug／L | 09／21／2001 | 3589 | $<5.0$ | eap | SW | 8260 B |
| 1，2－Dichlorobenzene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 1，3－Dichlorobenzene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 1，4－Dichlorobenzene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 1，1－Dichloroethane | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 8260日 |
| 1，1－Dichloroethene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | sw | 8260B |
| cis－1，2－Dichloroethene | 2.3 | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| trans－1，2－Dichloroethene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 1，2－Dichloropropane | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 1．3－Dichloropropane | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／21／2001 | 3589 | ＜1．0 | eap | SW | 8260B |
| 1，1－Dichloropropene | $<1.0$ | ug／L | 09／21／2001 | 3589 | ＜1．0 | eap | 5W | 8260B |

# TestAmerica，Incorporated 

PAGE 10 of 54

## ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin，OH 43016
10／12／2001

Job Number： 01.16930
Client Project ID：South Bend Indiana SBI002


SAMPLE NO．SAMPLEE DESCRIPTION
706768 SBI002：HMW29I：G091401：505
DATE／TIME TAKEN
09／14／2001 08：30

| Cis－I，3－Dichloropropene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | S＊8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans－1，3－Dichloropropene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260B |
| Ethylbenzene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW． 8260 B |
| Hexachlorobutadiene | $<5.0$ | ug／L | 09／21／2001 | 3589 | ＜5．0 | eap | SW 8260B |
| n－Hexane | ＜ 5.0 | ug／L | 09／21／2001 | 3589 | $<5.0$ | eap | SW 8260B |
| 2－Hexanone | $<12.5$ | ug／L | 09／21／2001 | 3589 | $<12.5$ | eap | SW 8260B |
| Isopropylbenzene（Cumene） | 1.8 | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260B |
| p－Isopropyltoluene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260B |
| Bromomethane | $<5.0$ | ug／L | 09／21／2001 | 3589 | $<5.0$ | eap | SW 8260B |
| Methylene Chloride | $<5.0$ | ug／L | 09／21／2001 | 3589 | $<5.0$ | eap | SW 8260B |
| Methyl t－butyl ether（MTBE） | $<5.0$ | ug／L | 09／21／2001 | 3589 | $<5.0$ | eap | SW 8260日 |
| 4－Methyl－2－pentanone（MIBK） | $<12.5$ | ug／L | 09／21／2001 | 3589 | ＜12．5 | eap | SW 8260B |
| n－Propylbenzene | 2.1 | ug／L | 09／21／2001 | 3589 | ＜1．0 | eap | SW 8260B |
| Styrene | $<1.0$ | ug／L | 09／21／2001 | 3589 | ＜1．0 | eap | SW 8260B |
| Naphthalene | $<5.0$ | ug／L | 09／21／2001 | 3589 | ＜ 5.0 | eap | SW 8260B |
| 1，1，1，2－Tetrachloroethane | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260B |
| 1，1，2，2－Tetrachloroethane | ＜1．0 | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260B |
| Tetrachloroethene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260B |
| Toluene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260日 |
| 1，2，4－Trichlorobenzene | $<5.0$ | ug／L | 09／21／2001 | 3589 | $<5.0$ | eap | SW 8260B |
| 1，1，1－Trichloroethane | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260］ |
| 1，1，2－Trichloroethane | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260B |
| Trichloroethene | 13.9 | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260B |
| Trichlorofluoromethane | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260B |
| 1，2，3－Trichloropropane | ＜5．0 | ug／L | 09／21／2001 | 3589 | ＜5．0 | eap | S＊8260日 |
| 1，2，4－Trimethylbenzene | $<1.0$ | ug／L | 09／21／2001 | 3589 | $<1.0$ | eap | SW 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.16930

Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 706768

SBIOO2:HMW29I:G091401:505

DATE/TIME TAKEN 09/14/2001 08:30

| 1,3,5-Trimethylbenzene | 61.0 | ug/L | 09/21/2001 |  | 3589 | $<1.0$ | eap | SW | 8260日 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Acetate | <5.0 | ug/L | 09/21/2001 |  | 3589 | $<5.0$ | eap | SW | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/21/2001 |  | 3589 | $<1.0$ | eap | SW | 8260B |
| Xylenes | <1.0 | ug/L | 09/21/2001 |  | 3589 | <1.0 | eap | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 95 | $\%$ | 09/21/2001 |  | 3589 |  | eap | SW | 8260B |
| Dibromofluoromethane (surr) | 97 | 8 | 09/21/2001 |  | 3589 |  | eap | SW | 8260B |
| d8-Toluene (surr) | 97 | \% | 09/21/2001 |  | 3589 |  | eap | SW | 8260B |
| Bromofluorobenzene (surr) | 100 | 8 | 09/21/2001 |  | 3589 |  | eap | SW | 82608 |
| BASE NEUTRAL COMP, (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270 C |
| Acenaphthylene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |
| Anthracene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | Sw | 8270C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270 C |
| Benzo(b) fluoranthene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | Sw | 8270C |
| Benzo(k)fluoranthene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |
| Benzo (a) pyrene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | <10 | jrw | SW | 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270 C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |
| bis(2-Ethylhexyl)phthalate | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |
| 2.2'-oxybis(1-Chloropropane) | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270 C |
| 4-Chloroaniline | $<10$ | $u g / L$ | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd. Dublin, OH 43016<br>Job Number: 01.16930<br>Client Project ID: South Bend Indiana SBI002

10/12/2001

|  |  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result | Date | Batch | Batch | Reporting Analyst |  |
| R Units | Analyzed | Number | Number | Limit | Initials Method Reference |

SAMPLE NO 706768

SAMPLE DESCRIPTION
SBI002:HMW29I:G091401:505

DATE/TIME TAKEN 09/14/2001 08:30

| Chrysene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | $8270{ }^{\text {c }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270 C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270 C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$. | jrw | SW | 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/21/2001 | 1272 | 2699 | $<50$ | jrw | SW | 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270 C |
| Dimethyl phthalate | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | Sw | 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270 C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jxw | SW | 8270C |
| Fluoranthene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jxw | SW | 8270C |
| Fluorene | 18 | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |
| Hexachloro-1,3-butadiene | <10 | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/21/2001 | 1272 | 2699 | $<20$ | jrw | SW | 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | Sw | 8270C |
| Indeno (1,2,3-cd) pyrene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270 C |
| Isophorone | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |
| Naphthalene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Nitrobenzene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270 C |
| Phenanthrene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270 C |
| Pyrene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |

## TestAmerica, Incorporated

# ANALYTICAL REPORT 

Kevin Wildman HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batyzed | Batch | Reporting Analyst |  |
| Bumber | Number | Limit | Initials Method Reference |  |  |

## SAMPLE NO. 706768

SAMPLE DESCRIPTION
SBIOO2:HMW29I: G091401:505

DATE/TIME TAKEN 09/14/2001 08:30

| surrogate: d5-Nitrobenzene | 96 |  | 4 | 09/21/2001 | 1272 | 2699 |  | jrw |  | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorobiphenyl | 81 |  | \% | 09/21/2001 | 1272 | 2699 |  | jrw | SW | 82700 |
| Surrogate: d14-Terphenyl | 53 |  | \% | 09/21/2001 | 1272 | 2699 |  | jrw | SW | 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ |  | ug/L | 09/21/2001 | 1272 | 2699 | $<50$ | jrw | Sw | 82700 |
| 4-Chloro-3-methylphenol | $<10$ |  | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270 C |
| 2-Chlorophenol | $<10$ |  | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270 C |
| 2,4-Dichlorophenol | $<10$ |  | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 82700 |
| 2,4-Dimethylphenol | $<10$ |  | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ |  | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |
| 2-Methylphenol | $<10$ |  | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270 C |
| meta \& para-Methylphenol | <10 |  | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270 C |
| 2-Nitrophenol | $<10$ |  | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270 C |
| Pentachlorophenol | $<10$ |  | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |
| Phenol | $<10$ |  | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |
| 2,4,5-Trichlorophenol | $<10$ |  | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<10$ |  | ug/L | 09/21/2001 | 1272 | 2699 | $<10$ | jrw | SW | 8270C |
| Surrogate: d6-Phenol | 65 |  | \% | 09/21/2001 | 1272 | 2699 |  | jrw | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 63 |  | $\%$ | 09/21/2001 | 1272 | 2699 |  | jrw | SW | 8270C |
| Surrogate: Tribromophenol | 68 | note | $\%$ | 09/21/2001 | 1272 | 2699 |  | jrw | SW | 8270C |
| TPM - Method 418.1 (AQ) | 3.6 |  | mg/L | 09/26/2001 | 601 | 721 | <0.2 | sub |  | 418.1 |

## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 706769 | SBIOO2:HMW28S:G091401:505 |

DATE/TIME TAKEN
09/14/2001 08:50


TestAmerica，Incorporated

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## ANALYTICAL REPORT

Kevin Wildman
HUL亡 \＆ASSOC．（Dublin）10／12／2001
6130 Wilcox Rd．
Dublin，OH 43016

Job Number： 01.16930
Client Project ID：South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting Analyst |  |
| Number | Number | Limit | Initials Method Reference |  |  |  |

SAMPLE NO．SAMPLE DESCRIPTION 706769

SBIO02：HMW28S：G091401：505

DATE／TIME TAKEN 09／14／2001 08：50

| sromobenzene | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2－Butanone（MEK） | ＜12．5 | ug／L | 09／21／2001 | 3585 | $<12.5$ | eap | SW 8260B |
| Carbon disulfide | $<1.0$ | ug／L | 09／21／2001 | 3585 | $\leqslant 1.0$ | eap | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug／L | 09／21／2001 | 3585 | ＜1．0 | eap | SW 8260B |
| Chlorobenzene | $<1.0$ | $u g / L$ | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Chloroethane | ＜5．0 | ug／L | 09／21／2001 | 3585 | ＜ 5.0 | eap | SW 8260B |
| 2－chlorotoluene | ＜1．0 | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 4 －chlorotoluene | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Chloroform | $<1.0$ | $\mathrm{ug} / \mathrm{L}$ | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Chloromethane | $<5.0$ | ug／L | 09／21／2001 | 3585 | $<5.0$ | eap | SW 8260B |
| Dibromochloromethane | $<2.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Dibromomethane | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1，2－Dibromo－3－chloropropane | $<5.0$ | ug／L | 09／21／2001 | 3585 | $<5.0$ | eap | SW 8260日 |
| 1，2－Dichlorobenzene | $<1.0$ | ug／L | 09／21／2001 | 3585 | ＜1．0 | eap | SW 8260B |
| 1，3－Dichlorobenzene | $<1.0$ | ug／L | 09／21／2001 | 3585 | ＜1．0 | eap | SW 8260B |
| 1，4－Dichlorobenzene | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1，1－Dichloroethane | $<1.0$ | بg／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260 B |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260日 |
| 1，1－Dichloroethene | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| cis－i，2－Dichloroethene | 2.6 | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| trans－1，2－Dichloroethene | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1，2－Dichloropropane | $<1.0$ | ug／L | 09／21／2001． | 3585 | ＜1．0 | eap | SW 8260B |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260日 |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1，1－Dichloropropene | $<1.0$ | ug／L | 09／21／2001 | 3585 | ＜1．0 | eap | SW 8260B |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. | SAMPLE DESCRIPTION | DATE/TIME TAKEN |
| :--- | :--- | :--- |
| 706769 | SBI002:HMW28S:G091401:505 | $09 / 14 / 2001$ 08:50 |


| Cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 82608 |
| Ethylbenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/21/2001 | 3585 | <5.0 | eap | SW | 8260B |
| n -Hexane | $<5.0$ | ug/L | 09/21/2001 | 3585 | $<5.0$ | eap | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/21/2001 | 3585 | $<12.5$ | eap | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/21/2001 | 3585 | <5.0 | eap | SW | 82608 |
| Methylene Chloride | $<5.0$ | ug/L | 09/21/2001 | 3585 | $<5.0$ | eap | SW | 8260B |
| Methyl t-butyl ether (MTBE) | <5.0 | ug/L | 09/21/2001 | 3585 | $<5.0$ | eap | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/21/2001 | 3585 | $<12.5$ | eap | SW | 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| Naphthalene | <5.0 | ug/L | 09/21/2001 | 3585 | $<5.0$ | eap | SW | 8260 B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 82608 |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | Sw | 8260B |
| Tetrachloroethene | 1.0 | ug/L | 09/21/2001 | 3585 | <1.0 | eap | SW | 8260B |
| Toluene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 82608 |
| 1,2,4-Trichlorobenzene | < 5.0 | ug/L | 09/21/2001 | 3585 | $<5.0$ | eap | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| Trichloroethene | 15.1 | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260日 |
| 1,2,3-Trichloropropane | <5.0 | ug/L | 09/21/2001 | 3585 | $<5.0$ | eap | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | <1.0 | eap | SW | 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002

Date |  | Prep Run |
| :--- | :--- | :--- |
| Batch Batch Reporting Analyst |  |

## SAMPLE NO <br> 706769 <br> SAMPLE DESCRIPTION <br> SBI002: HMW28S: G091401:505

| -,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/21/2001 |  | 3585 | $<1.0$ | eap | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Acetate | $<5.0$ | ug/L | 09/21/2001 |  | 3585 | <5.0 | eap | SW 8260E |
| Vinyl Chloride | $<1.0$ | ug/L | 09/21/2001 |  | 3585 | $<1.0$ | eap | SW 8260B |
| Xylenes | $<1.0$ | ug/L | 09/21/2001 |  | 3585 | $<1.0$ | eap | SW 8260B |
| d4-1,2-Dichloroethane (surr) | 93 | \% | 09/21/2001 |  | 3585 |  | eap | SW 8260B |
| Dibromofluoromethane (surr) | 98 | \% | 09/21/2001 |  | 3585 |  | eap | SW 8260B |
| ds-Toluene (surr) | 100 | 8 | 09/21/2001 |  | 3585 |  | eap | SW 8260B |
| Bromofluorobenzene (surr) | 105 | \% | 09/21/2001 |  | 3585 |  | eap | SW 8260 B |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| Acenaphthylene | $\leqslant 10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | Sw 8270C |
| Anthracene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| Benzo(k)fluoranthene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| Benzo (a) pyrene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | Sw 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jıw | SW 8270C |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| bis (2-Chloroethoxy)methane | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | Sw 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW 8270C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.16930<br>Client Project ID: South Bend Indiana SBI002

|  |  | Resuit | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | IIO |  |  |  |  | DAT | /TIME | TAKEN |
| 706769 |  | SBIOO2:HM | 28S | G091 | 1:505 |  |  |  | 09/ | $4 / 2001$ | 08:50 |


| Chrysene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzo (a, h) anthracene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | <10 | jrw | SW | 8270 C |
| Dibenzofuran | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| 1,4-Dichlorobenzene | $<10$. | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 82700 |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/20/2001 | 1272 | 2701 | $<50$ | jrw | SW | 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jxw | SW | 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Fluoranthene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Fluorene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Hexachlorobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Hexachloro-1, 3-butadiene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | j2w | SW | 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/20/2001 | 1272 | 2701 | $<20$ | jrw | SW | 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Indeno (1, 2,3-cd) pyrene | <10 | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270c |
| Isophorone | $<10$ | ug/L | 09/20/2001. | 1272 | 2701 | $<10$ | jrw | SW | 827.0 C |
| Naphthalene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Nitrobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Phenanthrene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Pyrene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | Sw | 8270 C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | Sw | 8270C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULLL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
706769

DATE/TIME TAKEN 706769

SBI002:HMW28S:G091401:505

| surrogate: d5-Nitrobenzene | 89 | \% | 09/20/2001 | 1272 | 2701 |  | jrw |  | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorobiphenyl | 77 | \% | 09/20/2001 | 1272 | 2701 |  | jrw | SW | 8270 C |
| Surrogate: di4-Terphenyl | 50 | $\%$ | 09/20/2001 | 1272 | 2701 |  | jrw | SW | 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/20/2001 | 1272 | 2701 | $<50$ | jrw | SW | 82700 |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2-Chlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2-Methylphenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2-Nitrophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Pentachlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Phenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 82700 |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 82700 |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Surrogate: d6-Phenol | 74 | \% | 09/20/2001 | 1272 | 2701 |  | jrw | S | 8270 C |
| Surrogate: 2-Fluorophenol | 72 | 8 | 09/20/2001 | 1272 | 2701 |  | jxw | SW | 8270 C |
| Surrogate: Tribromophenol | 42 | $\%$ | 09/20/2001 | 1272 | 2701 |  | jrw | SW | 8270C |
| TPH - Method 4IB.1 (AQ) | <0.2 | $\mathrm{mg} / \mathrm{L}$ | 09/26/2001 | 601 | 721 | <0.2 | sub |  | 418.1 |

# TestAmerica, Incorporated 

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## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |

SAMPLE NO. SAMPLE DESCRIPTION 706770 SBIO02:HMW32D:G091401:505


# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.16930<br>Client Project ID: South Bend Indiana SBIO02

10/12/2001


## SAMPLE NO 706770

SAMPLE DESCRIPTION SBI002:HMW32D:G091401:505

DATE/TIME TAKEN 09/14/2001 10:00

| -romobenzene | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260 B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Eutanone (MEK) | $<12.5$ | ug/L | 09/21/2001 | 3589 | $<12.5$ | eap | SW | 8260B |
| Carbon disulfide | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | Sw | 8260B |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| Chloroethane | $<5.0$ | ug/L | 09/21/2001 | 3589 | $<5.0$ | eap | SW | 8260B |
| 2-Chlorotoluene | 81.0 | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 4-Chlorotoluene | <1.0 | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| Chloroform | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 82608 |
| Chloromethane | $<5.0$ | ug/L | 09/21/2001 | 3589 | $<5.0$ | eap | SW | 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 82608 |
| Dibromomethane | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/21/2001 | 3589 | 61.0 | eap | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/21/2001 | 3589 | $<5.0$ | eap | SW | 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | S* | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| Cis-1,2-Dichloroethene | 33.3 | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| trans-1,2-Dichloroethene | 3.5 | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260b |
| 1،2-Dichloropropane | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<2.0$ | eap | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 82608 |
| 2،2-Dichloropropane | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 1,1-Dichloropropene | <1.0 | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman<br>HULI \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>10/12/2001

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CR | TIO |  |  |  |  | DA' | /TIME | TAKEN |
| 706770 |  | SBI002:H | N32D | G09 | 1:505 |  |  |  | 09/ | 4/2001 | 10:00 |


| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/21/2001 | 3589 | $<5.0$ | eap | SK | 8260B |
| n -Hexane | 23.3 | ug/L | 09/21/2001 | 3589 | $<5.0$ | eap | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/21/2001 | 3589 | $<12.5$ | eap | SH | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 82608 |
| p-Isopropyltoluene | 2.5 | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/21/2001 | 3589 | <5.0 | eap | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/21/2001 | 3589 | $<5.0$ | eap | SW | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/21/2001 | 3589 | $<5.0$ | eap | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/21/2001 | 3589 | $<12.5$ | eap | SH | 8260B |
| n -Propylbenzene | 1.5 | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/21/2001 | 3589 | $<5.0$ | eap | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | <1. 0 | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260 B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260日 |
| Tetrachloroethene | 35.9 | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260 B |
| Toluene | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 82608 |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/21/2001 | 3589 | $<5.0$ | eap | SH | 8260B |
| 1,1,1-Trichloroethane | <1.0 | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 82608 |
| 1,1,2-Trichloroethane | <1.0 | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| Trichloroethene | 18.2 | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260日 |
| 1,2,3-Trichloropropane | <5.0 | ug/L | 09/21/2001 | 3589 | $<5.0$ | eap | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SH | 8260 B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 706770 | SBIOO2:HMW32D:G091401:505 | $09 / 14 / 2001$ 10:00 |


| .3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/21/2001 |  | 3589 | $<1.0$ | eap | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Acetate | $<5.0$ | ug/L | 09/21/2001 |  | 3589 | <5.0 | eap | SW | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/21/2001 |  | 3589 | <1.0 | eap | SN | 82608 |
| Xylenes | $<1.0$ | ug/L | 09/21/2001 |  | 3589 | <1.0 | eap | SW | 8260B |
| d4-1, 2-Dichloroethane (surr) | 93 | $t$ | 09/21/2001 |  | 3589 |  | eap | SH | 8260 B |
| Dibromofluoromethane (surr) | 97 | \% | 09/21/2001 |  | 3589 |  | eap | SW | 8260B |
| di-Toluene (surr) | 100 | \% | 09/21/2001 |  | 3589 |  | eap | SW | 82608 |
| Bromofluorobenzene (surr) | 102 | $\%$ | 09/21/2001 |  | 3589 |  | eap | SK | 8260B |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Acenaphthylene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | Sk | 8270 C |
| Anthracene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jıw | SW | 82700 |
| Benzo (a) anthracene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Benzo (b) fluoranthene | <10 | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Benzo(k) fluoranthene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Benzo (a) Pyrene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Benzyl alcohol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jxw | SH | 8270 C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 2,2'-oxybis(1-Chloropropane) | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| 4-Chloroaniline | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 82700 |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 82700 |

# TestAmerica, Incorporated 

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## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION 706770 <br> SBIO02:HMW32D:G091401:505

| Chrysene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzo ( $\alpha, h$ ) anthracene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 1.2-Dichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | juw | SW | 82700 |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | <10 | jrw | SW | 8270 C |
| 1,4-Dichlorobenzene | $<10$ | $\underline{u g / L}$ | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/20/2001 | 1272 | 2701 | $<50$ | jrw | SW | 82700 |
| Diethyl phthalate | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Fluoranthene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Fluorene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 82700 |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/20/2001 | 1272 | 2701 | $<20$ | jrw | SW | 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Indeno(1,2,3-cd) pyrene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Isophorone | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | j5w | SW | 8270C |
| Naphthalene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Nitrobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 82700 |
| N-Nitrosodi-m-propylamine | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 82700 |
| Phenanthrene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Pyrene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |

## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) . 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBIO02


| surrogate: d5-Nitrobenzene | 94 | 8 | 09/20/2001 | 1272 | 2701 |  | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorobiphenyl | 91 | 4 | 09/20/2001 | 1272 | 2701 |  | jrw | SW | 8270C |
| Surrogate: d14-Terphenyl | 52 | \% | 09/20/2001 | 1272 | 2701 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/20/2001 | 1272 | 2701 | $<50$ | jrw | SW | 8270C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2-Chlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | Sw | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2-Methylphenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 2-Nitrophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Pentachlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Phenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | <10 | jrw | Sw | 8270 C |
| Surrogate: d6-Phenol | 70 | \% | 09/20/2001 | 1272 | 2701 |  | jrw | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 64 | \% | 09/20/2001 | 1272 | 2701 |  | jrw | SW | 8270 C |
| Surrogate: Tribromophenol | 76 | \% | 09/20/2001 | 1272 | 2701 |  | jrw | SW | 8270C |
| TPH - Method 418.1 (AQ) | 0.8 | mg/L | 09/26/2001 | 601 | 721 | $<0.2$ | sub |  | 418.1 |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>10/12/2001 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 706771 | SBIOO2:TB1:091401 | $09 / 14 / 2001$ |


| VOLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8260 - SW846 (AQ) | Complete |  | 09/21/2001 | 3585 | Complete | eap |  |
| Acetone | $<20.0$ | ug/L | 09/21/2001 | 3585 | <20.0 | eap | SW 8260B |
| Benzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | <1.0 | eap | SW 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| n-Butylbenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Bromochloromethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Eromodichloromethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | <1.0 | eap | SW 8260B |
| Bromoform | $<1.0$ | ug/L | 09/21/2001. | 3585 | $<1.0$ | eap | SW 8260B |
| Bromobenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/21/2001 | 3585 | $<12.5$ | eap | SW 8260B |
| Carbon disulfide | <1.0 | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/21/2001 | 3585 | <1.0 | eap | SW 8260B |
| Chlorobenzene | $<1.0$ | $\mathrm{ug} / \mathrm{L}$ | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Chloroethane | $<5.0$ | ug/L | 09/21/2001 | 3585 | $<5.0$ | eap | SW 8260日 |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Chloroform | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Chloromethane | $<5.0$ | $\mathrm{ug} / \mathrm{L}$ | 09/21/2001 | 3585 | $<5.0$ | eap | SW 8260日 |
| Dibromochloromethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/21/2001 | 3585 | $<5.0$ | eap | SW 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | <1.0 | eap | SW 8260B |

## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)

10/12/2001 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |

SAMPLE NO. SAMPLE DESCRIPTION
DATE/TIME TAKEN 706771

SBI002:TB1:091401

| -; 4-Dichlorobenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260b |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8250 B |
| 1,2-Dichloroethane | <1.0 | ug/L | 09/21/2001 | 3585 | <1.0 | eap | SW | 8260 B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260 B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 82608 |
| 1,2-Dichloropropane | <1.0 | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 82608 |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<2.0$ | eap | SW | 82608 |
| 2,2-Dichloropropane | <1.0 | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 82608 |
| 1,1-Dichloropropene* | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | Sw | 82608 |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 82508 |
| Ethylbenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 82608 |
| Hexachlorobutadiene | < 5.0 | ug/L | 09/21/2001 | 3585 | <5.0 | eap | SW | 82608 |
| n -Hexane | $<5.0$ | ug/L | 09/21/2001 | 3585 | $<5.0$ | eap | SW | 82608 |
| 2 -Hexanone | $<12.5$ | ug/L | 09/21/2001 | 3585 | $<12.5$ | eap | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260 B |
| p -Isopropyltoluene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | ธw | 82608 |
| Bromomethane | <5.0 | ug/L | 09/21/2001 | 3585 | $<5.0$ | eap | SW | 82608 |
| Methylene Chloride | $<5.0$ | ug/L | 09/21/2001 | 3585 | <5.0 | eap | SW | 82608 |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/21/2001 | 3585 | $<5.0$ | eap | SW | 82608 |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/21/2001 | 3585 | $<12.5$ | eap | SW | 82608 |
| $n$-Propylbenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/21/2001 | 3585 | < 5.0 | eap | SW | 8260 B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 82608 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
706771

|  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Date | Batch | Batch | Reporting | Analyst |  |
| Analyzed | Number | Number | Limit | Initials | Method Reference |

DATE/TIME TAKEN
09/14/2001

| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tetrachloroethene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 82608 |
| Toluene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/21/2001 | 3585 | $<5.0$ | eap | SW 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260日 |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Trichloroethene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1,2,3-Trichloropropane | <5.0 | ug/L | 09/21/2001 | 3585 | $<5.0$ | eap | SW 8260 B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1,3,5-Trimethyibenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Vinyl Acetate | <5.0 | ug/L | 09/21/2001 | 3585 | <5.0 | eap | SW 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260日 |
| Xylenes | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SN 8260B |
| d4-1,2-Dichloroethane (surr) | 93 | 4 | 09/21/2001 | 3585 |  | eap | SW 8260B |
| Dibromofluoromethane (surr) | 98 | $\%$ | 09/21/2001 | 3585 |  | eap | SW 8260B |
| d8-Toluene (surr) | 100 | \% | 09/21/2001 | 3585 |  | eap | SW 8260B |
| Bromofluorobenzene (surr) | 104 | \% | 09/21/2001 | 3585 |  | eap | SW 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBIOO2

SAMPLE NO. SAMPLE DESCRIPTION 706772

SBI002:HMW30D:G091401:505

| Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Batch | Batch | Reporting | Analyst |  |
| Number | Number | Limit | Initials Method Reference |  |


| -cpms total metals | Complete |  | 09/26/2001 |  | 2562 | Complete | ekh | SW 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | mg/L | 09/26/2001 | 1844 | 3686 | <0.0050 | ekh | SW 6020 |
| Barium, ICPMS | 0.0473 | $\mathrm{mg} / \mathrm{L}$ | 09/26/2001 | 1844 | 3894 | $<0.0050$ | ekh | SW 6020 |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 09/26/2001 | 1844 | 3565 | $<0.0010$ | ekh | SW 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | mg/L | 09/26/2001 | 1844 | 3965 | $<0.0050$ | ekh | SW 6020 |
| Lead, ICPMS | 0.0025 | $\mathrm{mg} / \mathrm{L}$ | 09/26/2001 | 1844 | 3643 | $<0.0010$ | ekh | SW 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/25/2001 | 1413 | 1359 | $<0.0002$ | epk | SW 7470A |
| Selenium, GFAA | $<0.0050$ | mg/L | 09/22/2001 | 746 | 575 | $<0.0050$ | jad | SW 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 09/26/2001 | 1844 | 3901 | $<0.0005$ | ekh | SW 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/25/2001 | 1844 |  | Complete | clm | SW 3010A |
| Metals Digestion, GFAA | Complete |  | 09/18/2001 | 746 |  | Complete | mrt | SW 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1413 |  | Complete | epk | SW 7470A |
| Prep, Base Neutral | complete |  | 09/17/2001 | 1272 |  | Complete | 1 mc | EPA 625 ; SW 3510C ; SW 352 |
| Prep, Acid Extractable | Complete |  | 09/17/2001 | 1272 |  | Complete | 1 mc | EPA 625 ; SW 3510C ; SW 352 |
| Prep, TPH - 418.1 aq | Complete |  | 09/25/2001 | 601 |  | Complete | sub | EPA 418.1 |
| VOLATILE COMPOUNDS - 8260 |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/21/2001 |  | 3585 | Complete | eap |  |
| Acetone | <20.0 | ug/L | 09/21/2001 |  | 3585 | <20.0 | eap | SW 8260B |
| Benzene | $<1.0$ | ug/L | 09/21/2001 |  | 3585 | $<1.0$ | eap | SW 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/21/2001 |  | 3585 | $<1.0$ | eap | SW 8260B |
| sec-Butylbenzene | 1.4 | ug/L | 09/21/2001 |  | 3585 | $<1.0$ | eap | SW 8260B |
| n-Butylbenzene | <1.0 | ug/L | 09/21/2001 |  | 3585 | $<1.0$ | eap | SW 8260B |
| Bromochloromethane | <1.0 | ug/L | 09/21/2001 |  | 3585 | $<2.0$ | eap | SW 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/21/2001 |  | 3585 | $<1.0$ | eap | SW 8260日 |
| Bromoform | $<1.0$ | ug/L | 09/21/2001 |  | 3585 | <1.0 | eap | SW 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

HULI \& ASSOC. (Dublin)
10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002


SAMPLE NO.
706772
SAMPLE DESCRIPTION
SBIO02:HMW30D:G091401:505

DATE/TIME TAKEN 09/14/2001 10:45

| Bromobenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | <1.0 | eap | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/21/2001 | 3585 | $<12.5$ | eap | SW 8260日 |
| Carbon disulfide | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Chloroethane | <5.0 | ug/L | 09/21/2001 | 3585 | <5.0 | eap | SW 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260 B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/21/2001 | 3585 | <1.0 | eap | SW 8260B |
| Chloroform | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Chloromethane | <5.0 | ug/L | 09/21/2001 | 3585 | $<5.0$ | eap | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260 B |
| Dibromomethane | <1.0 | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | Sw 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/21/2001 | 3585 | $<5.0$ | eap | SW 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1,4-Dichlorobenzene | <1.0 | ug/L | 09/21/2001 | 3585 | <1.0 | eap | SW 8260B |
| 1,1-Dichloroethane | 1.4 | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 82608 |
| 1,2-Dichloroethane | <1.0 | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| cis-1,2-Dichloroethene | 4.2 | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting Analyst | Number | Limit |
| Nuitials Method Reference |  |  |  |  |  |  |  |

## SAMPLE NO. SAMPLE DESCRIPTION

 706772DATE/TIME TAKEN
09/14/2001 10:45
1

| -18-1,3-Dichloropropene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/21/2001 | 3585 | <1.0 | eap | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | <1.0 | eap | SW | 8260B |
| Hexachlorobutadiene | <5.0 | ug/L | 09/21/2001 | 3585 | <5.0 | eap | SW | 8260日 |
| n-Hexane | 12.5 | ug/L | 09/21/2001 | 3585 | <5.0 | eap | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/21/2001 | 3585 | $<12.5$ | eap | SW | 82608 |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/21/2001 | 3585 | <1.0 | eap | SW | 8250B |
| p-Isopropyltoluene | 1.0 | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260 B |
| Bromomethane | < 5.0 | ug/L | 09/21/2001 | 3585 | $<5.0$ | eap | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/21/2001 | 3585 | $<5.0$ | eap | SW | 8260B |
| Methyl t-butyl ether.(MTBE) | < 5.0 | ug/L | 09/21/2001 | 3585 | < 5.0 | eap | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/21/2001 | 3585 | $<12.5$ | eap | SW | 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 82608 |
| Styrene | $<1.0$ | ug/L | 09/21/2001 | 3585 | <1.0 | eap | SW | 8260B |
| Naphthalene | < 5.0 | ug/L | 09/21/2001 | 3585 | <5.0 | eap | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260 B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| Tetrachloroethene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260 B |
| Toluene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/21/2001 | 3585 | $<5.0$ | eap | SW | 8260B |
| 1,1,1-Trichloroethane | 1.1 | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| Trichloroethene | 10.8 | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/21/2001 | 3585 | < 5.0 | eap | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | <1.0 | eap | SW | 8260B |

## TestAmerica, Incorporated

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## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch |  |
| Batch | Reporting Analyst |  |  |

SAMPLE NO. 706772

SAMPLE DESCRIPTION
SBI002:HMW30D:G091401:505

DATE/TIME TAKEN
09/14/2001 10:45

| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/21/2001 |  | 3585 | $<1.0$ | eap | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Acetate | <5.0 | ug/L | 09/21/2001 |  | 3585 | <5.0 | eap | SW | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/21/2001 |  | 3585 | <1.0 | eap | sw | 82608 |
| Xylenes | $<1.0$ | ug/L | 09/21/2001 |  | 3585 | <1.0 | eap | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 94 | \% | 09/21/2001 |  | 3585 |  | eap | SW | 8260B |
| Dibromofluoromethane (surr) | 97 | 4 | 09/21/2001 |  | 3585 |  | eap | Sw | 8260B |
| ds-Toluene (eurr) | 100 | 8 | 09/21/2001 |  | 3585 |  | eap | SW | 82608 |
| Bromofluorobenzene (surr) | 105 | 7 | 09/21/2001 |  | 3585 |  | eap | SW | 8260B |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | <10 | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Acenaphthylene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Anthracene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Benzo (k)fluoranthene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Benzo(a) pyrene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | Sw | 8270 C |
| Benzyl alcohol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | Sw | 8270 C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| bis(2-Chloroethyl)ether | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| bis (2-Chlorcethoxy) methane | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| bis(2-Ethylhexyl)phthalate | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2,2'-oxybis(1-Chloropropane) | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| 4-Eromophenyl phenyl ether | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| 4-Chloroaniline | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jTw | SW | 8270C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | sw | 8270 C |

# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

Kevin Wildman

HULL \& ASSOC. (Dublin) 10/12/2001<br>6130 Wilcox Rd

Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result |  |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 706772

SBIOO2:HMW3 OD: G091401:505

| -nrysene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | Sw | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | <10 | jrw | SW | 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | <10 | jrw | sw | 82700 |
| 1,4-Dichlorobenzene | $<10$ | ug/L | - 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/20/2001 | 1272 | 2701 | $<50$ | jrw | SW | 8270 C |
| Diethyl phthalate | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | sw | 8270 C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Fluoranthene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Fluorene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jxw | SW | 8270 C |
| Hexachlorobenzene | $<20$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | $8270 C^{\text {c }}$ |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | $8270 C^{\text {c }}$ |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/20/2001 | 1272 | 2701 | $<20$ | jrw | SW | 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 82700 |
| Indeno(1, 2,3-cd) pyrene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Isophorone | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Naphthalene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 82700 |
| Nitrobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 82700 |
| Phenanthrene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Pyrene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | Sw | 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |

## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002

|  |  | Rebult | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Nunber | Run Batch Number | Reporting <br> Limit | Analyst Initials | Method R | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { SAMPLE } \\ & 706772 \end{aligned}$ | NO. | $\begin{aligned} & \text { SAMPLE DI } \\ & \text { SBIO02:HM } \end{aligned}$ | $\begin{aligned} & \text { SCRI } \\ & \text { W3 OD } \end{aligned}$ | $\begin{aligned} & \text { PTION } \\ & : \text { G09] } \end{aligned}$ | $1: 505$ |  |  |  | DAT | $\begin{aligned} & \text { /TIME } \\ & 4 / 200 \end{aligned}$ | $\begin{gathered} \text { TAKEN } \\ 1 \quad 10: 45 \end{gathered}$ |


| Surrogate: d5-Nitrobenzene | 94 | 8 | 09/20/2001 | 1272 | 2701 |  | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorobiphenyl | 87 | \% | 09/20/2001 | 1272 | 2701 |  | jrw | SW | 8270 C |
| Surrogate: dl4-Texphenyl | 68 | 8 | 09/20/2001 | 1272 | 2701 |  | jrw | SW | 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/20/2001 | 1272 | 2701 | <50 | jIw | SW | 82700 |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 2-Chlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 82700 |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | sw | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2-Methylphenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 2-Nitrophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 82700 |
| Pentachlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Phenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jıw | SW | 8270C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jxw | SW | 8270 C |
| Surrogate: d6-Phenol | 64 | \% | 09/20/2001 | 1272 | 2701 |  | jıw | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 77 | \% | 09/20/2001 | 1272 | 2701 |  | jrw | SW | 8270 C |
| Surrogate: Tribromophenol | 72 | \% | 09/20/2001 | 1272 | 2701 |  | jrw | SW | 8270 C |
| TPH - Method 418.1 (AQ) | 0.3 | $\mathrm{mg} / \mathrm{L}$ | 09/26/2001 | 601 | 721 | <0.2 | sub |  | 418.1 |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$10 / 12 / 2001$

Job Number: 01.16930

|  | Prep Run |
| :--- | :--- |
| Date | Batch Batch Reporting Analyst |

Result Flag Units Analyzed Number Number Limit Initials Method Reference

| SAMPLE NO. $\quad$ SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 706773 | SBIO02:HMW30I:G091401:505 |

DATE/TIME TAKEN 09/14/2001 11:00


## TestAmerica，Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin，OH 43016

10／12／2001

Job Number：01．16930
Client Project ID：South Bend Indiana SBI002


SAMPLE NO．
SAMPLE DESCRIPTION
706773
SBI002：HMW30I：G091401：505

DATE／TIME TAKEN 09／14／2001 11：00

| Bromobenzene | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260日 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2－Butanone（MEK） | $<12.5$ | ug／L | 09／21／2001 | 3585 | $<12.5$ | eap | SW 8260B |
| Carbon disulfide | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Chlorobenzene | $<1.0$ | ug／L | 09／21／2001 | 3585 | ＜1．0 | eap | SW 8260B |
| Chloroethane | $<5.0$ | ug／L | 09／21／2001 | 3585 | $<5.0$ | eap | SW 8260B |
| 2－Chlorotoluene | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 4－Chlorotoluene | $<1.0$ | ug／L | 09／21／2001 | 3585 | ＜1．0 | eap | SW 8260B |
| Chloroform | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Chloromethane | $<5.0$ | ug／L | 09／21／2001 | 3585 | ＜ 5.0 | eap | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Dibromomethane | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260］ |
| Dichlorodifluoromethane | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260日 |
| 1，2－Dibromo－3－chloropropane | ＜5．0 | ug／L | 09／21／2001 | 3585 | $<5.0$ | eap | SW 8260B |
| 1，2－Dichlorobenzene | ＜1．0 | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260日 |
| 1，3－Dichlorobenzene | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1，4－Dichlorobenzene | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1，1－Dichloroethane | 1.3 | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1．1－Dichloroethene | $<1.0$ | ug／L | 09／21／2001 | 3585 | ＜1．0 | eap | SW 8260B |
| cis－1，2－Dichloroethene | 1.4 | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| trans－1，2－Dichloroethene | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1．2－Dichloropropane | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260b |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260E |
| 1，1－Dichloropropene | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |

# TestAmerica，Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin，OH 43016

10／12／2001

Job Number：01．16930
Client Project ID：South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |


| SAMPLE NO．SAMPLE DESCRIPTION | DATE／TIME TAKEN |  |
| :--- | :--- | :--- |
| 706773 | SBI002：HMW30I：G091401：505 | $09 / 14 / 2001$ 11：00 |


| －s－1，3－Dichloropropene | $<1.0$ | ug／L | 09／21／2001 | 3585 | ＜1．0 | eap | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans－1，3－Dichloropropene | $<1.0$ | ug／L | 09／21／2001 | 3585 | ＜1．0 | eap | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug／L | 09／21／2001． | 3585 | $<1.0$ | eap | SW | 8260日 |
| Hexachlorobutadiene | ＜5．0 | ug／L | 09／21／2001 | 3585 | $<5.0$ | eap | SW | 8260B |
| n －Hexane | 44.8 | ug／L | 09／21／2001 | 3585 | ＜ 5.0 | eap | SW | 82608 |
| 2－Hexanone | $<12.5$ | ug／L | 09／21／2001 | 3585 | $<12.5$ | eap | SW | 8260 B |
| Isopropylbenzene（Cumene） | 1.0 | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW | 82608 |
| p－Isopropyltoluene | 3.2 | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| Bromomethane | ＜5．0 | ug／L | 09／21／2001 | 3585 | $<5.0$ | eap | SW | 8260日 |
| Methylene Chloride | $<5.0$ | $\underline{u g / L}$ | 09／21／2001 | 3585 | ＜5．0 | eap | SW | 8260B |
| Methyl t－butyl ether（MTBE） | ＜5．0 | ug／L | 09／21／2001 | 3585 | ＜5．0 | eap | Sw | 82608 |
| 4－Methyl－2－pentanone（MIBK） | $<12.5$ | ug／L | 09／21／2001 | 3585 | $<12.5$ | eap | SW | 8260B |
| n－Propylbenzene | 3.8 | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| Styrene | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW | 82608 |
| Naphthalene | $<5.0$ | ug／L | 09／21／2001 | 3585 | $<5.0$ | eap | SW | 8260B |
| 1，1，1，2－Tetrachloroethane | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| 1，1，2，2－Tetrachloroethane | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| Tetrachloroethene | $<1.0$ | ug／L | 09／21／2001 | 3585 | ＜1．0 | eap | SW | 8260B |
| Toluene | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| 1，2，4－Trichlorobenzene | $<5.0$ | ug／L | 09／21／2001 | 3585 | $<5.0$ | eap | SW | 8260B |
| 1，1，1－Trichloroethane | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW | 82608 |
| 1，1，2－Trichloroethane | ＜1．0 | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW | 8260日 |
| Trichloroethene | 1.2 | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | Sw | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW | 8260日 |
| 1，2，3－Trichloropropane | $<5.0$ | ug／L | 09／21／2001 | 3585 | $<5.0$ | eap | SW | 82608 |
| 1，2，4－Trimethylbenzene | 2.6 | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW | 82608 |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting | Analyst |

SAMPLE NO. 706773

SAMPLE DESCRIPTION
SBIO02:HMW30I: G091401:505

DATE/TIME TAKEN 09/14/2001 11:00


# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002


DATE/TIME TAKEN 09/14/2001 11:00

| .rysene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzo (a, h) anthracene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 1,3-Dichlorobenzene | $<10$ | $\underline{u g / L}$ | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/20/2001 | 1272 | 2701 | $<50$ | jrw | SW | 8270 C |
| Diethyl phthalate | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $\leqslant 10$ | jrw | SW | 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | <10 | jrw | SW | 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 2,5-Dinitrotoluene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Fluoranthene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Fluorene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 82700 |
| Hexachlorobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Hexachloro-1, 3-butadiene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 82700 |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/20/2001 | 1272 | 2701 | <20 | jrw | SW | 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Indeno (1,2,3-cd) pyrene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Isophorone | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Naphthalene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Nitrobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Phenanthrene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Pyrene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | <10 | jrw | SW | 8270C |

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# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 706773

SAMPLE DESCRIPTION SBIO02:HMW30I:G091401:505

| Surrogate: d5-Nitrobenzene | 93 | \% | 09/20/2001 | 1272 | 2701 |  | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorobiphenyl | 88 | \% | 09/20/2001 | 1272 | 2701 |  | jrw | SW | 8270 C |
| Surrogate: d14-Terphenyl | 66 | \% | 09/20/2001 | 1272 | 2701 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/20/2001 | 1272 | 2701 | $<50$ | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 2-Chlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jxw | SW | B270C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 2-Methylphenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | $8270{ }^{\text {c }}$ |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 82700 |
| 2-Nitrophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Pentachlorophenol | $<10$ | ug/L | 09/20/2002 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| Phenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/20/2001 | 1272 | 2701 | $<10$ | jrw | SW | 8270 C |
| Surrogate: d6-Phenol | 79 | \% | 09/20/2001 | 1272 | 2701 |  | jrw | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 80 | 8 | 09/20/2001 | 1272 | 2701 |  | jrw | SW | 8270C |
| Surrogate: Tribromophenol | 89 | \% | 09/20/2001 | 1272 | 2701 |  | jrw | SW | 8270C |
| TPH - Method 418.1 (AQ) | 0.4 | mg/L | 09/26/2001 | 601 | 721 | $<0.2$ | bub |  | 418.1 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | SCRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 706774 |  | SBIO02: HM | N32I | G091 | 1:505 |  |  |  | 09/ | 4/2001 | 12:00 |



# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002

|  |  | Prep Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batch Reporting Analyst |  |  |  |
| Analyzed | Number Number Limit | Initials Method Reference |  |  |  |

SAMPLE DESCRIPTION
SBIO02:HMW32I:G091401:505

DATE/TIME TAKEN
09/14/2001 12:00

| Bromobenzene | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/21/2001 | 3589 | $<12.5$ | eap | SW | 82608 |
| Carbon disulfide | $<1.0$ | ug/L | 09/21/2001 | 3589 | <1.0 | eap | SW | 82601 |
| Carbon tetrachloride | <1.0 | ug/L | 09/21/2001 | 3589 | <1.0 | eap | SW | 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| Chloroethane | $<5.0$ | ug/L | 09/21/2001 | 3589 | $<5.0$ | eap | SW | 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 82608 |
| 4-Chlorotoluene | $<1.0$ | $u g / L$ | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| Chloroform | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/21/2001 | 3589 | $<5.0$ | eap | SW | 82608 |
| Dibromochloromethane | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 82608 |
| Dichiorodifluoromethane | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 82508 |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/21/2001 | 3589 | <5.0 | eap | SW | 82608 |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 1,3-Dichlorobenzene | <1.0 | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | Sw | 82608 |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 82608 |
| cis-1.2-Dichloroethene | 7.0 | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260 B |
| trans-1,2-Dichloroethene | 9.1 | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 82608 |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/21/2001 | 3589 | <1.0 | eap | SW | 82608 |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 82608 |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 82608 |

# TestAmerica, Incorporated 

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# ANALYTICAL REPORT 

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |

SAMPLE NO. 706774

SAMPLE DESCRIPTION
SBI002: HMW32I: G091401:505

| -is-1,3-Dichloropropene | <1.0 | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | sw | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/21/2001 | 3589 | <1.0 | eap | Sw | 8260日 |
| Ethylbenzene | <1.0 | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/21/2001 | 3589 | < 5.0 | eap | SW | 8260B |
| $n$-Hexane | 114 | ug/L | 09/21/2001 | 3589 | $<5.0$ | eap | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/21/2001 | 3589 | $<12.5$ | eap | SW | 8260B |
| Isopropylbenzene (Cumene) | <1.0 | ug/L | 09/21/2001 | 3589 | <1.0 | eap | SW | 8260B |
| p-Isopropyltoluene | 2.3 | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| Bromomethane | <5.0 | ug/L | 09/21/2001 | 3589 | $<5.0$ | eap | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/21/2001 | 3589 | $<5.0$ | eap | SW | 8260 B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/21/2001 | 3589 | < 5.0 | eap | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/21/2001 | 3589 | $<12.5$ | eap | SW | 82608 |
| n -Propylbenzene | 1.9 | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 82608 |
| Styrene | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260 B |
| Naphthalene | $<5.0$ | ug/L | 09/21/2001 | 3589 | $<5.0$ | eap | SW | 8260 B |
| 1,1,1,2-Tetrachloroethane | <1.0 | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| Tetrachloroethene | 363 | ug/L | 09/21/2001 | 3585 | $<10$ | eap | SW | 82608 |
| Toluene | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260日 |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/21/2001 | 3589 | < 5.0 | eap | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260 B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 82608 |
| Trichloroethene | 98.8 | ug/L | 09/21/2001 | 3585 | $<10$ | eap | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/21/2001 | 3589 | <5.0 | eap | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/21/2001 | 3589 | $<1.0$ | eap | SW | 8260B |

## TestAmerica, Incorporated

ANALYTICAL REPORT


Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002
10/12/2001

| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/21/2001 |  | 3589 | $<1.0$ | eap | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Acetate | <5.0 | ug/L | 09/21/2001 |  | 3589 | $<5.0$ | eap | SW | 82608 |
| Vinyl Chloride | $<1.0$ | ug/L | 09/21/2001 |  | 3589 | $<1.0$ | eap | SW | 82608 |
| xylenes | $<1.0$ | ug/L | 09/21/2001 |  | 3589 | $<1.0$ | eap | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 94 | \% | 09/21/2001 |  | 3589 |  | eap | SW | 8260b |
| Dibromofluoromethane (surr) | 96 | \% | 09/21/2001 |  | 3589 |  | eap | SW | 8260B |
| d8-Toluene (surr) | 100 | \% | 09/21/2001 |  | 3589 |  | eap | SW | 8260B |
| Bromofluorobenzene (surr) | 105 | 8 | 09/21/2001 |  | 3589 |  | eap | SW | 8260B |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| Acenaphthylene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| Anthracene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| Benzo(b) fluoranthene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| Benzo(k) fluoranthene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | Sw | 8270C |
| Benzo (a) pyrene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| Benzyl alcohol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| bis (2-Chloroethyl)ether | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | <10 | jxw | SW | $8270{ }^{\text {c }}$ |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |

# TestAmerica, Incorporated 

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## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)
6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBIO02

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |
| Analyed | Number | Number Limit | Initials Method Reference |  |


| SAMPLE NO. | SAMPLE DESCRIPTION | DATE/TIME TAKEN |
| :--- | :--- | :--- |
| 706774 | SBIOO2:HMW32I:G091401:505 | $09 / 14 / 2001$ 12:00 |


| chrysene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW 8270C |
| 1,4-Dichlorobenzene | $<10$ | $\underline{u g / L}$ | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/20/2001 | 1273 | 2701 | $<50$ | jrw | SW 8270 C |
| Diethyl phthalate | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jxw | SW 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW 8270C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW 8270C |
| Fluoranthene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW 8270C |
| Fluorene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW 8270C |
| Hexachlorobenzene. | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | <10 | jrw | Sw 8270C |
| Hexachloro-1, 3-butadiene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/20/2001 | 1273 | 2701 | $<20$ | jrw | SW 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW 8270C |
| Indeno (1,2,3-cd) pyrene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW 8270 C |
| Isophorone | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW 8270 C |
| Naphthalene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW 8270 C |
| Nitrobenzene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW 8270C |
| N -Nitrosodi-n-propylamine | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW 8270C |
| Phenanthrene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | Sw 8270C |
| Pyrene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jヶw | Sw 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | <10 | jrw | SW 8270C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION
706774 SBI002:HMW32I:G091401:505
DATE/TIME TAKEN
09/14/2001 12:00

| Surrogate: d5-Nitrobenzene | 89 | \% | 09/20/2001 | 1273 | 2701 |  | jxw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorobiphenyl | 88 | \% | 09/20/2001 | 1273 | 2701 |  | jrw | SW | 8270C |
| Surrogate: di4-Terphenyl | 69 | $\%$ | 09/20/2001 | 1273 | 2701 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | <50 | ug/L | 09/20/2001 | 1273 | 2701 | $<50$ | jrw | SW | 82700 |
| 4-Chloro-3-methylphenol | <10 | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2-Chlorophenol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| 2،4-Dimethylphenol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | $u g / L$ | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2-Methylphenol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | Sw | 8270 C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2-Nitrophenol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| Pentachlorophenol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 82700 |
| Phenol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | juw | SW | 8270 C |
| Surrogate: d6-Phenol | 80 | 8 | 09/20/2001 | 1273 | 2701 |  | jrw | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 78 | 8 | 09/20/2001 | 1273 | 2701 |  | jrw | SW | 8270C |
| Surrogate: Tribromophenol | 93 | 8 | 09/20/2001 | 1273 | 2701 |  | jrw | SW | 8270 C |
| TPH - Method 418.1 (AQ) | 0.7 | mg/L | 09/26/2001 | 601 | 721 | <0.2 | sub | EPA | 418.1 |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002


SAMPLE DESCRIPTION
SBI 002:HMW28D: G091401:505

DATE/TIME TAKEN
09/14/2001 12:15


# TestAmerica, Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 706775 | SBIOO2:HMW28D:G091401:505 | $09 / 14 / 200112: 15$ |


| Bromobenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | <1.0 | eap | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/21/2001 | 3585 | $<12.5$ | eap | SW | 82608 |
| Carbon disulfide | $<1.0$ | ug/L | 09/21/2001 | 3585 | <1.0 | eap | SW | 82608 |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/21/2001 | 3585 | <1.0 | eap | SW | 82608 |
| Chlorobenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260] |
| Chloroethane | < 5.0 | ug/L | 09/21/2001 | 3585 | $<5.0$ | eap | SW | 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/s | 09/21/2001 | 3585 | <1.0 | eap | SW | 82608 |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 82608 |
| Chloroform | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/21/2001 | 3585 | < 5.0 | eap | SW | 82608 |
| Dibromochloromethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| Dibromomethane | $<1.0$ | $\mathrm{ug} / \mathrm{L}$ | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | <1.0 | eap | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/21/2001 | 3585 | $<5.0$ | eap | SW | 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 82608 |
| 1,3-Dichlorobenzene | $<1.0$ | $u g / L$ | 09/21/2001 | 3585 | $<1.0$ | eap | Sw | 82608 |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | Sw | 82608 |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 82608 |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/21/2001 | 3585 | <1.0 | eap | SW | 82608 |
| 1,1-Dichloroethene | <1.0 | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| Cis-1,2-Dichloroethene | 2.0 | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/21/2001 | 3585 | <1.0 | eap | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260 B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | sw | 82608 |
| 1,1-Dichloropropene | <1.0 | ug/L | 09/21/2001 | 3585 | $<1.0$ | eap | SW | 8260B |

## TestAmerica，Incorporated

## ANALYTICAL REPORT

## Kevin Wildman

HULL \＆ASSOC．（Dublin）<br>$10 / 12 / 2001$

Dublin，OH 43016

Job Number： 01.16930

## Client Project ID：South Bend Indiana SBI002



| SAMPLE NO．SAMPLE DESCRIPTION | DATE／TIME TAKEN |  |
| :--- | :--- | :--- |
| 706775 | SBIO02：HMW28D：G091401：505 | $09 / 14 / 2001$ 12：15 |


| ．is－1．3－Dichloropropene | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260 B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans－1．3－Dichloropropene | $<1.0$ | ug／L | 09／21／2001 | 3585 | ＜1．0 | eap | SW 8260B |
| Ethylbenzene | $<1.0$ | ug／L | 09／21／2001 | 3585 | ＜1．0 | eap | SW 8260B |
| Hexachlorobutadiene | $<5.0$ | ug／L | 09／21／2001 | 3585 | $<5.0$ | eap | SW 8260B |
| $n$－Hexane | $<5.0$ | ug／L | 09／21／2001 | 3585 | ＜5．0 | eap | SW 8260B |
| 2－Hexanone | $<12.5$ | ug／L | 09／21／2001 | 3585 | $<12.5$ | eap | SW 8260B |
| Ifopropylbenzene（Cumene） | $<1.0$ | ug／L | 09／21／2001 | 3585 | ＜1．0 | eap | SW 8260日 |
| p－Isopropyltoluene | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Bromomethane | $<5.0$ | ug／L | 09／21／2001 | 3585 | $<5.0$ | eap | Sw 8260B |
| Methylene Chloride | $<5.0$ | ug／L | 09／21／2001 | 3585 | ＜5．0 | eap | SW 8260日 |
| Methyl t－butyl ether（MTBE） | $<5.0$ | ug／L | 09／21／2001 | 3585 | $<5.0$ | eap | SW 8260B |
| 4－Methyl－2－pentanone（MIBK） | $<12.5$ | ug／L | 09／21／2001 | 3585 | $<12.5$ | eap | SW 8260B |
| n－Propylbenzene | $<1.0$ | ug／L | 09／21／2001 | 3585 | ＜1．0 | eap | SW 8260B |
| Styrene | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Naphthalene | $<5.0$ | ug／L | 09／21／2001 | 3585 | $<5.0$ | eap | SW 8260B |
| 1，1，1，2－Tetrachloroethane | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1，1，2，2－Tetrachloroethane | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260 B |
| Tetrachloroethene | 1.4 | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260 B |
| Toluene | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260 B |
| 1，2，4－Trichlorobenzene | ＜5．0 | ug／L | 09／21／2001 | 3585 | $<5.0$ | eap | SW 8260B |
| 1，1，1－Trichloroethane | 1.8 | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| 1，1，2－Trichloroethane | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Trichloroethene | 51.4 | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |
| Trichlorofluoromethane | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260 B |
| 1，2，3－Trichloropropane | $<5.0$ | ug／L | 09／21／2001 | 3585 | $<5.0$ | eap | SW 8260日 |
| 1，2，4－Trimethylbenzene | $<1.0$ | ug／L | 09／21／2001 | 3585 | $<1.0$ | eap | SW 8260B |

## TestAmerica, Incorporated

# ANALYTICAL REPORT 

Kevin Wildman HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBIO02

|  |  | Prep | Run |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch Batch Reporting Analyst |
| Number Number Limit | Initials Method Reference |  |  |


| SAMPLE NO. | SAMPLE DESCRIPTION |
| :--- | :--- |
| 706775 | SBI002:HMW28D:G091401:505 |

DATE/TIME TAKEN 09/14/2001 12:15

| 1,3,5-Trimethyibenzene | $<1.0$ | ug/L | 09/21/2001 |  | 3585 | $<1.0$ | eap | SW | 8260 B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Acetate | < 5.0 | ug/L | 09/21/2001 |  | 3585 | <5.0 | eap | SW | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/21/2001 |  | 3585 | $<1.0$ | eap | SW | 82608 |
| Xylenes | <1.0 | ug/L | 09/21/2001 |  | 3585 | <1.0 | eap | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 93 | \% | 09/21/2001 |  | 3585 |  | eap | SW | 8260B |
| Dibromofluoromethane (surr) | 98 | \% | 09/21/2001 |  | 3585 |  | eap | SW | 8260 B |
| d8-Toluene (surr) | 99 | 4 | 09/21/2001 |  | 3585 |  | eap | Sw | B260E |
| Bromofluorobenzene (surr) | 105 | 8 | 09/21/2001 |  | 3585 |  | eap | SW | 82608 |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 82700 |
| Acenaphthylene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| Anthracene | $<10$ | .ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jıw | SW | 8270 C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jxw | SW | 8270C |
| Benzo(k) fluoranthene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SN | 8270 C |
| Benzo(a) pyrene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| Benzyl alcohol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| bis (2-Chloroethyl)ether | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| 4-Chloroaniline | <10 | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | Jrw | SW | 8270C |

# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

Kevin Wildman HULL \& ASSOC. (Dublin)

10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01. 16930
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 706775 SBI002:HMW28D:G091401:505

| -hrysene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | juw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | <10 | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 82700 |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/20/2001 | 1273 | 2701 | $<50$ | jrw | SW | 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 82700 |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | $8270{ }^{\text {c }}$ |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| Di-n-octylphthalate | $<1.0$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| Fluoranthene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| Fluorene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/20/2001 | 1273 | 2701 | $<20$ | jrw | SW | 8270C |
| Hexachioroethane | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| Indeno (1, 2,3-cd) pyrene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| Isophorone | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| Naphthalene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| Nitrobenzene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| Phenanthrene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| Pyrene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 82700 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.16930
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 706775

SAMPIE DESCRIPTION SBI002:HMW28D:G091401:505

10/12/2001

| Surrogate: d5-Nitrobenzene | 94 | \% | 09/20/2001 | 1273 | 2701 |  | jrw |  | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorobiphenyl | 90 | \% | 09/20/2001 | 1273 | 2701 |  | jrw | SW | 8270 C |
| Surrogate: d14-Terphenyl | 70 | \% | 09/20/2001 | 1273 | 2701 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/20/2001 | 1273 | 2701 | $<50$ | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jıw | SW | 8270C |
| 2-Chlorophenol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2.-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| 2-Methylphenol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| 2-Nitrophenol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| Pentachlorophenol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| Phenol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | Sw | 8270 C |
| 2,4,5-Trichlorophenol | <10 | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/20/2001 | 1273 | 2701 | $<10$ | jrw | SW | 8270C |
| Surrogate: d6-Phenol | 73 | \% | 09/20/2001 | 1273 | 2701 |  | jrw | SW | 8270c |
| Surrogate: 2-Fluorophenol | 80 | \% | 09/20/2001 | 1273 | 2701 |  | jrw | SW | 8270 C |
| Surrogate: Tribromophenol | 92 | 8 | 09/20/2001 | 1273 | 2701 |  | jrw | SW | 8270 C |
| TPH - Method 418.1 (AQ) | <0.2 | mg/L | 09/26/2001 | 601 | 721 | <0.2 | sub |  | 418.1 |

## QUALITY CONTROL FLAG DEFINITIONS PAGE 53 of 54

Job Number: 01.16930
(*) Indicates an out-of-control QC. The analytical data was reported based on other supporting quality control information.
(Note) Indicates to review the notes and comments section of the analytical report as there is additional information concerning this analytical result.
(MS) Indicates that the Matrix Spike (MS) was out of statistical advisory limits.
(MSD) Indicates that the Matrix Spike Duplicate (MSD) was out of statistical advisory limits.
(RPD) Indicates that the Relative Percent Difference (RPD) for the MS/MSD pair was outside of statistical advisory limits.
(SS) Indicates that the MS and MSD were out of statistical advisory limits.
(SSR) Indicates that the MS, MSD and RPD were out of statistical advisory limits.
(MSR) Indicates that the MS and RPD were out of statistical advisory limits.
(MSDR) Indicates that the MSD and RPD were out of statistical advisory limits.
(DL) Indicates that the MS and MSD were diluted out and the percent recoveries of the spikes could not be calculated.
(LS) Indicates that statistical accuracy and precision data is not available for spike concentrations which are $<1 / 4$ of the sample amount. Care should be used in interpreting this data.
(J) Indicates estimated concentration due to internal standard areas or surrogate recoveries outside of control limits. A sample matrix effect is usually indicated.
(DW) Indicates Dry Weight.
Analytical Reporting Limits
The reporting limits listed for non-aqueous samples in the analytical report section are Practical Quantitation Limits (PQLs). These PQLs are based upon a typical standard weight used for a non-aqueous sample. The reporting limit for a sample may be different from the PQL listed depending upon the actual weight of sample used, the samples moisture content and any dilutions used during the analysis.
$01.16430$


## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001
Job Number: 01.17216

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

Sample
Number
707866
707867
707868
707869
707870
707871
707872
707873
707874
707875
707876
707877
707878
707879
707880
707881
707882
707883
707884
707885

Sample Description
SBI002:HMW31D:G091701:523
SBI002:HMW31S:G091701:523
SBIO02:HMW31I:G091701:523
SBI002:HMW31I:G091701D:523
SBI002:HMW22D:G091701:523
SBI002:HMW22I:G091701:523
SBI002:MW8D: G091701:523
SBI002:MW8S:G091701:523
SBI002:MW1D:G091701:523
SBI002:MW1S:G091701:523
SBI002:HMW8D:G091701:523
SBI002:HMW8I:G091701:523
SBI002:HMW8S:G091701:523
SBI002:HMW8D:G091701D:523
SBI002:HMW7S:G091701:523
SBI002:HMW35S:G091701:523
SBI002:HMW17D:G091701:523
SBI002:MW25D:G091701:523
SBI002:MW25S:G091701:523
SBI002:FBI:W091701:523

Date Taken

09/17/2001
09/17/2001
09/17/2001
09/17/2001
09/17/2001
09/17/2001
09/17/2001
09/17/2001
09/17/2001
09/17/2001
09/17/2001
09/17/2001
09/17/2001
09/17/2001
09/17/2001
09/17/2001
09/17/2001
09/17/2001
09/17/2001
09/17/2001

Date Received

09/19/2001
09/19/2001
09/19/2001
09/19/2001
09/19/2001
09/19/2001
09/19/2001
09/19/2001
09/19/2001
09/19/2001
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09/19/2001
09/19/2001
09/19/2001
09/19/2001
09/19/2001
09/19/2001
09/19/2001
09/19/2001

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted only in its entirety.

Enclosure


## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman

| HULL \& ASSOC. (Dublin) | $10 / 12 / 2001$ |
| :--- | :--- |
| 6130 WilCOX Rd. | Job Number: 01.17216 |
| Dublin, OH 43016 |  |

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

Sample
Number
Sample Description
707886 SBI002:FB2:W091701:523
708064

Date
Taken
09/17/2001 09/19/2001
09/17/2001 09/19/2001

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted entirety.

Enclosure


# TestAmerica, Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002.

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |


| SAMPLE NO. | SAMPLE DESCRIPTION |
| :--- | :--- |
| 707866 | SBIOO2:HMW31D:G091701:523 |

DATE/TIME TAKEN
09/17/2001 11:25


## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman

HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002


| Bromobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/25/2001 | 3601 | $<12.5$ | dmg | SW 8260 B |
| Carbon disulfide | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Chloroethane | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW 8260B |
| Chloroform | $<1.0$ | us/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW 8260b |
| Dibromochloromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260b |
| Dibromomethane | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 1,2-Dibromo-3-chloropropane | <5.0 | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260b |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 1,4-Dichlorobenzene | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | ding | SW 8260B |
| 1,1-Dichloroethane | 1.3 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW 8260B |
| 1,1-Dichloroethene | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Cis-1,2-Dichloroethene | 1.6 | ug/L | 09/25/2001 | 3601 | $<1.0$ | ding | SW 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | ding | SW 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260 B |
| 1, 1-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |

## TestAmerica，Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULI \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin，OH 43016

Job Number： 01.17216
Client Project ID：South Bend Indiana SBIO02

|  |  | Prep | Run |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units Analyzed | Batch | Batch Reporting Analyst |  |
| Number | Number Limit | Initials Method Reference |  |

SAMPLE NO． 707866

SAMPLE DESCRIPTION
SBI002：HMW31D：G091701：523

DATE／TIME TAKEN 09／17／2001 11：25

| cis－1，3－Dichloropropene | ＜1．0 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans－1，3－Dichloropropene | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW | 82608 |
| Ethylbenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Hexachlorobutadiene | ＜5．0 | ug／L | 09／25／2001 | 3601 | ＜5．0 | dmg | SW | 8260B |
| n－Hexane | 78.2 | ug／L | 09／25／2001 | 3601 | ＜5．0 | dmg | SW | 8260 B |
| 2－Hexanone | $<12.5$ | ug／L | 09／25／2001 | 3601 | $<12.5$ | dmg | SW | 82608 |
| Isopropylbenzene（Cumene） | 3.6 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| p－Isopropyltoluene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromomethane | $<5.0$ | ug／L | 09／25／2001 | 3601 | ＜ 5.0 | dmg | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug／L | 09／25／2001 | 3601 | ＜5．0 | dmg | SW | 82608 |
| Methyl t－butyl ether（MTBE） | $<5.0$ | ug／L | 09／25／2001 | 3601 | ＜5．0 | dmg | SW | 8260B |
| 4－Methyl－2－pentanone（MIBK） | $<12.5$ | ug／L | 09／25／2001 | 3601 | ＜12．5 | dmg | SW | 8260日 |
| n －Propylbenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Styrene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Naphthalene | $<5.0$ | ug／L | 09／25／2001 | 3601 | ＜ 5.0 | dmg | SW | 8260b |
| 1，1，1，2－Tetrachloroethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | sw | 8260B |
| 1，1，2，2－Tetrachloroethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Tetrachloroethene | 1.0 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| Toluene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1，2，4－Trichlorobenzene | $<5.0$ | ug／L | 09／25／2001 | 3601. | ＜ 5.0 | dmg | SW | 8260B |
| 1，1，1－Trichloroethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW | 8260日 |
| 1，1，2－Trichloroethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| Trichloroethene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| Trichlorofluoromethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1，2，3－Trichloropropane | $<5.0$ | ug／L | 09／25／2001 | 3601 | ＜ 5.0 | dmg | SW | 8260日 |
| 1，2，4－Trimethylbenzene | $<1.0$ | ug／L | 05／25／2001 | 3601 | ＜1．0 | dmg | SW | 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. 707866

SAMPLE DESCRIPTION
SBI002:HMW31D:G091701:523
Prep Run

| Date | Batch | Batch Reporting Analyst |
| :--- | :--- | :--- | :--- | :--- |
| Analyzed Number Number Limit | Initials Method Reference |  |



# TestAmerica, Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

HULI \& ASSOC. (Dublin)<br>10/12/2001

6130 Wilcox Rd
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 707866 | SBIOO2:HMW31D:G091701:523 | $09 / 17 / 2001$ 11:25 |


| -nysene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | <10 | jrw | SW | 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | $8270{ }^{\text {c }}$ |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | <10 | jrw | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/24/2001 | 1276 | 2708 | $<50$ | jrw | SW | 8270 C |
| Diethyl phthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Dimethyl phthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Fluoranthene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Fluorene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Hexachlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw. | SW | 8270C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/24/2001 | 1276 | 2708 | $<20$ | jrw | SW | 8270C |
| Hexachioroethane | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Indeno (1,2,3-cd) pyrene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Isophorone | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 82700 |
| Naphthalene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Nitrobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 82700 |
| Phenanthrene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Pyrene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |

## TestAmerica, Incorporated

PAGE 8 of 96

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>10/12/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 707866 |  | SBI002: HM | N31D | G091 | 1:523 |  |  |  | 09/ | $7 / 2001$ | 1 11:25 |


| Surrogate: d5-Nitrobenzene | 103 |  | $t$ | 09/24/2001 | 1276 | 2708 |  | jıw | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorobiphenyl | 83 |  | 4 | 09/24/2001 | 1276 | 2708 |  | jrw | sw | 8270 C |
| Surrogate: di4-Terphenyl | 60 |  | \% | 09/24/2001 | 1276 | 2708 |  | jrw | SW | 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<50$ | jrw | SW | 8270C |
| 4-Chloro-3-methylphenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 2-Chlorophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | Sw | 8270 C |
| 2,4-Dichlorophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 2,4-Dimethylphenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 2-Methylphenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| meta \& para-Methylphenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 2-Nitrophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Pentachlorophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jxw | SW | 8270 C |
| Phenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 2,4,6-Trichlorophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | B270C |
| Surrogate: d6-Phenol | 63 |  | $\%$ | 09/24/2001 | 1276 | 2708 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorophenol | 59 |  | \% | 09/24/2001 | 1276 | 2708 |  | jıw | SW | 8270 C |
| Surrogate: Tribromophenol | 61 | note | \% | 09/24/2001 | 1276 | 2708 |  | jrw | SW | 8270 C |
| TPH - Method 418.1 (AQ) | 13 |  | mg/L | 09/27/2001. | 603 | 724 | <0.2 | 260 | EPA | 418.1 |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |

SAMPLE NO. SAMPLE DESCRIPTION
707867

DATE/TIME TAKEN 09/17/2001 11:40

| - SPMS TOTAL METALS | Complete |  | 09/29/2001 |  | 2572 | Complete | ekh |  | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | 0.121 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3699 | <0.0050 | ekh |  | 6020 |
| Barium, ICPMS | 1.02 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3907 | $<0.0050$ | ekh |  | 6020 |
| Cadmium, ICPMS | 0.0068 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3578 | $<0.0010$ | ekh |  | 6020 |
| Chromium, ICPMS (0.005) | 0.0553 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3978 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | 0.387 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3656 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | 0.0005 | $\mathrm{mg} / \mathrm{L}$ | 09/25/2001 | 1415 | 1361 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/27/2001 | 753 | 578 | $<0.0050$ | 1nh |  | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3913 | $<0.0005$ | ekh | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1848 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 753 |  | Complete | clm. | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1415 |  | Complete | epk | SW | 7470A |
| Prep, Base Neutral | Complete |  | 09/24/2001 | 1278 |  | Complete | rec | EPA | 625 ; SW 3510C ; SW 352 |
| Prep, Acid Extractable | Complete |  | 09/24/2001 | 1278 |  | Complete | rec | EPA | 625 ; SW 3510C ; SW 352 |
| Prep, TPH - 418.1 aq | Complete |  | 09/26/2001 | 603 |  | Complete | 260 | EPA | 418.1 |
| VOLATILLE COMPOUNDS - 8260 |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/25/2001 |  | 3601 | Complete | dmg |  |  |
| Acetone | $<20.0$ | ug/L | 09/25/2001 |  | 3601 | $<20.0$ | dmg | SW | 8260B |
| Benzene | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| n-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromochloromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg |  | 8260B |
| Bromoform | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |

## TestAmerica，Incorporated

Kevin Wildman
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6130 Wilcox Rd．
Dublin，OH 43016

10／12／2001

Job Number：01．17216
Client Project ID：South Bend Indiana SBI002

SAMPLE NO． 707867

SAMPLE DESCRIPTION
SBIO02：HMW31S：G091701：523

DATE／TIME TAKEN 09／17／2001 11：40

| Bromobenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2－Butanone（MEK） | $<12.5$ | ug／L | 09／25／2001 | 3601 | $<12.5$ | dmg | SW | 82608 |
| Carbon disulfide | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW | 8260B |
| Carbon tetrachloride | ＜1．0 | ug／L | 09／25／2001 | 3601 | $<1.0$ | ding | SW | 8260b |
| Chlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Chloroethane | $<5.0$ | ug／L | 09／25／2001 | 3601 | $<5.0$ | ding | SW | 8260b |
| 2－Chlorotoluene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| 4－Chlorotoluene | ＜1．0 | ug／L | 09／25／2001 | $3601^{\circ}$ | ＜1．0 | dmg | SW | 8260b |
| Chloroform | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Chloromethane | ＜5．0 | ug／L | 09／25／2001 | 3601 | ＜5．0 | dmg | SW | 8260日 |
| Dibromochloromethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW | 82608 |
| Dibromomethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW | 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1，2－Dibromo－3－chloropropane | ＜ 5.0 | ug／L | 09／25／2001 | 3601 | ＜5．0 | dmg | SW | 82608 |
| 1，2－Dichlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| 1，3－Dichlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1，4－Dichlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW | 8260B |
| 1，1－Dichloroethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1，1－Dichloroethene | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW | 8260B |
| cis－1，2－Dichloroethene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| trans－1，2－Dichloroethene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1，2－Dichloropropane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | Sw | 8260日 |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW | 8260B |
| 1，1－Dichloropropene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 82608 |

## TestAmerica，Incorporated

ANALYTICAL REPORT

Kevin Wildman HULL \＆ASSOC．（Dublin）

10／12／2001
6130 Wilcox Rd．
Dublin，OH 43016

Job Number：01．17216
Client Project ID：South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |

SAMPLE NO． 707867

SAMPLE DESCRIPTION
SBI002：HMW31S：G091701：523

DATE／TIME TAKEN 09／17／2001 11：40

| －is－1，3－Dichloropropene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans－1，3－Dichloropropene | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW | 82608 |
| Ethylbenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| Hexachlorobutadiene | $<5.0$ | ug／L | 09／25／2001 | 3601 | $<5.0$ | dimg | SW | 8260B |
| n－Hexane | ＜5．0 | ug／L | 09／25／2001 | 3601 | ＜ 5.0 | dmg | SW | 8260日 |
| 2－Hexanone | $<12.5$ | ug／L | 09／25／2001 | 3601 | $<12.5$ | dmg | SW | 8260B |
| Isopropylbenzene（Cumene） | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | ding | sw | 82608 |
| p－Isopropyltoluene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260日 |
| Bromomethane | $<5.0$ | ug／L | 09／25／2001 | 3601 | $<5.0$ | dmg | SW | 82608 |
| Methylene Chloride | $<5.0$ | ug／L | 09／25／2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| Methyl t－butyl ether（MTBE） | $<5.0$ | ug／L | 09／25／2001 | 3601 | ＜5．0 | dmg | SW | 8260日 |
| 4－Methyl－2－pentanone（MIBK） | $<12.5$ | ug／L | 09／25／2001 | 3601 | $<12.5$ | dmg | SW | 8260B |
| n－Propylbenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| Styrene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Naphthalene | ＜5．0 | ug／L | 09／25／2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| 1，1，1，2－Tetrachloroethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260b |
| 1，1，2，2－Tetrachloroethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | sw | 8260B |
| Tetrachloroethene | 11.8 | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW | 82608 |
| Toluene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260日 |
| 1，2，4－Trichlorobenzene | $<5.0$ | ug／L | 09／25／2001 | 3601 | $<5.0$ | dimg | SW | 8260B |
| 1，1，1－Trichloroethane． | 1.4 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1，1，2－Trichloroethane | ＜1．0 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260日 |
| Trichloroethene | 2.0 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| 1，2，3－Trichloropropane | $<5.0$ | ug／L | 09／25／2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| 1，2，4－Trimethylbenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW | 8260B |

# TestAmerica, Incorporated 

PAGE 12 of 96
ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch Reporting Analyst |  |
| Analy | Number | Number Limit | Initials Method Reference |  |

SAMPLE NO. SAMPLE DESCRIPTION 707867

SBIO 02 : HMW31S: G091701:523

DATE/TIME TAKEN 09/17/2001 11:40

| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Acetate | $<5.0$ | ug/L | 09/25/2001 |  | 3601 | $<5.0$ | dmg | SW | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260日 |
| Xylenes | <1.0 | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 100 | 울 | 09/25/2001 |  | 3601 |  | ding | SW | 82608 |
| Dibromofluoromethane (surr) | 97 | * | 09/25/2001 |  | 3601 |  | ding | SW | 8260B |
| ds-Toluene (surr) | 97 | 8 | 09/25/2001 |  | 3601 |  | ding | SW | 8260B |
| Bromofluorobenzene (surr) | 106 | \% | 09/25/2001 |  | 3601 |  | ding | SW | 82608 |
| BASE NEUIRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | <10 | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 8270 C |
| Acenaphthylene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jcs | SW | 82700 |
| Anthracene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 8270C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 8270C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jcs | SW | 82700 |
| Benzo(k)fluoranthene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | $8270{ }^{\text {c }}$ |
| Benzo(a) pyrene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jcs | SW | 8270 C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 8270 C |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | јсв | SW | 8270 C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 8270C |
| bis (2-Ethylhexyl)phthalate | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | $8270{ }^{\text {c }}$ |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | Sw | 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 82700 |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 8270 C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 707867

SBIO02:HMW31S:G091701:523

DATE/TIME TAKEN 09/17/2001 11:40

| arysene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jcs | SW | 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 8270 C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jcs | SW | 8270 C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jcs | SW | 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | <10 | jcs | Sw | 8270 C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/26/2001 | 1278 | 2704 | $<50$ | jes | Sw | 8270 C |
| Diethyl phthalate | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jcs | SW | 8270 C |
| Dimethyl phthalate | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jcs | SW | 8270 C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jcs | SW | 8270 C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | <10 | jes | SW | 8270 C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jcs | SW | 8270 C |
| Fluoranthene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 8270 C |
| Fluorene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 82700 |
| Hexachlorobenzene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jcs | SW | 8270 C |
| Hexachloro-1, 3-butadiene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jcs | SW | 827.0 C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/26/2001 | 1278 | 2704 | <20 | jcs | SW | 8270 C |
| Hexachloroethane | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 8270 C |
| Indeno (1, 2,3-cd) pyrene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 8270 C |
| Isophorone | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 8270C |
| Naphthalene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jcs | SW | 8270 C |
| Nitrobenzene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jcs | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 8270C |
| Phenanthrene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 8270 C |
| Pyrene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | Sw | 8270 C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jcs | Sw | 8270 C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
707867

| Surrogate: d5-Nitrobenzene | 99 | 7 | 09/26/2001 | 1278 | 2704 |  | jes | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorobiphenyl | 88 | 8 | 09/26/2001 | 1278 | 2704 |  | jcs | SW | 8270C |
| Surrogate: d14-Terphenyl | 58 | 8 | 09/26/2001 | 1278 | 2704 |  | jes | Sw | 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/26/2001 | 1278 | 2704 | $<50$ | jes | SW | 8270 C |
| 4-Chloro-3-methyiphenol | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jcs | SW | 8270 C |
| 2-Chlorophenol | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jcs | SW | 8270 C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jcs | SW | 8270 C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jcs | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 8270 C |
| 2-Methylphenol | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 8270C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 8270 C |
| 2-Nitrophenol | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jcs | SW | 8270 C |
| Pentachlorophenol | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 8270 C |
| Phenol | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | Sw | 8270 C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/26/2001 | 1278 | 2704 | $<10$ | jes | SW | 8270C |
| Surrogate: d6-Phenol | 69 | $\%$ | 09/26/2001 | 1278 | 2704 |  | jes | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 72 | 4 | 09/26/2001 | 1278 | 2704 |  | jes | Sw | 8270C |
| Surrogate: Tribromophenol | 54 | $\%$ | 09/26/2001 | 1278 | 2704 |  | jes | SW | 8270C |
| TPH - Method 418.1 (AQ) | $<0.2$ | $\mathrm{mg} / \mathrm{L}$ | 09/27/2001 | 603 | 724 | $<0.2$ | 260 | EPA | 418.1 |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initiala | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | SCRI | PION |  |  |  |  | DAT | /TIME | TAKEN |
| 707868 |  | SBI002: HM | W31I | : G0917 | $1: 523$ |  |  |  | 09/ | 7/2001 | 12:50 |


| -PMS TOTAL METALS | Complete |  | 09/29/2001 |  | 2572 | Complete | ekh | Sw | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3699 | $<0.0050$ | ekh | Sw | 6020 |
| Barium, ICPMS | 0.0706 | mg/L | 09/29/2001 | 1848 | 3907 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | mg/L | 09/29/2001 | 1848 | 3578 | $<0.0010$ | ekh | Sw | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3978 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | 0.0079 | mg/L | 09/29/2001 | 1848 | 3656 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/25/2001 | 1415 | 1361 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | mg/L | 09/27/2001 | 753 | 578 | $<0.0050$ | 1nh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3913 | <0.0005 | ekh | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1848 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 753 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1415 |  | Complete | epk | SW | 7470A |
| Prep, Base Neutral | Complete |  | 09/20/2001 | 1276 |  | Complete | rec | EPA | 625 ; SW 3510C ; SW 352 |
| Prep, Acid Extractable | Complete |  | 09/20/2001 | 1276 |  | Complete | rec | EPA | 625 ; SW 3510C ; SW 352 |
| Prep, TPH - 418.1 aq | Complete |  | 09/26/2001 | 603 |  | Complete | 260 | EPA | 418.1 |
| VOLATILE COMPOUNDS - 8260 |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/25/2001 |  | 3601 | Complete | dmg |  |  |
| Acetone | <20.0 | ug/L | 09/25/2001 |  | 3601 | <20.0 | dmg | SW | 8260B |
| Benzene | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| sec-Butylbenzene | 9.8 | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dimg | SW | 8260B |
| $n$-Butylbenzene | 10.3 | ug/L | 09/25/2001 |  | 3601 | <1.0 | dmg | SW | 82608 |
| Bromochloromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | <1.0 | dmg | SW | 8260B |
| Bromoform | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | <1.0 | dmg | SW | 8260B |

## ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin，OH 43016

Job Number： 01.17216
Client Project ID：South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting Limit | Analyst <br> Initials | Method Re | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO． | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | ／TIME | TAKEN |
| 707868 |  | SBI002：HM | 311 | G091 | $1: 523$ |  |  |  | 09／ | 7／2001 | 1 12：50 |


| Bromobenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2－Butanone（MEK） | $<12.5$ | $\underline{u g / L}$ | 09／25／2001 | 3601 | $<12.5$ | dmg | SW 8260B |
| Carbon disulfide | ＜1．0 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260］ |
| Carbon tetrachloride | ＜1．0 | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW 8260B |
| Chlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Chloroethane | $<5.0$ | ug／L | 09／25／2001 | 3601 | ＜5．0 | dmg | SW 8260B |
| 2－Chlorotoluene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 4－Chlorotoluene | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW 8260B |
| Chloroform | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dimg | SW 8260B |
| Chloromethane | ＜ 5.0 | ug／L | 09／25／2001 | 3601 | ＜5．0 | ding | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260日 |
| Dibromomethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8250b |
| 1，2－Dibromo－3－chloropropane | $<5.0$ | ug／L | 09／25／2001 | 3601 | $<5.0$ | dimg | SW 8260B |
| 1，2－Dichlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dimg | SW 8260B |
| 1，3－Dichlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW 8260B |
| 1，4－Dichlorobenzene | ＜1．0 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 1，1－Dichloroethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260日 |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260日 |
| 1，1－Dichloroethene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260日 |
| cis－1，2－Dichloroethene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| trans－1，2－Dichloroethene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 1，2－Dichloropropane | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW 8260B |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 2，2－Dichloropropane | ＜1．0 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 1，1－Dichloropropene | ＜1．0 | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULLL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBIO02


SAMPLE NO. 707868

SAMPLE DESCRIPTION
SBIO02:HMW31I: G091701:523

DATE/TIME TAKEN 09/17/2001 12:50

| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans-1, 3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |
| Hexachiorobutadiene | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 8260B |
| n-Hexane | 68.0 | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/25/2001 | 3601 | $<12.5$ | dmg | SW | 8260B |
| Isopropylbenzene (Cumene) | 3.2 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| p-Isopropyltoluene | 5.1 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromomethane | $<5.0$ | $\mathrm{ug} / \mathrm{L}$ | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 82608 |
| 4-Methyl-2-pentanone (MIAK) | $<12.5$ | ug/L | 09/25/2001 | 3601 | $<12.5$ | dmg | SW | 82608 |
| n -Propylbenzene | 4.1 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Tetrachloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| Toluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| Trichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | ding | SW | 82608 |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | S* | 82608 |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260日 |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>10/12/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 707868 <br> SAMPLE DESCRIPTION <br> SBI002:HMW31I: G091701:523

| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | ding | SW | 8260 B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Acetate | <5.0 | ug/L | 09/25/2001 |  | 3601 | $<5.0$ | dmg | SW | 82608 |
| Vinyl Chloride | 1.5 | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 82508 |
| Xylenes | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | <1.0 | dmg | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 94 | \% | 09/25/2001 |  | 3601 |  | dmg | SW | 8260B |
| Dibromofluoromethane (surr) | 92 | $\%$ | 09/25/2001 |  | 3601 |  | dmg | SW | 8260E |
| ds-Toluene (burr) | 97 | 8 | 09/25/2001 |  | 3601 |  | dmg | SW | 8260 B |
| Bromofluorobenzene (surr) | 99 | \% | 09/25/2001 |  | 3601 |  | dmg | SW | 8260 B |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Acenaphthylene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Anthracene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | <10 | jrw | SW | 8270C |
| Benzo(b) fluoranthene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 82700 |
| Benzo (k) fluoranthene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Benzo(a) pyrene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Benzyl alcohol | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| bis (2-Chloroethyl)ether | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| bis (2-Chloroethoxy) methane | <10 | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| bis (2-Ethylhexyl)phthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jxw | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 4-Bromophenyl phenyl ether | <10 | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | B270C |
| 4-Chloroaniline | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | sw | 8270C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |

## TestAmerica, Incorporated

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Bnalyzed | Butch | Reporting Analyst |  |
| Number | Number Limit | Initials Method Reference |  |  |  |

SAMPLE NO. SAMPLE DESCRIPTION
707868

| Chrysene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 82700 |
| 1,2-Dichlorobenzene | $<10$ | $\underline{u g / L}$ | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SN | 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/24/2001 | 1276 | 2708 | <50 | jrw | SW | 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jxw | SW | 8270 C |
| Dimethyl phthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jww | SW | 8270C |
| Fluoranthene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Fluorene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Hexachlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Hexachioro-1,3-butadiene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/24/2001 | 1276 | 2708 | $<20$ | jrw | SW | 82700 |
| Hexachloroethane | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Indeno (1,2,3-cd) pyrene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Isophorone | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Naphthaiene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | j5w | SW | 8270C |
| Nitrobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| N -Nitrosodi-n-propylamine | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Phenanthrene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Pyrene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | <10 | jrw | SW | 8270C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 707868

SAMPLE DESCRIPTION
SBIO02:HMW31I:G091701:523

| Surrogate: d5-Nitrobenzene | 82 |  | 4 | 09/24/2001 | 1276 | 2708 |  | jrw |  | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorobiphenyl | 81 |  | $\%$ | 09/24/2001 | 1276 | 2708 |  | jrw | SW | 8270 C |
| Surrogate: d14-Terphenyl | 54 |  | \% | 09/24/2001 | 1276 | 2708 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ |  | ug/L | 09/24/2001 | 1276 | 2708 | < 50 | jrw | SW | 8270 C |
| 4.-Chloro-3-methylphenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 2-Chlorophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 2,4-Dichlorophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 2,4-Dimethylphenol | <10 |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jıw | SW | 8270C |
| 2-Methylphenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| meta \& para-Methylphenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 2-Nitrophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Pentachlorophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Phenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 2,4,6-Trichlorophenol | <10 |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Surrogate: d6-Phenol | 70 |  | 8 | 09/24/2001 | 1276 | 2708 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorophenol | 72 |  | \% | 09/24/2001 | 1276 | 2708 |  | jrw | SW | 8270C |
| Surrogate: Tribromophenol | 82 | note | \% | 09/24/2001 | 1276 | 2708 |  | jrw |  | 8270C |
| TPH - Method 418.1 (AQ) | 1.4 |  | mg/L | 09/27/2001 | 603 | 724 | <2 | 260 |  | 418.1 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 707869

SAMPLE DESCRIPTION SBI002:HMW31I:G091701D:523

DATE/TIME TAKEN 09/17/2001 12:50


# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002


| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/25/2001 | 3601 | $<12.5$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carbon disulfide | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Carbon tetrachloride | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | ding | SW | 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| Chloroethane | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 82608 |
| 2-Chlorotoluene | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Chloroform | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260 B |
| Chloromethane | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | . SW | 8260 B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260 B |
| Dibromomethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 82608 |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | Sw | 82608 |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 82608 |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | ding | SW | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | Sw | 82608 |
| trans-1,2-Dichloroethene | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloropropane | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | Sw | 8260B |
| Cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |

# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>10/12/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Eatch | Batch | Reporting Analyst |  |
| Number | Number | Limit | Initials Method Reference |  |  |

```
SAMPLE NO. SAMPLE DESCRIPTION 707869 SBI002:HMW31I:G091701D:523
```

| crans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260 B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 8260B |
| $n$-Hexane | 83.6 | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/25/2001 | 3601 | <12.5 | dmg | SW | 8260B |
| Isopropylbenzene (Cumene) | 3.0 | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 82608 |
| p-Isopropyltoluene | 5.2 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260 B |
| Bromomethane | <5.0 | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260 B |
| Methylene Chloride | <5.0 | ug/L | 09/25/2001 | 3601 | < 5.0 | dmg | SW | 8260日 |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | amg | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/25/2001 | 3601 | $<12.5$ | dmg | SW | 8260日 |
| n-Propylbenzene | 4.0 | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 82608 |
| Styrene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2,2-Tetrachloroethane | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Tetrachloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| Toluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260 B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260 B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260 B |
| Trichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3602 | $<1.0$ | dmg | SW | 8260B |
| 1,3,5-Trimethylbenzene | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |

## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | SCRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 707869 |  | SBI002:HM | N31I | G09 | 1D: 52 |  |  |  | 09/ | 7/2001 | 12:50 |


| Vinyl Acetate | $<5.0$ | ug/L | 09/25/2001 |  | 3601 | $<5.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Chloride | 1.3 | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 82608 |
| Xylenes | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | <1.0 | dimg | Sw | 8260B |
| d4-1,2-Dichloroethane (surr) | 88 | \% | 09/25/2001 |  | 3601 |  | dmg | SW | 8260B |
| Dibromofluoromethane (surr) | 92 | \% | 09/25/2001 |  | 3601 |  | dmg | SW | 8260B |
| ds-Toluene (surr) | 98 | 8 | 09/25/2001 |  | 3601 |  | ding | SW | 82608 |
| Bromofluorobenzene (surr) | 94 | \% | 09/25/2001 |  | 3601 |  | dmg | SW | 8260B |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Acenaphthylene | $<10$ | . ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Anthracene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Benzo (k) fluoranthene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Benzo (a) pyrene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Benzyl alcohol | $<10$ | ug/L | .09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| bis(2-Chloroethyl)ether | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | Sw | 8270 C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 2,2'-oxybie (1-Chloropropane) | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 82700 |
| 4-Chloroaniline | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Chrysene | <10 | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | $8270{ }^{\text {c }}$ |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>10/12/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number Limit | Initials Method Reference |  |  |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 707869 | SBIOO2:HMW31I:G091701D:523 | $09 / 17 / 2001$ 12:50 |

1

| -rbenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzofuran | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | <10 | jrw | SW | 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<50$ | $\underline{u g / L}$ | 09/24/2001 | 1276 | 2708 | $<50$ | jrw | SW | 8270 C |
| Diethyl phthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Dimethyl phthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Fluoranthene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Fluorene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | Sw | 8270 C |
| Hexachlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Hexachloro-1, 3-butadiene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/24/2001 | 1276 | 2708 | $<20$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Hexachloroethane | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Indeno (1, 2, 3-cd) pyrene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jıw | SW | 8270 C |
| Isophorone | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 82700 |
| Naphthalene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Nitrobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | <10 | jrw | SW | 8270 C |
| Phenanthrene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Pyrene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 77 | \% | 09/24/2001 | 1276 | 2708 |  | jrw | SW | 8270 C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$10 / 12 / 2001$

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002


DATE/TIME TAKEN 09/17/2001 12:50

| Surrogate: 2-Fluorobiphenyl | 76 |  | 8 | 09/24/2001 | 1276 | 2708 |  | jrw | Sw | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: dl4-Terphenyl | 45 |  | $t$ | 09/24/2001 | 1276 | 2708 |  | jrw | SW | 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |  |
| Benzoic acid | <50 |  | ug/L | 09/24/2001 | 1276 | 2708 | $<50$ | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | Sw | 8270C |
| 2-Chlorophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 2,4-Dichlorophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 2,4-Dimethylphenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ |  | $\underline{u g / L}$ | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 2-Methylphenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| meta \& para-Methylphenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 2-Nitrophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | $8270{ }^{\circ}$ |
| Pentachlorophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Phenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jxw | SW | 8270C |
| 2,4,5-Trichlorophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Surrogate: d6-Phenol | 36 |  | $\%$ | 09/24/2001 | 1276 | 2708 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorophenol | 40 |  | \% | 09/24/2001 | 1276 | 2708 |  | jrw | SW | 8270 C |
| Surrogate: Tribromophenol | 49 | note | \% | 09/24/2001 | 1276 | 2708 |  | jrw | SW | 8270C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

## SAMPLE NO. SAMPLE DESCRIPTION 707870 <br> SBIOO2:HMW22D:G091701:523

DATE/TIME TAKEN 09/17/2001 14:30

| -PMS TOTAL METALS | Complete |  | 09/29/2001 |  | 2572 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | mg/L | 09/29/2001 | 1848 | 3699 | $<0.0050$ | ekh | SW | 6020 |
| Barium, ICPMS | 0.0763 | mg/L | 09/29/2001 | 1848 | 3907 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | mg/L | 09/29/2001 | 1848 | 3578 | $<0.0010$ | ekh | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3978 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | 0.0030 | mg/L | 09/29/2001 | 1848 | 3656 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/25/2001 | 1415 | 1361 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | mg/L | 09/28/2001 | 753 | 579 | $<0.0050$ | Inh | SW | 7740 |
| Silver, ICPMS | <0.0005 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3913 | $<0.0005$ | ekh | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1848 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 753 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1415 |  | Complete | epk | sw | 7470A |
| VOLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/25/2001 |  | 3601 | Complete | dmg |  |  |
| Acetone | <20.0 | ug/L | 09/25/2001 |  | 3601 | $<20.0$ | dmg | SW | 8260B |
| Benzene | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260日 |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | 81.0 | dmg | SW | 8260 B |
| n-Butylbenzene | <1.0 | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromochloromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | <1.0 | dmg | SW | 8260B |
| Bromoform | <1.0 | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromobenzene | <1.0 | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | ding | SW | 8260B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/25/2001 |  | 3601 | $<12.5$ | dmg | SW | 8260B |
| Carbon disulfide | <1.0 | ug/L | 09/25/2001 |  | 3601 | <1.0 | dmg | SW | 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17216

## Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |

SAMPLE DESCRIPTION
SBI002:HMW22D:G091701:523

DATE/TIME TAKEN 09/17/2001 14:30

| Carbon tetrachloride | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| Chloroethane | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | Sw | 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Chloroform | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |
| Chloromethane | < 5.0 | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 82608 |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | Sw | 82608 |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 82608 |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dimg | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 2,2-Dichloropropane | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260 B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Ethylbenzene | <1.0 | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |

# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

## Kevin Wildman

HULL \& ASSOC. (Dublin)
10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216

## Client Project ID: South Bend Indiana SBIO02

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 707870 | SBIOO2:HMW22D:G091701:523 |

DATE/TIME TAKEN 09/17/2001 14:30

| ..exachlorobutadiene | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $n$-Hexane | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/25/2001 | 3601 | $<12.5$ | dmg | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SH | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/25/2001 | 3601 | $<12.5$ | dimg | SW | 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SH | 82608 |
| Styrene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dimg | SW | 8260 B |
| Naphthalene | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 8260 B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/r | 09/25/2001 | 3601 | $<1.0$ | ding | SW | 8260 B |
| 1,1,2,2-Tetrachloroethane | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Tetrachloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260 B |
| Toluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 82608 |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | Sh | 8260b |
| 1,1,2-Trichloroethane | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260日 |
| Trichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260 B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260b |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260b |
| Vinyl Acetate | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | Sh | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 707870

SBIOO2:HMW22D:G091701:523

| Xylenes | $<1.0$ | ug/L | $09 / 25 / 2001$ | 3601 |
| :--- | :--- | :--- | :--- | :--- |
| d4-1,2-Dichloroethane (surr) | 94 | $\%$ | $09 / 25 / 2001$ | 3601 |
| Dibromofluoromethane (surr) | 96 | $\%$ | $09 / 25 / 2001$ | 3601 |
| d8-Toluene (surr) | 97 | $\%$ | $09 / 25 / 2001$ | 3601 |
| Bromofluorobenzene (surr) | 98 | $\%$ | $09 / 25 / 2001$ | 3601 |

## SAMPLE NO. 707871

SAMPLE DESCRIPTION
SBIOO2:HMW22I:G091701:523

10/12/2001

Limit Initials Initials Method Reference

DATE/TIME TAKEN 09/17/2001 14:30

| dmg | SW 8260B |
| :--- | :--- |
| dmg | SN 8260B |
| dmg | SW 8260B |
| dmg | SW 8260B |
| dmg | SW 8260B |

DATE/TIME TAKEN 09/17/2001 14:20

| ICPMS TOTAL METALS | Complete |  | 09/29/2001 |  | 2572 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | 0.0077 | mg/L | 09/29/2001 | 1848 | 3699 | <0.0050 | ekh | SW | 6020 |
| Barium, ICPMS | 0.0618 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3907 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | mg/L | 09/29/2001 | 1848 | 3578 | $<0.0010$ | ekh | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | mg/L | 09/29/2001 | 1848 | 3978 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | 0.0058 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3656 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/25/2001 | 1415 | 1361 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 753 | 579 | $<0.0050$ | lnh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3913 | $<0.0005$ | ekh | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1848 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 753 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1415 |  | Complete | epk | SW | 7470A |

## TestAmerica，Incorporated

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \＆ASSOC．（Dublin）<br>$10 / 12 / 2001$<br>6130 Wilcox Rd．<br>Dublin，OH 43016

Job Number：01．17216
Client Project ID：South Bend Indiana SBI002


| －60－SW846（AQ） | Comple |  | 09／25／2001 | 3601 | Complete | dmg |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | $<20.0$ | ug／L | 09／25／2001 | 3601 | ＜20．0 | dmg | SW | 8260日 |
| Benzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260日 |
| tert－Butylbenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | Sw | 82608 |
| sec－Butylbenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW | 8260 B |
| n－Butylbenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromochloromethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | ding | SW | 82608 |
| Bromodichloromethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromoform | ＜1．0 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromobenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW | 8260B |
| 2－Butanone（MEK） | $<12.5$ | ug／L | 09／25／2001 | 3601 | $<12.5$ | dmg | SW | 8260B |
| Carbon disulfide | ＜1．0 | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW | 8260B |
| Carbon tetrachloride | ＜1．0 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Chlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| Chloroethane | $<5.0$ | ug／L | 09／25／2001 | 3601 | ＜5．0 | dmg | SW | 8260B |
| 2－Chlorotoluene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 4－Chlorotoluene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Chlorofortn | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Chloromethane | ＜5．0 | ug／L | 09／25／2001 | 3601 | ＜5．0 | dimg | SW | 8260B |
| Dibromochloromethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| Dibromomethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | sw | 8260 B |
| Dichlorodifluoromethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1，2－Dibromo－3－chloropropane | $<5.0$ | ug／L | 09／25／2001 | 3601 | ＜5．0 | ding | SW | 8260B |
| 1，2－Dichlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1，3－Dichlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dimg | SW | 8260日 |
| 1，4－Dichlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | sw | 82608 |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting Limit | Analyst Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPIE DE | CRI | TIO |  |  |  |  | DA | /TIME | TAKEN |
| 707871 |  | SBI002: HM | 22 I | G091 | $1: 523$ |  |  |  | 09/ | 7/2001 | 1 14:20 |


| 1.1-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260 B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloroethene | <1.0 | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | $8260{ }^{\circ}$ |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 82608 |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 2,2-Dichloropropane | <1.0 | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 82608 |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dimg | SW | 82608 |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | ding | SW | 82608 |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260日 |
| Ethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260 B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| n-Hexane | $<5.0$ | ug/L | 09/25/2001 | 3601 | < 5.0 | dmg | SW | 82608 |
| 2-Hexanone | $<12.5$ | ug/L | 09/25/2001 | 3601 | $<12.5$ | dmg | SW | 8260B |
| Isopropylbenzene (Cumene) | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| p-Isopropyltoluene | <1.0 | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 82608 |
| Bromomethane | <5.0 | ug/L | 09/25/2001 | 3601 | $<5.0$ | dimg | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dimg | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/25/2001 | 3601 | $<12.5$ | dmg | SW | 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260 B |
| Styrene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | ding | SW | 8260 B |
| Naphthalene | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 82608 |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | ding | SW | 8260日 |
| 1,1,2,2-Tetrachloroethane | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002


| Atrachloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Toluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 1,2,4-Trichlorobenzene | < 5.0 | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW 8260B |
| 1,1,1-Trichloroethane | 1.2 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | ding | SW 8260B |
| Trichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dimg | SW 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260日 |
| Vinyl Acetate | <5.0 | ug/L | 09/25/2001 | 3601 | <5.0 | dimg | SW 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Xylenes | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| d4-1,2-Dichloroethane (gurr) | 95 | \% | 09/25/2001 | 3601 |  | dmg | SW 8260B |
| Dibromofluoromethane (surr) | 96 | 8 | 09/25/2001 | 3601 |  | ding | SW 8260B |
| d8-Toluene (surr) | 96 | $\%$ | 09/25/2001 | 3601 |  | dmg | SW 8260B |
| Bromofluorobenzene (surr) | 101 | \% | 09/25/2001 | 3601 |  | dmg | SW 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.17216<br>Client Project ID: South Bend Indiana SBI002

10/12/2001


SAMPLE NO. SAMPLE DESCRIPTION
707872
DATE/TIME TAKEN 09/17/2001 15:15

| ICPMS TOTAL METALS | Complete |  | 09/29/2001 |  | 2572 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | mg/L | 09/29/2001 | 1848 | 3699 | $<0.0050$ | ekh | SW | 6020 |
| Barium, ICPMS | 0.0474 | mg/L | 09/29/2001 | 1848 | 3907 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | mg/L | 09/29/2001 | 1848 | 3578 | $<0.0010$ | ekh | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | mg/L | 09/29/2001 | 1848 | 3978 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | 0.0057 | mg/L | 09/29/2001 | 1848 | 3656 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/25/2001 | 1415 | 1361 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 753 | 579 | $<0.0050$ | 1nh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3913 | $<0.0005$ | ekh | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1848 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 753 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1415 |  | Complete | epk | SW | 7470A |
| VOLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/25/2001 |  | 3601 | Complete | dmg |  |  |
| Acetone | <20.0 | ug/L | 09/25/2001 |  | 3601 | $<20.0$ | dmg | SW | 8260B |
| Benzene | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | <1:0 | dmg | SW | 8260B |
| sec-Butylbenzene | $<1.0$ | . ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| n-Butylbenzene | <1.0 | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 82608 |
| Bromochloromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260日 |
| Bromoform | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromobenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | <1.0 | ding | SW | 8260B |
| 2-Butanone (MEK) | <12.5 | ug/L | 09/25/2001 |  | 3601 | $<12.5$ | dmg | SW | 8260B |
| Carbon disulfide | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | <1.0 | dmg | SW | 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman

HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>10/12/2001

Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002


DATE/TIME TAKEN 09/17/2001 15:15

| -arbon tetrachloride | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Chloroethane | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | ding | SW | 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260日 |
| Chloroform | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| Dibromochloromethane | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260b |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<2.0$ | dmg | SW | 8260 B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dimg | SW | 82608 |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dimg | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | Sw | 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | Sw | 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260 B |

# TestAmerica, Incorporated 

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## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |

SAMPLE NO. 707872

SAMPLE DESCRIPTION
SBI002:MW8D:G091701:523

DATE/TIME TAKEN 09/17/2001 15:15

| Hexachlorobutadiene | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n -Hexane | <5.0 | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 8260 B |
| 2-Hexanone | $<12.5$ | ug/L | 09/25/2001 | 3601 | $<12.5$ | dmg | SW | 8260B |
| Isopropylbenzene (Cumene) | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260] |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | Sw | 82608 |
| Bromomethane | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 82608 |
| Methylene Chloride | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 8260 B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | ding | SW | 82608 |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/25/2001 | 3601 | $<12.5$ | dmg | SW | 8260 B |
| n-Propylbenzene | <1.0 | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | Sw | 82608 |
| Styrene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | Sw | 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260日 |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2,2-Tetrachloroethane | <1.0 | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | Sw | 8260日 |
| Tetrachloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |
| Toluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | Sw | 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| 1,1,1-Trichloroethane | <1.0 | ug/L | 09/25/2001 | 3601 | $\leqslant 1.0$ | dmg | SW | 8260 B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Trichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Vinyl Acetate | <5.0 | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | sw | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC.' (Dublin)
6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.17216
Client Project ID: South Bend Indiana SBIO02


Method Reference

SAMPIE NO. 707872

SAMPLE DESCRIPTION
SBI002:MW8D: G091701:523

DATE/TIME TAKEN 09/17/2001 15:15

| ..ylenes | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d4-1,2-Dichloroethane (surr) | 92 | \% | 09/25/2001 | 3601 |  | dmg | SW 8260B |
| Dibromofluoromethane (surr) | 96 | 8 | 09/25/2001. | 3601 |  | dmg | SW 8260B |
| d8-Toluene (surr) | 96 | \% | 09/25/2001 | 3601 |  | dmg | SW 8260B |
| Bromofluorobenzene (surr) | 100 | \% | 09/25/2001 | 3601 |  | dmg | SW 8260B |

SAMPLE DESCRIPTION
SBI002:MW8S: G091701:523

DATE/TIME TAKEN 09/17/2001 15:30

| ICPMS TOTAL METALS | Complete |  | 09/29/2001 |  | 2572 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic. ICPMS | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3699 | $<0.0050$ | ekh | SW | 6020 |
| Barium, ICPMS | 0.0297 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3907 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3578 | $<0.0010$ | ekh | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3978 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | 0.0085 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3656 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | mg/L | 09/25/2001 | 1415 | 1361 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 753 | 579 | $<0.0050$ | 1 nh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | mg/L | 09/29/2001 | 1848 | 3913 | $<0.0005$ | ekh | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1848 |  | Complete | clm | Sw | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 753 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1415 |  | Complete | epk | SW | 7470A |

## TestAmerica, Incorporated

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## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting | Analyst |  |
| R |  | Number | Number | Limit | Initials Method Reference |  |

SAMPLE NO. 707873

SAMPLE DESCRIPTION SBIO02:MW8S:G091701:523

DATE/TIME TAKEN
09/17/2001 15:30


# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd<br>Dublin, OH 43016<br>Job Number: 01.17216<br>Client Project ID: South Bend Indiana SBI002

10/12/2001


SAMPLE NO. 707873

SAMPLE DESCRIPTION
SBIO02:MW8S:G091701:523

DATE/TIME TAKEN 09/17/2001 15:30

| ,1-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | drng | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260 B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | ding | SW | 8260B |
| 1,3-Dichloropropane | <1.0 | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 82608 |
| 2.2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260日 |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260E |
| n -Hexane | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | S* | 8260 B |
| 2-Hexanone | $<12.5$ | ug/L | 09/25/2001 | 3601 | $<12.5$ | dmg | SW | 8260 B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dimg | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 82608 |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 82608 |
| 4-Methyl-2-pentanone (MIBK) | <12.5 | ug/L | 09/25/2001 | 3601 | $<12.5$ | dimg | SW | 8260B |
| n -Propylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| Styrene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | ding | SW | 8260 B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | . 3601 | $<1.0$ | dmg | SW | 82608 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) 10/12/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.17216<br>Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | Ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | PTIOI |  |  |  |  | DAT | /TIME | TAKEN |
| 707873 |  | SBIOO2:MW | S : | 09170 | : 523 |  |  |  | 09/ | $7 / 2001$ | 1 15:30 |


| Tetrachloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Toluene | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 82608 |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW 82608 |
| 1,1,1-Trichloroethane | <1.0 | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW 82608 |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260 B |
| Trichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 82608 |
| Trichlorofluoromethane | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260] |
| 1,2,3-Trichloropropane | <5.0 | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW 82608 |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260b |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Vinyl Acetate | <5.0 | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260 B |
| Xylenes | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW 8260 B |
| d4-1,2-Dichloroethane (surr) | 93 | \% | 09/25/2001 | 3601 |  | dmg | SW 8260 B |
| Dibromofluoromethane (surr) | 96 | \% | 09/25/2001 | 3601 |  | dmg | SW 82608 |
| d8-Toluene (surr) | 96 | 8 | 09/25/2001 | 3601 |  | dmg | SW 8260 B |
| Bromofluorobenzene (surr) | 101 | 8 | 09/25/2001 | 3601 |  | dmg | SW 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002


SAMPLE DESCRIPTION
SBI002:MW1D:G091701:523

DATE/TIME TAKEN 09/17/2001 15:40

| ICPMS TOTAL METALS | Complete |  | 10/01/2001 |  | 2577 | Complete | kmb | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | mg/L | 09/29/2001 | 1848 | 3699 | $<0.0050$ | ekh | SW | 6020 |
| Barium, ICPMS | 0.0620 | mg/L | 09/29/2001 | 1848 | 3907 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | mg/L | 09/29/2001 | 1848 | 3578 | $<0.0010$ | ekh | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | mg/L | 09/29/2001 | 1848 | 3978 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | 0.0011 | $\mathrm{mg} / \mathrm{L}$ | 10/01/2001 | 1848 | 3663 | $<0.0010$ | kmb | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/25/2001 | 1415 | 1361 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 753 | 579 | $<0.0050$ | lnh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3913 | <0.0005 | ekh | sw | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1848 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 753 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1415 |  | Complete | epk | SW | 7470A |
| Volatille compounds - 8260 |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/25/2001 |  | 3601 | Complete | dmg |  |  |
| Acetone | <20.0 | ug/L | 09/25/2001 |  | 3601 | $<20.0$ | dmg | SW | 8260日 |
| Benzene | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260 B |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | Sw | 8260 B |
| n-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromochloromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260 B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromoform | <1.0 | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromobenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | ding | SW | 8260B |
| 2-Butanone (MEK) | <12.5 | ug/L | 09/25/2001 |  | 3601 | $<12.5$ | dmg | Sw | 82608 |
| Carbon disulfide | <1.0 | ug/L | 09/25/2001 |  | 3601 | <1.0 | dmg | SW | 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
10/12/2001

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Rumbed | Number | Number Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 707874

SBIO 02 :MW1D:G091701:523

DATE/TIME TAKEN 09/17/2001 15:40

| Carbon tetrachloride | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | Sw | 8260b |
| Chloroethane | <5.0 | ug/L | 09/25/2001 | 3601 | < 5.0 | dmg | SW | 8250B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Chloroform | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| Chloromethane | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 82608 |
| Dibromochloromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| Dibromomethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/25/2001 | 3601 | < 5.0 | dmg | SW | 82608 |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260b |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8250B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| trans-1,3-Dichloropropene | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | Sw | 82608 |
| Ethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 707874
Hexachlorobutadiene
n-Hexane
2-Hexanone
Isopropylbenzene (Cumene)
p-Isopropyltoluene
Bromomethane
Methylene Chloride
Methyl t-butyl ether (MTBE)
4-Methyl-2-pentanone (MIBK)
n-Propylbenzene
Styrene
Naphthalene
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethene
Toluene
1,2,4-Trichlorobenzene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
Trichlorofluoromethane
1,2,3-Trichloropropane
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
Vinyl Acetate
Vinyl Chloride

| $<5.0$ | ug/L | 09/25/2001 |
| :---: | :---: | :---: |
| <5.0 | ug/L | 09/25/200工 |
| $<12.5$ | ug/L | 09/25/2001 |
| $<1.0$ | ug/L | 09/25/2001 |
| $<1.0$ | ug/L | 09/25/2001 |
| <5.0 | ug/L | 09/25/2001 |
| $<5.0$ | ug/L | 09/25/2001 |
| $<5.0$ | ug/L | 09/25/2001 |
| $<12.5$ | ug/L | 09/25/2001 |
| <1.0 | ug/L | 09/25/2001 |
| $<1.0$ | ug/L | 09/25/2001 |
| $<5.0$ | ug/L | 09/25/2001 |
| <1.0 | ug/L | 09/25/2001 |
| $<1.0$ | ug/L | 09/25/2001 |
| $<1.0$ | ug/L | 09/25/2001 |
| $<1.0$ | ug/L | 09/25/2001 |
| < 5.0 | ug/L | 09/25/2001 |
| $<1.0$ | ug/L | 09/25/2001 |
| $<1.0$ | ug/L | 09/25/2001 |
| $<1.0$ | ug/L | 09/25/2001 |
| $<1.0$ | ug/L | 09/25/2001 |
| $<5.0$ | ug/L | 09/25/2001 |
| $<1.0$ | ug/L | 09/25/2001 |
| $<1.0$ | ug/L | 09/25/2001 |
| $<5.0$ | ug/L | 09/25/2001 |
| $<1.0$ | L | 09/25/2001 |


| 3601 | $<5.0$ | dmg | SW 8260B |
| :--- | :--- | :--- | :--- |
| 3601 | $<5.0$ | dmg | SW 8260B |
| 3601 | $<12.5$ | dmg | SW 8260B |
| 3601 | $<1.0$ | dmg | SW 8260B |
| 3601 | $<1.0$ | dmg | SW 8260B |
| 3601 | $<5.0$ | dmg | SW 8260B |
| 3601 | $<5.0$ | dmg | SW 8260B |
| 3601 | $<5.0$ | dmg | SW 8260B |
| 3601 | $<12.5$ | dmg | SW 8260B |
| 3601 | $<1.0$ | dmg | SW 8260B |
| 3601 | $<1.0$ | dmg | SW 8260B |
| 3601 | $<5.0$ | dmg | SW 8260B |
| 3601 | $<1.0$ | dmg | SW 8260B |
| 3601 | $<1.0$ | dmg | SW 8260B |
| 3601 | $<1.0$ | dmg | SW 8260B |
| 3601 | $<1.0$ | dmg | SW 8260B |
| 3601 | $<5.0$ | dmg | SW 8260B |
| 3601 | $<1.0$ | dmg | SW 8260B |
| 3601 | $<1.0$ | dmg | SW 8260B |
| 3601 | $<1.0$ | dmg | SW 8260B |
| 3601 | $<1.0$ | dmg | SW 8260B |
| 3601 | $<5.0$ | dmg | SW 8260B |
| 3601 | $<1.0$ | dmg | SW 8260B |
| 3601 | $<1.0$ | dmg | SW 8260B |
| 3601 | $<5.0$ | dmg | SW 8260B |
| 3601 | $<1.0$ | dmg | SW 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Date | Batch Batch Reporting Analyst |  |
| Result Flag Units Analyzed | Number Number Limit | Initials Method Reference |  |  |

## SAMPLE NO. SAMPLE DESCRIPTION 707874 SBI002:MW1D:G091701:523

DATE/TIME TAREN 09/17/2001 15:40


| ICPMS TOTAL METALS | Complete |  | 09/29/2001 |  | 2572 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | mg/L | 09/29/2001 | 1848 | 3699 | $<0.0050$ | ekh | SW | 6020 |
| Barium, ICPMS | 0.0538 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3907 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3578 | $<0.0010$ | ekh | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3978 | <0.0050 | ekh | SW | 6020 |
| Lead, ICPMS | 0.0146 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3656 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | mg/L | 09/25/2001 | 1415 | 1361 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 10/09/2001 | 753 | 582 | $<0.0050$ | lnh | Sw | 7740 |
| Silver, ICPMS | <0.0005 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3913 | $<0.0005$ | ekh | S* | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1848 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 753 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1415 |  | Complete | epk | Sw | 747 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batyzed | Reporting Analyst |  |
| Number | Number | Limit | Initials Method Reference |  |

DATE/TIME TAKEN 09/17/2001 15:55

| 50 - SW846 (AQ) | Complete |  | 09/25/2001 | 3601 | Complete | dmg |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | $<20.0$ | ug/L | 09/25/2001 | 3601 | $<20.0$ | dmg | SW 8260B |
| Benzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| n-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Bromochloromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW 82608 |
| Bromoform | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Bromobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | ding | SW 8260 B |
| 2-Butanone (MEK) | <12.5 | ug/L | 09/25/2001 | 3601 | $<12.5$ | dmg | SW 8260B |
| Carbon disulfide | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | ding | SW 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Chloroethane | $<5.0$ | ug/L | 09/25/2001 | 3601 | $\leq 5.0$ | dmg | SW 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260日 |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Chloroform | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Chloromethane | $<5.0$ | ug/L. | 09/25/2001 | 3601 | $<5.0$ | dimg | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | ding | SW 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 1,2-Dibromo-3-chloropropane | <5.0 | ug/L | 09/25/2001 | 3601 | < 5.0 | dmg | SW 8260B |
| 1.2-Dichlorobenzene | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting | Analyst |  |
| Number | Number | Limit | Initials Method Reference |  |  |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 707875

SBI002:MW1S:G091701:523

DATE/TIME TAKEN
09/17/2001 15:55

| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| 1,1-Dichloroethene | <1.0 | ug/L | 09/25/2001 | 3601 | <1.0 | ding | SW | 8260B |
| cis-1,2-Dichloroethene | 2.7 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| trans-1,2-Dichloroethene | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260 B |
| 1,2-Dichloropropane | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | Sw | 82608 |
| 2,2-Dichloropropane | <1.0 | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 82608 |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 82608 |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 8260B |
| n -Hexane | <5.0 | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/25/2001 | 3601 | $<12.5$ | dmg | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dimg | SW | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/25/2001 | 3601 | $<12.5$ | dmg | Sw | 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 82608 |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | ding | Sw | 8260B |

## TestAmerica，Incorporated

## ANALYTICAL REPORT

Kevin Wildman HULL \＆ASSOC．（Dublin） 6130 Wilcox Rd．
Dublin，OH 43016

10／12／2001

Job Number：01．17216
Client Project ID：South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Rumber | Number | Limit | Initials Method Reference |  |  |

SAMPLE NO． 707875

SAMPLE DESCRIPTION
SBI002：MW1S：G091701：523

DATE／TIME TAKEN
09／17／2001 15：55

| －trachloroethene | 403 | ug／L | 09／26／2001 | 3602 | $<10$ | mrh | SW 8260 B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Toluene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 1，2，4－Trichlorobenzene | $<5.0$ | ug／L | 09／25／2001 | 3601 | $<5.0$ | ding | SW 8260B |
| 1，1，1－Trichloroethane | $<1.0$ | $u g / L$ | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 1，1，2－Trichloroethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Trichloroethene | 4.4 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | Sw 8260B |
| Trichlorofluoromethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | ding | SW 8260日 |
| 1，2，3－Trichloropropane | ＜5．0 | ug／L | 09／25／2001 | 3601 | ＜ 5.0 | dmg | SW 8260日 |
| 1，2，4－Trimethylbenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260日 |
| 1，3，5－Trimethylbenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260日 |
| Vinyl Acetate | $<5.0$ | ug／L | 09／25／2001 | 3601 | ＜5．0 | dmg | SW 8260B |
| Vinyl Chloride | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260日 |
| xylenes | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW 8260B |
| d4－1，2－Dichloroethane（surr） | 96 | \％ | 09／25／2001 | 3601 |  | dmg | SW 8260b |
| Dibromofluoromethane（surr） | 99 | \％ | 09／25／2001 | 3601 |  | dmg | SW 8260B |
| ds－Toluene（surr） | 96 | \％ | 09／25／2001 | 3601 |  | dimg | SW 8260B |
| Bromofluorobenzene（surr） | 109 | $\%$ | 09／25／2001 | 3601 |  | dimg | SW 8260B |

## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.17216
Client Project ID: South Bend Indiana SBIO02

|  |  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analyzed | Number | Number | Limit | Initials Method Reference |  |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 707876 | SBIOO2 :HMW8D:G091701:523 | $09 / 17 / 2001$ 16:30 |


| ICPMS TOTAL METALS | Complete |  | 10/01/2001 |  | 2577 | Complete | kmb | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3699 | <0.0050 | ekh | SW | 6020 |
| Barium, ICPMS | 0.0818 | $m \mathrm{~m} / \mathrm{L}$ | 09/29/2001 | 1848 | 3907 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | mg/L | 09/29/2001 | 1848 | 3578 | $<0.0010$ | ekh | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 10/01/2001 | 1848 | 3983 | $<0.0050$ | kmb | SW | 6020 |
| Lead, ICPMS | 0.0048 | mg/L | 09/29/2001 | 1848 | 3656 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | mg/L | 09/25/2001 | 1415 | 1361 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | mg/L | 09/28/2001 | 753 | 579 | $<0.0050$ | 1nh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3913 | $<0.0005$ | ekh | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1848 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 753 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1415 |  | Complete | epk | SW | 7470A |
| VOLATILE COMPOUNDS - 8260 |  |  |  |  |  |  |  |  |  |
| 8260 - SWB46 (AQ) | Complete |  | 09/26/2001 |  | 3602 | Complete | mrh |  |  |
| Acetone | <20.0 | ug/L | 09/26/2001 |  | 3602 | $<20.0$ | mrh | SW | 82608 |
| Benzene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| n-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | B260B |
| Bromochloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 82608 |
| Bromoform | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| Bromobenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 |  | 3602 | $<12.5$ | mrh | SW | 8260日 |
| Carbon disulfide | <1.0 | ug/L | 09/26/2001 |  | 3602 | <1.0 | mrh | SW | 8260B |

## TestAmerica，Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin）10／12／2001
6130 Wilcox Rd．
Dublin，OH 43016

Job Number： 01.17216
Client Project ID：South Bend Indiana SBI002


## SAMPLE NO． 707876

SAMPLE DESCRIPTION
SBI002：HMF8D：G091701：523

DATE／TIME TAKEN 09／17／2001 16：30

| rbon tetrachloride | $<1.0$ | $u g / L$ | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrh | SW | 8260B |
| Chloroethane | $<5.0$ | ug／L | 09／26／2001 | 3602 | $<5.0$ | mrn | SW | 8260B |
| 2－Chlorotoluene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 4－Chlorotoluene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mr＇h | SW | 8260B |
| Chloroform | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260日 |
| Chloromethane | $<5.0$ | ug／L | 09／26／2001 | 3602 | $<5.0$ | mrh | SW | 8260B |
| Dibromochloromethane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mr | SW | 8260B |
| Dibromomethane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1，2－Dibromo－3－chloropropane | $<5.0$ | ug／L | 09／26／2001 | 3602 | ＜5．0 | mrh | SW | 8260B |
| 1，2－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 82608 |
| 1，3－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260 B |
| 1，4－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 82608 |
| 1，1－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260日 |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1，1－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 82608 |
| cis－1，2－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| trans－1，2－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260日 |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260日 |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 82608 |
| 1，1－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| cis－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260日 |
| trans－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| Ethylbenzene | ＜1．0 | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17216

## Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting | Analyst |

DATE/TIME TAKEN 09/17/2001 16:30


## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$10 / 12 / 2001$

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
707876

d8-Toluene (surr) 97
Bromofluorobenzene (surr)
SAMPLE NO. SAMPLE DESCRIPTION 707877 SBI002:HMW8I:G091701:523

DATE/TIME TAKEN
09/17/2001 16:30

| ICPMS TOTAL METALS | Complete |  | 10/02/2001 |  | 2582 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | 0.0105 | mg/L | 09/29/2001 | 1848 | 3699 | $<0.0050$ | ekh | SW | 6020 |
| Barium, ICPMS | 0.0982 | mg/L | 09/29/2001 | 1848 | 3907 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3578 | $<0.0010$ | ekh | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 10/02/2001 | 1848 | 3988 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | 0.0102 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3656 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/25/2001 | 1415 | 1361 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | mg/L | 09/28/2001 | 753 | 579 | $<0.0050$ | 1nh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3913 | $<0.0005$ | ekh | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1848 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 753 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1415 |  | Complete | epk | SW | 7470A |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17216


SAMPLE NO. SAMPLE DESCRIPTION
707877
DATE/TIME TAKEN
09/17/2001 16:40

| 8260-SW846 (AQ) | Complete |  | 09/25/2001 | 3601 | Complete | dmg |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | <20.0 | ug/L | 09/25/2001 | 3601 | $<20.0$ | dmg | SW | 82608 |
| Benzene | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | ding | SW | 8260B |
| sec-Butylbenzene | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| n-Eutylbenzene | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromochloromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromoform | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/25/2001 | 3601 | $<12.5$ | ding | SW | 8260B |
| Carbon disulfide | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| Carbon tetrachloride | $\leqslant 1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Chloroethane | < 5.0 | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| 2-Chlorotoluene | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 4-Chloxotoluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Chloroform | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | ding | SW | 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dimg | SW | 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| Dibromomethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| Dichlorodifluoromethane | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | ding | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 82608 |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 82608 |
| 1,4-Dichlorobenzene | <1.0 | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260 B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17216
Client Project ID: South Bend Indiana SBIO02


SAMPLE DESCRIPTION
SBI002:HMW8I:G091701:523

DATE/TIME TAKEN 09/17/2001 16:40

| 1.1-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| cis-1,2-Dichloroethene | 1.0 | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260 B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260日 |
| n -Hexane | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 8260B |
| 2 -Hexanone | $<12.5$ | ug/L | 09/25/2001 | 3601 | $<12.5$ | dmg | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| Eromomethane | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | ding | SW | 8260 B |
| Methylene Chloride | <5.0 | ug/L | 09/25/2001 | 3601 | $<5.0$ | dimg | SW | 82608 |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/25/2001 | 3601 | $<12.5$ | dimg | SW | 82608 |
| n-Propylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| Naphthalene | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| 1,1,2,2-Tetrachloroethane | <1.0 | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed |  |  |
| Batch | Batch | Reporting | Analyst |  |
| Number | Limit | Initials Method Reference |  |  |

Initials Method Reference

SAMPLE NO. 707877

SAMPLE DESCRIPTION
SBI002:HMW8I:G091701:523

10/12/2001

Limit

DATE/TIME TAKEN
09/17/2001 16:40

| Tetrachloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260日 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Toluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| 1,1,1-Trichloroethane | 3.2 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| Trichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dimg | Sw | 8260B |
| 1,2,4-Trimethyibenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dimg | SW | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Xylenes | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 101 | $\%$ | 09/25/2001 | 3601 |  | dmg | SW | 8260B |
| Dibromofluoromethane (surr) | 99 | $\%$ | 09/25/2001 | 3601 |  | dmg | SW. | 8260B |
| d8-Toluene (surr) | 97 | $\%$ | 09/25/2001 | 3601 |  | dmg | SW | 8260B |
| Bromofluorobenzene (surr) | 107 | \% | 09/25/2001 | 3601 |  | dmg | SW | 82608 |

## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyat <br> Initials | Method R | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | PTO |  |  |  |  | DAT | /TIME | TAKEN |
| 707878 |  | SBIOO2:HM | -8S : | G0917 | : 523 |  |  |  | 09/ | $7 / 2001$ | 1 16:50 |


| MS TOTAL METALS | Complete |  | 09/29/2001 |  | 2572 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | 0.0153 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3699 | $<0.0050$ | ekh | SW | 6020 |
| Barium, ICPMS | 0.102 | mg/L | 09/29/2001 | 1848 | 3907 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3578 | $<0.0010$ | ekh | SW | 6020 |
| Chromium, ICPMS (0.005) | 0.0101 | mg/L | 09/29/2001 | 1848 | 3978 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | 0.0452 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3656 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/25/2001 | 1415 | 1361 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 753 | 579 | $<0.0050$ | Inh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3913 | $<0.0005$ | ekh | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1848 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 753 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1415 |  | Complete | epk | SW | 7470A |
| VOLATILE COMPOUNDS - 8260 |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AO) | Complete |  | 09/25/2001 |  | 3601 | Complete | dmg |  |  |
| Acetone | <20.0 | ug/L | 09/25/2001 |  | 3601 | $<20.0$ | dmg | SW | 8260B |
| Benzene | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 82608 |
| sec-Butylbenzene | <1.0 | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| n-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromochloromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromodichloromethane | <1.0 | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromoform | <1.0 | ug/L | 09/25/2001 |  | 3601 | $<1.0$ | dmg | SW | 8260B |
| Bromobenzene | <1.0 | ug/L | 09/25/2001 |  | 3601 | <1.0 | dmg | SW | 82608 |
| 2-Butanone (MEK) | <12.5 | ug/L | 09/25/2001 |  | 3601 | $<12.5$ | dmg | SW | 8260B |
| Carbon disulfide | <1.0 | ug/L | 09/25/2001 |  | 3601 | <1.0 | dmg | SW | 8260B |

## TestAmerica, Incorporated

# ANALYTICAL REPORT 

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting | Analyst |


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 707878 | SBIOO2:HMW8S:G091701:523 |

DATE/TIME TAKEN
09/17/2001 16:50

| Carbon tetrachloride | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| chloroethane | <5.0 | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| Chloroform | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| Chloromethane | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 82608 |
| Dibromochloromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | ding | Sw | 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SH | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 82608 |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | amg | Sw | 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 82608 |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | Sw | 8260B |
| 1.1-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Ethylbenzene | <1.0 | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | Sw | 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBIO02


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 707878 | SBIOO2:HMW8S:G091701:523 |

DATE/TIME TAKEN 09/17/2001 16:50

| dexachlorobutadiene | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n-Hexane | <5.0 | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/25/2001 | 3601 | <12.5 | dmg | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | $\underline{u g / L}$ | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| Bromomethane | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dimg | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 82608 |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/25/2001 | 3601 | $<12.5$ | dmg | SW | 8260 B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260] |
| Styrene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Naphthalene | <5.0 | ug/L | 09/25/2001 | 3601 | <5.0 | ding | SW | $8260{ }^{\text {8 }}$ |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | ding | SW | 8260B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260 B |
| Tetrachloroethene | 40.7 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| Toluene | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | aimg | SW | 82608 |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | sw | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | sw | 8260 B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Trichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | Sw | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | Sw | 8260B |
| 1,2,3-Trichloropropane | <5.0 | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | Sw | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 82608 |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 8260b |
| Vinyl Chloride | <1.0 | ug/L | 09/25/2001 | 3601 | <1.0 | dimg | SW | 82608 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 707878

SBI002:HMW8S: G091701:523

10/12/2001

Initials Method Reference

09/17/2001 16:50

| Xylenes | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW 8260B |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d4-1,2-Dichloroethane (surr) | 103 | \% | 09/25/2001 | 3601 |  | dmg | Sw 8260 B |  |
| Dibromofluoromethane (surr) | 100 | \% | 09/25/2001 | 3601 |  | dmg | SN 8260B |  |
| di-Toluene (surr) | 96 | \% | 09/25/2001 | 3601 |  | dmg | SW 8260b |  |
| Bromofluorobenzene (surr) | 111 | \% | 09/25/2001 | 3601 |  | dmg | SW 8260 B |  |
| $\begin{array}{ll} \text { SAMPLE NO. SA } \\ 707879 \end{array}$ | LE | TIO | $L D: 523$ |  |  |  | $\begin{aligned} & \text { ГE/TIME } \\ & / 17 / 2001 \end{aligned}$ | TAKEN $16: 30$ |


| ICPMS TOTAL METALS | Complete |  | 09/29/2001 |  | 2572 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | <0.0050 | mg/L | 09/29/2001 | 1848 | 3699 | <0.0050 | ekh | SW | 6020 |
| Barium, ICPMS | 0.0821 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3907 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | mg/L | 09/29/2001 | 1848 | 3578 | $<0.0010$ | ekh | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$. | mg/L | 09/29/2001 | 1848 | 3978 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | 0.0034 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3656 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | mg/L | 09/25/2001 | 1415 | 1361 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | mg/L | 09/28/2001 | 753 | 579 | $<0.0050$ | lnh | SW | 7740 |
| Silver, ICPMS | <0.0005 | mg/L | 09/29/2001 | 1848 | 3913 | $<0.0005$ | ekh | Sw | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1848 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 753 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1415 |  | Complete | epk | SW | 7470A |

# TestAmerica, Incorporated 

PAGE 59 of 96

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>10/12/2001

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
707879

707879
SBIO02:HMW8D:G091701D:523
DATE/TIME TAKEN
09/17/2001 16:30


# TestAmerica，Incorporated 

## ANALYTICAL REPORT

Kevin Wildman HULL \＆ASSOC．（Dublin）
$10 / 12 / 2001$

## Job Number： 01.17216

Client Project ID：South Bend Indiana SBI002


SAMPLE NO．SAMPLE DESCRIPTION
707879 SBI002：HMW8D：G091701D：523

DATE／TIME TAKEN 09／17／2001 16：30

| 1，1－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrh | SW 8260B |
| 1，1－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrh | SW 8260B |
| cis－1，2－Dichloroethene | ＜1．0 | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrh | SW 8260B |
| trans－1，2－Dichloroethene | ＜1．0 | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 1，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrh | SW 8260B |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 1，1－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrs | SW 826 dB |
| cis－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| trans－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Ethylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Hexachlorobutadiene | $<5.0$ | ug／L | 09／26／2001 | 3602 | $<5.0$ | mrh | SW 8260B |
| n －Hexane | ＜5．0 | ug／L | 09／26／2001 | 3602 | $<5.0$ | mrh | SW 8260B |
| 2 －Hexanone | $<12.5$ | ug／L | 09／26／2001 | 3602 | $<12.5$ | mrh | SW 8260b |
| Isopropylbenzene（Cumene） | ＜1．0 | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260日 |
| p－Isopropyltoluene | $<1.0$ | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrh | SW 8260B |
| Bromomethane | $<5.0$ | ug／L | 09／26／2001 | 3602 | ＜5．0 | mrh | SW 8260］ |
| Methylene Chloride | ＜5．0 | ug／L | 09／26／2001 | 3602 | ＜5．0 | mrh | SW 8260］ |
| Methyl t－butyl ether（MTBE） | $<5.0$ | ug／L | 09／26／2001 | 3602 | ＜5．0 | mrh | SW 8260日 |
| 4－Methyl－2－pentanone（MIBK） | $<12.5$ | ug／L | 09／26／2001 | 3602 | $<12.5$ | mrh | SW 8260日 |
| n－Propylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrin | SW 8260B |
| Styrene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Naphthalene | $<5.0$ | ug／L | 09／26／2001 | 3602 | ＜ 5.0 | mrh | SW 8260B |
| 1，1，1，2－Tetrachloroethane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260b |
| 1，1，2，2－Tetrachloroethane | ＜1．0 | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrh | SW 8260日 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
$\begin{array}{ll}\text { HULL \& ASSOC. (Dublin) } \\ \text { 6130 Wilcox Rd. } & 10 / 12 / 2001\end{array}$
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | PTIO1 |  |  |  |  | DAT | TIME | TAKEN |
| 707879 |  | SBIOO2: HM | 88: | G0917 | D:523 |  |  |  | 09/ | 7/2001 | 1 16:30 |


| Strachloroethene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Toluene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/26/2001 | 3602 | <5.0 | mrh | SW | 8260B |
| 1,1,1-Trichioroethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| Trichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrs | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/26/2001 | 3602 | $<5.0$ | mrh | SW | 82608 |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260日 |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mas | SW | 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 | 3602 | $<5.0$ | murh | SW | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260日 |
| XYlenes | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| d4-1,2-Dichloroethane (aurr) | 106 | $\%$ | 09/26/2001 | 3602 |  | mrh | SW | 8260B |
| Dibromofluoromethane (surr) | 104 | \% | 09/26/2001 | 3602 |  | mrh | Sw | 8260B |
| d8-Toluene (surr) | 97 | 8 | 09/26/2001 | 3602 |  | mrh | SW | 8260B |
| Bromofluorobenzene (surr) | 110 | 8 | 09/26/2001 | 3602 |  | mrh | SW | 8260B |

## TestAmerica, Incorporated

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch |  |
| Analyzed | Reporting Analyst |  |  |
| Number | Number | Limit | Initials Method Reference |

SAMPLE NO. SAMPLE DESCRIPTION 707880

| ICPMS TOTAL METALS | Complete |  | 09/29/2001 |  | 2572 | Complete | ekch | Sw | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | <0.0050 | mg/L | 09/29/2001 | 1848 | 3699 | <0.0050 | ekh | SW | 6020 |
| Barium, ICPMS | 0.0390 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3907 | <0.0050 | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3578 | $<0.0010$ | ekh | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3978 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | 0.0051 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3656 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | mg/L | 09/25/2001 | 1415 | 1361 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 753 | 579 | $<0.0050$ | 1nh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3913 | $<0.0005$ | ekch | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1848 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 753 |  | Complete | clm | SW | 3020A |
| Manual Mexcury Digestion | Complete |  | 09/24/2001 | 1415 |  | Complete | epk | SW | 7470A |
| VOLATILE COMPOUNDS - 8260 |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/26/2001 |  | 3602 | Complete | mrh |  |  |
| Acetone | $<20.0$ | ug/L | 09/26/2001 |  | 3602 | $<20.0$ | mrh | SW | 8260B |
| Benzene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| sec-Butylbenzene | <1.0 | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| n-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| Bromochloromethane | <1.0 | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| Bromodichloromethane | <1.0 | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| Bromoform | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| Bromobenzene | <1.0 | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 |  | 3602 | $<12.5$ | mrh | SW | 8260B |
| Carbon disulfide | <1.0 | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mr ${ }^{\text {m }}$ | SW | 8260B |

# TestAmerica，Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin，OH 43016

10／12／2001

Job Number：01．17216
Client Project ID：South Bend Indiana SBI002


SAMPLE NO． 707880

SAMPLE DESCRIPTION
SBI002：HMW7S：G091701：523

DATE／TIME TAKEN
09／17／2001 17：45

| －bon tetrachloride | ＜1．0 | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260日 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 82608 |
| Chloroethane | ＜5．0 | ug／L | 09／26／2001 | 3602 | ＜5．0 | mrh | SW | 8260B |
| 2－Chlorotoluene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 4－Chlorotoluene | $<1.0$ | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrh | SW | 8260B |
| Chloroform | 1.3 | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| Chloromethane | $<5.0$ | ug／L | 09／26／2001 | 3602 | $<5.0$ | mrh | SW | 82608 |
| Dibromochloromethane | ＜1．0 | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| Dibromomethane | ＜1．0 | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 82608 |
| Dichlorodifluoromethane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260日 |
| 1，2－Dibromo－3－chloropropane | $<5.0$ | ug／L | 09／26／2001 | 3602 | ＜5．0 | mrs | SW | 8260B |
| 1，2－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrin | SW | 8260B |
| 1，3－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrh | SW | 8260B |
| 1，4－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrg | SW | 8260B |
| 1，1－Dichloroethane | ＜1．0 | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrh | SW | 8260B |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | maxh | SW | 8260B |
| 1，1－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrh | SW | 82608 |
| cis－1，2－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrt | SW | 8260B |
| trans－1，2－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | sw | 8260 B |
| 1，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrh | SW | 8260 B |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | Sw | 8260B |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1，1－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260 B |
| cis－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| trans－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260b |
| Ethylbenzene | $<1.0$ | $\underline{u g / L}$ | 09／26／2001 | 3602 | $<1.0$ | mrh | SW | 8260日 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 707880 | SBI002:HMW7S:G091701:523 | $09 / 17 / 2001$ 17:45 |


| Hexachlorobutadiene | < 5.0 | ug/L | 09/26/2001 | 3602 | $<5.0$ | mrh | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n -Hexane | <5.0 | ug/L | 09/26/2001 | 3602 | $<5.0$ | mrh | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3602 | <12.5 | mrh | SW | 8260B |
| Isopropylbenzene (Cumene) | <1.0 | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | SW | 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3602 | < 5.0 | mrh | SW | 8260B |
| Methylene Chloride | <5.0 | ug/L | 09/26/2001 | 3602 | $<5.0$ | mrh | SW | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/26/2001 | 3602 | $<5.0$ | $m \times h$ | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 | 3602 | $<12.5$ | mrh | SW | 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260 B |
| Styrene | $<1.0$ | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | SW | 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/26/2001 | 3602 | <5.0 | mrh | SW | 8260 B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260 B |
| 1,1,2,2-Tetrachloroethane | <1.0 | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| Tetrachloroethene | 4.1 | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| Toluene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 09/26/2001 | 3602 | <5.0 | mrh | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| Trichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/26/2001 | 3602 | $<5.0$ | mrh | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | SW | 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3602 | <1.0 | $m \mathrm{~m}$ | SW | 8260 B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 | 3602 | <5.0 | mrh | SW | 8260 B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analyzed | Number | Number Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 707880

SBI002:HMW7S:G091701:523

DATE/TIME TAKEN 09/17/2001 17:45

| xylenes | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | $m \mathrm{mr}$ | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d4-1,2-Dichloroethane (surr) | 107 | \% | 09/26/2001 | 3602 |  | mrh | SW 8260B |
| Dibromofluoromethane (surr) | 103 | $\%$ | 09/26/2001 | 3602 |  | mrh | SW 8260B |
| d8-Toluene (surr) | 96 | \% | 09/26/2001 | 3602 |  | mrh | SW 8260B |
| Bromofluorobenzene (surr) | 109 | \% | 09/26/2001 | 3602 |  | mrh | SW 8260日 |

## SAMPLE NO. SAMPLE DESCRIPTION <br> 707881 SBI002:HMW35S:G091701:523

DATE/TIME TAKEN
09/17/2001 18:00

| ICEMS TOTAL METALS | Complete |  | 09/29/2001 |  | 2572 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | mg/L | 09/29/2001 | 1848 | 3699 | $<0.0050$ | ekh | SW | 6020 |
| Barium, ICPMS | 0.0471 | mg/L | 09/29/2001 | 1848 | 3907 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3578 | $<0.0010$ | ekh | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | mg/L | 09/29/2001 | 1848 | 3978 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | 0.0028 | mg/L | 09/29/2001 | 1848 | 3656 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | mg/L | 09/25/2001 | 1415 | 1361 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | mg/L | 09/27/2001 | 753 | 578 | $<0.0050$ | lnh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3913 | $<0.0005$ | ekh | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1848 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 753 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1415 |  | Complete | epk | SW | 7470A |

VOLATILE COMPOUNDS - 8260 (AQ)

## ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin，OH 43016

Job Number： 01.17216
Client Project ID：South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO． | SAMPLE DE | CR | TIO |  |  |  |  | DAT | ／TIME | TAKEN |
| 707881 |  | SBI002：HM | W35S | ：G091 | 1：523 |  |  |  | 09／ | 7／2001 | 18：00 |


| 8260 －SW846（AQ） | Complete |  | 09／25／2001 | 3601 | Complete | dmg |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | $<20.0$ | ug／L | 09／25／2001 | 3601 | $<20.0$ | dmg | SW 8260B |
| Benzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW 8260B |
| tert－Eutylbenzene | ＜1．0 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| sec－Butylbenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260b |
| n－Butylbenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Bromochloromethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Bromodichloromethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Bromoform | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | drng | SW 8260B |
| Bromobenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 2－Butanone（MEK） | ＜12．5 | ug／L | 09／25／2001 | 3601 | $<12.5$ | dmg | SW 8260B |
| Carbon disulfide | ＜1．0 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260b |
| Chlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dimg | SW 8260B |
| Chloroethane | $<5.0$ | ug／L | 09／25／2001 | 3601 | ＜5．0 | dmg | SW 8260B |
| 2－Chlorotoluene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dimg | SW 8260B |
| 4－Chlorotoluene | ＜1．0 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Chloroform | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Chloromethane | ＜5．0 | ug／L | 09／25／2001 | 3601 | ＜5．0 | dmg | SW 8260日 |
| Dibromochloromethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260日 |
| Dibromomethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 1，2－Dibromo－3－chloropropane | ＜5．0 | ug／L | 09／25／2001 | 3601 | $<5.0$ | dmg | SW 8260日 |
| 1，2－Dichlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260日 |
| 1，3－Dichlorobenzene | ＜1．0 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 1，4－Dichlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dimg | SW 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dubiin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 707881 | SBI002:HMW35S:G091701:523 | $09 / 17 / 2001$ 18:00 |


| 1-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dimg | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Cis-1,2-Dichloroethene | 1.5 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| trans-1, 3-Dichioropropene | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dimg | SW | 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260 B |
| n -Hexane | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/25/2001 | 3601 | $<12.5$ | dmg | SW | 82608 |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Eromomethane | $<5.0$ | ug/L | 09/25/2001 | 3601 | < 5.0 | dmg | SW | 82608 |
| Methylene Chloride | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | sw | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/25/2001 | 3601 | $<12.5$ | dmg | SW | 8260B |
| $n$-Propylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | ding | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW | 8260日 |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.

Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE NO. | SAMPLE DE | SCRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 707881 | SBI002 : HM | N35 | G091 | $1: 523$ |  |  |  | 09/ | 7/2001 | 18:00 |


| Tetrachloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Toluene | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 09/25/2001 | 3601 | - <5.0 | dmg | SW | 8260B |
| 1,1,1-Trichloroethane | <1.0 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Trichloroethene | 7.4 | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | dmg | SW | 8260B |
| 1,2,3-Trichloropropane | <5.0 | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW | 8260b |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/25/2001 | 3601 | <5.0 | ding | SW | 8260B |
| Vinyl Chloride | $<2.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 8260 B |
| Xylenes | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW | 82608 |
| d4-1,2-Dichloroethane (surr) | 103 | 8 | 09/25/2001 | 3601 |  | ding | SW | 8260日 |
| Dibromofluoromethane (surr) | 100 | 8 | 09/25/2001 | 3601 |  | dmg | SW | 8260B |
| d8-Toluene (surr) | 97 | $\%$ | 09/25/2001 | 3601 |  | dmg | SW | 82608 |
| Bromofluorobenzene (surr) | 107 | 8 | 09/25/2001 | 3601 |  | dmg | SW | 8260B |

# TestAmerica, Incorporated 

PAGE 69 of 96

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting | Analyst |  |  |
| R |  | Number | Number | Limit | Initials Method Reference |  |  |

## SAMPLE NO. 707882

SAMPLE DESCRIPTION
SBIO02:HMWI7D: G091701:523

DATE/TIME TAKEN
09/17/2001 18:20

| PMS TOtAL METALS | Complete |  | 09/29/2001 |  | 2572 | Complete | ekh | sw | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | mg/L | 09/29/2001 | 1848 | 3699 | $<0.0050$ | ekh | SW | 6020 |
| Barium, ICPMS | 0.0663 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3907 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3578 | $<0.0010$ | ekch | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3978 | $<0.0050$ | ekh | SW | 5020 |
| Lead, ICPMS | 0.0030 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3656 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/25/2001 | 1415 | 1361 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 753 | 579 | $<0.0050$ | 1 nh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3913 | $<0.0005$ | ekh | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1848 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 753 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1415 |  | Complete | epk | SW | 7470A |
| VOLATILE COMPOUNDS - 8260 |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/26/2001 |  | 3602 | Complete | mrin |  |  |
| Acetone | <20.0 | ug/L | 09/26/2001 |  | 3602 | $<20.0$ | mrh | SW | 8260B |
| Benzene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 82608 |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| - n -Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| Bromochloromethane | <1.0 | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | <1.0 | mrh | SW | 82608 |
| Bromoform | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | <1.0 | mrh | SW | 8260B |
| Bromobenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| 2-Butanone (MEK) | <12.5 | ug/L | 09/26/2001 |  | 3602 | $<12.5$ | mrh | SW | 8260B |
| Carbon disulfide | <1.0 | ug/L | 09/26/2001 |  | 3602 | <1.0 | mrh | SW | 8260B |

# TestAmerica，Incorporated 

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \＆ASSOC．（Dublin）<br>6130 Wilcox Rd．<br>Dublin，OH 43016<br>Job Number： 01.17216<br>Client Project ID：South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method R | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { SAMPLE } \\ & 707882 \end{aligned}$ | NO． | SAMPLE D SBIOO2：H |  | PTION | $1: 523$ |  |  |  | DAT | $\begin{aligned} & \text { /TIME } \\ & 7 / 2001 \end{aligned}$ | $\begin{aligned} & \text { TAKEN } \\ & 18: 20 \end{aligned}$ |


| Carbon tetrachloride | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Chloroethane | ＜ 5.0 | ug／L | 09／26／2001 | 3602 | $<5.0$ | mrh | SW 8260B |
| 2－Chlorotoluene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 4－Chlorotoluene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SN 8260日 |
| Chloroform | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Chloromethane | $<5.0$ | ug／L | 09／26／2001 | 3602 | $<5.0$ | mrh | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260日 |
| Dibromomethane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | msh | SW 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrs | SW 8260B |
| 1，2－Dibromo－3－chioropropane | $<5.0$ | ug／L | 09／26／2001 | 3602 | $<5.0$ | mrh | SW 8260B |
| 1，2－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 1，3－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 1，4－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrh | SW 8260B |
| 1，1－Dichloroethane | $\leqslant 1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | murh | SW 8260B |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 1，1－Dichloroethene | ＜1．0 | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260日 |
| cis－1，2－Dichloroethene | 1.2 | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrh | SW 8260B |
| trans－1，2－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 1，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260日 |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260日 |
| 1，1－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| cis－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| trans－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Ethylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman

HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>$10 / 12 / 2001$

Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002


SAMPLE DESCRIPTION
SBIO02:HMWI7D:G091701:523

DATE/TIME TAKEN 09/17/2001 18:20

| xachlorobutadiene | $<5.0$ | ug/L | 09/26/2001 | 3602 | < 5.0 | mrs | SW 8260 B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n -Hexane | $<5.0$ | ug/L | 09/26/2001 | 3602 | <5.0 | mrh | SW 8260B |
| 2-Hexanone | $<12.5$ | ug/L | .09/26/2001 | 3602 | $<12.5$ | mrh | SW 82608 |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| p-Isopropyltoluene | <1.0 | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 82608 |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3602 | < 5.0 | mrh | SW SW 260 B |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3602 | $<5.0$ | mrh | SW 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/26/2001 | 3602 | <5.0 | mrh | SW 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 | 3602 | $<12.5$ | mrh | SW 8260b |
| n-Propylbenzene | <1.0 | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | SW 8260 B |
| Styrene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/26/2001 | 3602 | < 5.0 | mrh | SW 8260 B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260 B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Tetrachloroethene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Toluene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260b |
| 1,2,4-Trichlorobenzene | <5.0 | $\underline{u g / L}$ | 09/26/2001 | 3602 | <5.0 | mrh | SW 8260 B |
| 1,1,1-Trichloroethane | 1.9 | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260 B |
| Trichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/26/2001 | 3602 | <5.0 | mrh | SW 8260日 |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | SW 8260B |
| 1,3,5-Trimethylbenzene | <1.0 | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2002 | 3602 | $<5.0$ | mrh | SW 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | SW 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  | Prep Run |
| :--- | :--- |
| Date | Batch Batch Reporting Analyst |

Result Flag Units Analyzed Number Number Limit Initials Method Reference

## SAMPLE NO. SAMPLE DESCRIPTION

 707882DATE/TIME TAKEN 09/17/2001 18:20

| Xylenes | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d4-1,2-Dichloroethane (surr) | 106 | \% | 09/26/2001 | 3602 |  | mrh | SW | 82608 |
| Dibromofluoromethane (surr) | 103 | \% | 09/26/2001 | 3602 |  | mrs | SW | 8260B |
| d8-Toluene (surr) | 97 | $\%$ | 09/26/2001 | 3602 |  | mrh | SW | 8260 B |
| Bromofluorobenzene (surr) | 106 | 8 | 09/26/2001 | 3602 |  | mrh | Sw | 82608 |

SAMPLE NO. SAMPLE DESCRIPTION 707883 SBI002:MW25D:G091701:523

| ICPMS TOTAL METALS | Complete |  | 09/29/2001 |  | 2572 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3699 | $<0.0050$ | ekh | SW | 6020 |
| Barium, ICPMS | 0.0647 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3907 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3578 | $<0.0010$ | ekh | SW | 6020 |
| Chromium, ICPMS (0.005) | 0.0304 | mg/L | 09/29/2001 | 1848 | 3978 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | 0.0038 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3656 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | mg/L | 09/25/2001 | 1415 | 1361 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | mg/L | 09/28/2001 | 753 | 579 | $<0.0050$ | 1 nh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2002 | 1848 | 3913 | $<0.0005$ | ekh | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1848 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 753 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1415 |  | Complete | epk | SW | 7470A |

DATE/TIME TAKEN 09/17/2001 18:30

## TestAmerica，Incorporated

ANALYTICAL REPORT

Kevin Wildman
$\begin{array}{lr}\text { HULIL \＆ASSOC．（Dublin）} \\ 6130 \text { Wilcox Rd．} & 10 / 12 / 2001\end{array}$ Dublin，OH 43016

Job Number： 01.17216
Client Project ID：South Bend Indiana SBI002

|  |  | Prep Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analyzed | Number Number Limit | Initials Method Reference |  |  |  |

## SAMPLE NO 707883

SAMPLE DESCRIPTION
SBIO 02 ：MW25D：G091701：523

DATE／TIME TAKEN 09／17／2001 18：30

| －60－SN846（AQ） | Complete |  | 09／26／2001 | 3602 | Complete | mrh |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | ＜20．0 | ug／L | 09／26／2001 | 3602 | ＜20．0 | mrh | SW 8260B |
| Benzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | ．＜1．0 | mre | SW 8260B |
| tert－Butylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrh | SW 8260B |
| sec－Butylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | Sw 8260日 |
| n－Butylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Bromochloromethane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Bromodichloromethane | $<1.0$ | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrh | SW 8260B |
| Bromoform | $<1.0$ | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrh | SW 8260B |
| Bromobenzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrh | SW 8260B |
| 2－Butanone（MEK） | $<12.5$ | ug／L | 09／26／2001 | 3602 | ＜12．5 | mrh | SW 8260日 |
| Carbon disulfide | $<1.0$ | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrh | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrin | SW 8260B |
| Chlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Chloroethane | $<5.0$ | ug／L | 09／26／2001 | 3602 | $<5.0$ | mrh | SW 8260B |
| 2－Chlorotoluene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 82608 |
| 4－Chlorotoluene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Chloroform | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Chloromethane | ＜5．0 | ug／L | 09／26／2001 | 3602 | $<5.0$ | mrh | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrh | SW 8260B |
| Dibromomethane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260日 |
| 1，2－Dibromo－3－chloropropane | $<5.0$ | ug／L | 09／26／2001 | 3602 | ＜5．0 | mrh | SW 8250B |
| 1，2－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | ＜1．0 | mrh | SW 8260B |
| 1，3－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 1，4－Dichlorobenzene | ＜1．0 | ug／L | 09／26／2001 | 3602 | $<1.0$ | mrh | SW 8260B |

# TestAmerica, Incorporated 

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## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 707883

SBI002:MW25D:G091701:523

DATE/TIME TAKEN 09/17/2001 18:30
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene
1,2-Dichloropropane
1,3-Dichloropropane
2,2-Dichloropropane
1,1-Dichloropropene
cis-1,3-Dichloropropene
trans-1,3-Dichloropropene
Ethylbenzene
Hexachlorobutadiene
n-Hexane
2-Hexanone
Isopropylbenzene (Cumene)
p-Isopropyltoluene
Bromomethane
Methylene Chloride
Methyl t-butyl ether (MTBE)
4-Methyl-2-pentanone (MIBK)
n-propylbenzene
Styrene
Naphthalene
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane


## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002


| rachloroethene | 2.2 | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Toluene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/26/2001 | 3602 | $<5.0$ | mrin | SW 8260B |
| 1,1,1-Trichloroethane | 2.7 | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | SW 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Trichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/26/2001 | 3602 | $<5.0$ | $m \times \mathrm{h}$ | SW 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 | 3602 | $<5.0$ | mrh | SW 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Xylenes | <1.0 | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| d4-1,2-Dichloroethane (surr) | 106 | \% | 09/26/2001 | 3602 |  | mrh | SW 8260B |
| Dibromofluoromethane (surr) | 103 | 8 | 09/26/2001 | 3602 |  | mrh | SW 8260B |
| ds-Toluene (surr) | 96 | 8 | 09/26/2001 | 3602 |  | mrh | SW 8260B |
| Bromofluorobenzene (surr) | 108 | \% | 09/26/2001 | 3602 |  | mrh | SW 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | SCRI | PTIO1 |  |  |  |  | DAT | /TIME | TAKEN |
| 707884 |  | SBI002:M | 25: | G0917 | $1: 523$ |  |  |  | 09/ | 7/2001 | 18180 |


| ICPMS TOTAL METALS | Complete |  | 09/29/2001 |  | 2572 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arbenic, ICPMS | 0.0056 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3699 | $<0.0050$ | ekh | SW | 6020 |
| Barium, ICPMS | 0.189 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3907 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3578 | $<0.0010$ | ekh | SW | 6020 |
| Chromium, ICPMS (0.005) | 0.0899 | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3978 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | 0.0209 | mg/L | 09/29/2001 | 1848 | 3656 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | <0.0002 | $\mathrm{mg} / \mathrm{L}$ | 09/25/2001 | 1415 | 1361 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 753 | 579 | $<0.0050$ | 1nh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3913 | <0.0005 | ekh | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1848 |  | Complete | clm | SW | 3010A |
| Metala Digestion, GFAA | Complete |  | 09/26/2001 | 753 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1415 |  | Complete | epk | SW | 7470A |
| VOLATILE COMPOUNDS - 8260 |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/26/2001 |  | 3602 | Complete | mrh |  |  |
| Acetone | $<20.0$ | ug/L | 09/26/2001 |  | 3602 | $<20.0$ | mrh | SW | 8260B |
| Benzene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 82608 |
| sec-Butylbenzene | <1.0 | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| n-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| Bromochloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260日 |
| Bromodichloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | <1.0 | mrh | SW | 8260B |
| Bromoform | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | <1.0 | mrh | SW | 8260B |
| Bromobenzene | <1.0 | ug/L | 09/26/2001 |  | 3602 | <1.0 | moch | SW | 8260B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 |  | 3602 | $<12.5$ | mrh | SW | 82608 |
| Carbon disulfide | <1.0 | ug/L | 09/26/2001 |  | 3602 | <1.0 | mrh | SW | 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HUL工 \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$10 / 12 / 2001$

Job Number: 01.17216


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 707884 | SBIO02:MW25S:G091701:523 | $09 / 17 / 2001$ 18:40 |


| arbon tetrachloride | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260b |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chlorobenzene | <1.0 | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260 B |
| Chloroethane | $<5.0$ | ug/L | 09/26/2001 | 3602 | $<5.0$ | mrh | SW 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 82608 |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Chloroform | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Chloromethane | <5.0 | ug/L | 09/26/2001 | 3602 | <5.0 | mrh | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mren | SW 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/26/2001 | 3602 | <5.0 | murh | SW 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260b |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 1,2-Dichloroethane | <1.0 | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260 B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260日 |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | $m \mathrm{~m}$ | SW 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260B |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW 8260b |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | SW 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
10/12/2001

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002


| Hexachlorobutadiene | $<5.0$ | ug/L | 09/26/2001 | 3602 | <5.0 | mrh | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n-Hexane | $<5.0$ | ug/L | 09/26/2001 | 3602 | $<5.0$ | mrh | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3602 | $<12.5$ | mrh | SW | 8260B |
| Isopropylbenzene (Cumene) | <1.0 | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260 B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mreh | SW | 8260 B |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3602 | < 5.0 | mrh | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3602 | <5.0 | mrh | SW | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/26/2001 | 3602 | $<5.0$ | mrh | SW | 82608 |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 | 3602 | $<12.5$ | $m \times h$ | SW | 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 82608 |
| Styrene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrih | SW | 8260B |
| Naphthalene | <5.0 | ug/L | 09/26/2001 | 3602 | <5.0 | mrh | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | Sw | 8260B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| Tetrachloroethene | 4.7 | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | SW | 82608 |
| Toluene | <1.0 | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 09/26/2001 | 3602 | <5.0 | mrin | SW | 8260B |
| 1,1,1-Trichloroethane | 1.3 | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1,1,2-Trichloroethane | <1.0 | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 82608 |
| Trichloroethene | <1.0 | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | $u g / L$ | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1,2,3-Trichloropropane | <5.0 | ug/L | 09/26/2001 | 3602 | $<5.0$ | mrh | SW | 8260B |
| 1,2,4-Trimethylbenzene | <1.0 | ug/L | 09/26/2001 | 3602 | $<1.0$ | murh | SW | 8260B |
| 1,3,5-Trimethylbenzene | <1.0 | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | Sw | 8260B |
| Vinyl Acetate | <5.0 | ug/L | 09/26/2001 | 3602 | $<5.0$ | marh | SW | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260 B |

## TestAmerica, Incorporated

# ANALYTICAL REPORT 

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

Date Brep Run | Batch Batch Reporting Analygt |
| :--- |

Result Flag Units Analyzed Number Number Limit Initials Method Reference

## SAMPLE NO. SAMPLE DESCRIPTION

 707884SBI002:MW25S:G091701:523 Limit Initials Method Reference

DATE/TIME TAKEN 09/17/2001 18:40

10/12/2001

| Lenes | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d4-1,2-Dichloroethane (surr) | 106 | $\%$ | 09/26/2001 | 3602 |  | mrh | SW | 8260日 |
| Dibromofluoromethane (surr) | 103 | 8 | 09/26/2001 | 3602 |  | mrh | SW | 82608 |
| d8-Toluene (surr) | 97 | 8 | 09/26/2001 | 3602 |  | mrh | SW | 8260 B |
| Bromofluorobenzene (surr) | 111 | \% | 09/26/2001 | 3602 |  | mrh | SW | 8260B |

SAMPLE NO. SAMPLE DESCRIPTION
707885 SBI002:FB1:W091701:523

| ICPMS TOTAL METALS | Complete |  | 09/29/2001 |  | 2572 | Complete | ekh | SW | 6020 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3699 | $<0.0050$ | ekh | Sw | 6020 |  |
| Barium, ICPMS | $<0.0050$ | mg/L | 09/29/2001 | 1848 | 3907 | $<0.0050$ | ekh | sw | 6020 |  |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3578 | $<0.0010$ | ekh | SW | 6020 |  |
| Chromium, ICPMS (0.005) | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3978 | $<0.0050$ | ekh | SW | 6020 |  |
| Lead, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3656 | $<0.0010$ | ekh | SW | 6020 |  |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/25/2001 | 1415 | 1361 | $<0.0002$ | epk | SW | 7470A |  |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 753 | 579 | $<0.0050$ | 1 nh | SW | 7740 |  |
| Silver, ICPMS | $<0.0005$ | mg/L | 09/29/2001 | 1848 | 3913 | $<0.0005$ | ekh | SW | 6020 |  |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1848 |  | Complete | clm | SW | 3010A |  |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 753 |  | Complete | clm | SW | 3020A |  |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1415 |  | Complete | epk | SW | 7470A |  |
| Prep, Base Neutral | Complete |  | 09/20/2001 | 1276 |  | Complete | rec | EP | A 625 | ; SW 352 |
| Prep, Acid Extractable | Complete |  | 09/20/2001 | 1276 |  | Complete | rec |  | A 625 | ; SW 3.52 |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | SCRI | TIO |  |  |  |  | DAI | /TIME | TAKEN |
| 707885 |  | SBI002:FB | :WO | 170 |  |  |  |  | 09/ | $7 / 2001$ | 1 13:00 |

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

SAMPLE DESCRIPTION
SBI002:FB1:W091701:523

| Prep, TPH - 418.1 aq | Complete |  | 09/26/2001 | 603 |  | Complete | 260 | EPA 418.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VOLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/26/2001 |  | 3602 | Complete | mrh |  |
| Acetone | <20.0 | ug/L | 09/26/2001 |  | 3602 | $<20.0$ | mrh | SW 8260B |
| Benzene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | - 3602 | $<1.0$ | mrh | SW 8260 B |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW 8260B |
| n-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW 8260 B . |
| Bromochloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW 8260B |
| Bromoform | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW 8260B |
| Bromobenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW 8260B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 |  | 3602 | $<12.5$ | mrh | SW 8260B |
| Carbon disulfide | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrs | SW 8260B |
| Carbon tetrachioride | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW 8260B |
| Chlorobenzene | <1.0 | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW 8260B |
| Chloroethane | $<5.0$ | ug/L | 09/26/2001 |  | 3602 | $<5.0$ | mrh | SW 8260B |
| 2-Chlorotoluene | <1.0 | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW 8260B |
| 4-Chlorotoluene | <1. 0 | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW 8260B |
| Chloroform | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW 8260B |
| Chloromethane | <5.0 | ug/L | 09/26/2001 |  | 3602 | $<5.0$ | mrh | SW 8260 B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW 8260B |
| Dibromomethane | <1.0 | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW 8260日 |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/26/2001 |  | 3602 | <5.0 | mrh | SW 8260B |

## TestAmerica, Incorporated

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| R Analy | Number | Number | Limit | Initials Method Reference |  |

$\begin{array}{ll}\text { SAMPLE NO. SAMPLE DESCRIPTION } \\ 707885 & \text { SBIOO2:FBI:W09170I:523 }\end{array}$
DATE/TIME TAKEN
09/17/2001 13:00

| -Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,3-Dichlorobenzene | <1.0 | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | SW | 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mreh | SW | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | SW | 82608 |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | sw | 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/26/2001 | 3602 | $<5.0$ | mrh | SW | 8260B |
| $n$-Hexane | $<5.0$ | ug/L | 09/26/2001 | 3602 | $<5.0$ | mrh | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3602 | $<12.5$ | mrh | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | SW | 82608 |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 82608 |
| Bromomethane | <5.0 | ug/L | 09/26/2001 | 3602 | $<5.0$ | mrh | SW | 82608 |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3602 | $<5.0$ | mrh | SW | 82608 |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/26/2001 | 3602 | $<5.0$ | mrh | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 | 3602 | <12.5 | mrh | SW | 8260 B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | SW | 82608 |
| Styrene | <1.0 | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | SW | 8260B |

# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION 707885

DATE/TIME TAKEN
09/17/2001 13:00


# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd.
Dublin, OH 43016
$10 / 12 / 2001$

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION

 707885SBI002:FB1:W091701:523

DATE/TIME TAKEN
09/17/2001 13:00

| -nzo(b) Eluoranthene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benzo (k) fluoranthene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Benzo (a) pyrene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | <10 | jrw | SW | 8270 C |
| Benzyl alcohol. | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | $8270{ }^{\text {c }}$ |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 82700 |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Chrysene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/24/2001 | 1276 | 2708 | $<50$ | jrw | SW | 8270 C |
| Diethyl phthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Dimethyl phthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Fluoranthene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Fluorene | <10 | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |

## TestAmerica, Incorporated

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002


DATE/TIME TAKEN 09/17/2001 13:00

| Hexachlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/24/2001 | 1276 | 2708 | <20 | jrw | SW | 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Indeno(1,2,3-cd) pyrene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Isophorone | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Naphthalene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Nitrobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Phenanthrene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Pyrene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 76 | \% | 09/24/2001 | 1276 | 2708 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 82 | \% | 09/24/2001 | 1276 | 2708 |  | jrw | SW | 8270 C |
| Surrogate: di4-Terphenyl | 78 | \% | 09/24/2001 | 1276 | 2708 |  | jrw | SW | 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/24/2001 | 1276 | 2708 | < 50 | jrw | sw | 82700 |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 2-Chlorophenol | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jxw | Sw | 8270 C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | Sw | 8270C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 82700 |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 2-Methylphenol | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 2-Nitrophenol | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | <10 | jrw | SW | $8270{ }^{\text {C }}$ |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>10/12/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  | Prep | Run |
| :--- | :--- | :--- |
| Date |  |  |
| Batch |  |  |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 707885 | SBI002:FB1:W091701:523 | $09 / 17 / 2001$ 13:00 |


| .tachlorophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Phenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW 8270C |
| 2,4,5-Trichlorophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW 8270C |
| 2,4,6-Trichlorophenol | <10 |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW 8270C |
| Surrogate: d6-Phenol | 61 |  | \% | 09/24/2001 | 1276 | 2708 |  | jrw | SW 8270C |
| Surrogate: 2-Fluorophenol | 70 |  | 8 | 09/24/2001 | 1276 | 2708 |  | jrw | SW 8270C |
| Surrogate: Tribromophenol | 83 | note | \% | 09/24/2001 | 1276 | 2708 |  | jrw | SW 8270C |
| TPH - Method 418.1 (AQ) | $<0.2$ |  | $\mathrm{mg} / \mathrm{L}$ | 09/27/2001 | 603 | 724 | $<0.2$ | 260 | EPA 418.1 |

## SAMPLE NO. SAMPLE DESCRIPTION <br> 707886 SBI002:FB2:W091701:523

| ICPMS TOTAL METALS | Complete |  | 09/29/2001 |  | 2572 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | <0.0050 | mg/L | 09/29/2001 | 1848 | 3699 | $<0.0050$ | ekh | SW | 6020 |
| Barium, ICPMṢ | $<0.0050$ | mg/L | 09/29/2001 | 1848 | 3907 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3578 | $<0.0010$ | ekh | SW | 6020 |
| Chromium, ICPMS (0.005) | <0.0050 | mg/L | 09/29/2001 | 1848 | 3978 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 09/29/2001 | 1848 | 3656 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | mg/L | 09/26/2001 | 1416 | 1362 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | mg/L | 09/28/2001 | 753 | 579 | $<0.0050$ | 1nh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | mg/L | 09/29/2001 | 1848 | 3913 | <0.0005 | ekh | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1848 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 753 |  | Complete | clm | SW | 3020A |

## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBIO02

|  |  | Prep | Run |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch |  |
| Batch | Reporting Analyst |  |  |

## SAMPLE NO. SAMPLE DESCRIPTION

 707886SBI002: FB2:W091701:523

DATE/TIME TAKEN 09/17/2001 18:45


# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

SAMPLE NO.
707886

SAMPLE DESCRIPTION
SBI002: FB2: W091701:523

| bromomethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260b |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | SW | 82608 |
| 1,2-Dibromo-3-chloropropane | <5.0 | ug/L | 09/26/2001 | 3602 | $<5.0$ | mrh | SW | 8260 B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260 B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 82608 |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | SW | 82608 |
| Cis-1.2-Dichloroethene | <1.0 | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | SW | 82608 |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | Sw | 8260 B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | SW | 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 82608 |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260B |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 82608 |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | SW | 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/26/2001 | 3602 | $<5.0$ | mrh | SW | 8260B |
| n -Hexane | $<5.0$ | ug/L | 09/26/2001 | 3602 | $<5.0$ | mrh | SW | 82608 |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3602 | $<12.5$ | mrh | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/26/2001 | 3602 | $<1.0$ | mrh | SW | 8260日 |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/26/2001 | 3602 | <1.0 | mrh | SW | 8260b |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3602 | $<5.0$ | mrh | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3602 | < 5.0 | mush | SW | 8260B |
| Methyl t-butyl ether (MTBE) | <5.0 | ug/L | 09/26/2001 | 3602 | <5.0 | mrh | SW | 8260 B |

[^44]
## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.17216<br>Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | SRI | TIO1 |  |  |  |  | DAT | /TIME | TAKEN |
| 707886 |  | SBI002: FB | : W0 | 1701 | 23 |  |  |  | 09/ | 7/2001 | 1 18:45 |


| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 |  | 3602 | <12.5 | mrh | SW | 8260 B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n -Propylbenzene | <1.0 | ug/L | 09/26/2001 |  | 3602 | <1.0 | much | SW | 82608 |
| styrene | <1.0 | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 82608 |
| Naphthalene | $<5.0$ | ug/L | 09/26/2001 |  | 3602 | $<5.0$ | mrh | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | $m \mathrm{rh}$ | SW | 8260B |
| 1,1,2,2-Tetrachloroethane | <1.0 | ug/L | 09/26/2001 |  | 3602 | <1.0 | mreh | SW | 8260B |
| Tetrachloroethene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| Toluene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 09/26/2001 |  | 3602 | $<5.0$ | mrh | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260b |
| Trichloroethene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | Sw | 82608 |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/26/2001 |  | 3602 | <5.0 | mrh | Sw | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | marh | SW | 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 |  | 3602 | $<5.0$ | mur | SW | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | mrh | SW | 82608 |
| xylenes | $<1.0$ | ug/L | 09/26/2001 |  | 3602 | $<1.0$ | $m \mathrm{~m}$ | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 110 | 8 | 09/26/2001 |  | 3602 |  | $m \mathrm{mch}$ | SW | 8260B |
| Dibromofluoromethane (surr) | 105 | $\%$ | 09/26/2001 |  | 3602 |  | mrh | SW | 8260B |
| ds-Toluene (surr) | 96 | 4 | 09/26/2001 |  | 3602 |  | mrh | SW | 8260B |
| Bromofluorobenzene (surr) | 105 | 8 | 09/26/2001 |  | 3602 |  | mrh | SW | 8260B |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |

TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.17216<br>Client Project ID: South Bend Indiana SBI002

10/12/2001

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DI | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 707886 |  | SBI002: FB | : W0 | 170 | 3 |  |  |  | 09/ | 7/2001 | 18:45 |


| .-enaphthylene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Anthracene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | <10 | jxw | SW | 8270 C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | JTW | SW | 8270C |
| Benzo (k) fluoranthene | $\leqslant 10$ | ug/L | 09/24/2001 | 1276 | 2708 | <10 | jrw | SW | 8270C |
| Benzo (a) pyrene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/24/2001 | 2276 | 2708 | $<10$ | jrw | SW | 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $\leqslant 10$ | jrw | SW | 82700 |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 2.2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jxw | SW | 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jxw | SW | 8270C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Chrysene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | j5w | SW | 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | Sw | 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | Sw | 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/24/2001 | 12.76 | 2708 | $<50$ | jrw | SW | 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 2,6-Dinitrotoluene | $<10$. | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  | Prep Run |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting | Analyst |  |
| Number | Number | Limit | Initials Method Reference |  |  |  |  |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 707886 | SBIOO2:FB2:W091701:523 | $09 / 17 / 2001$ 18:45 |


| Di-m-octylphthalate | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fluoranthene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Fluorene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jnw | SW | 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Hexachloro-1, 3-butadiene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jxw | SW | 8270 C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/24/2001 | 1276 | 2708 | $<20$ | jxw | SW | 8270 C |
| Hexachioroethane | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Indeno (1, 2,3-cd) pyrene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SH | 8270C |
| Isophorone | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270 C |
| Naphthalene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Nitrobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | sw | 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Phenanthrene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Pyrene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | $8270{ }^{\circ}$ |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 78 | \% | 09/24/2001 | 1276 | 2708 |  | jrw | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 83 | 4 | 09/24/2001 | 1276 | 2708 |  | jrw | SW | 8270 C |
| Surrogate: dl4-Terphenyl | 83 | \% | 09/24/2001 | 1276 | 2708 |  | jrw | SW | 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | <50 | ug/L | 09/24/2001 | 1276 | 2708 | $<50$ | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jxw | SW | 8270 C |
| 2-Chlorophenol | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jxw | SW | 8270C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW | 8270C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$10 / 12 / 2001$

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Rumber | Number | Limit | Initials Method Reference |  |  |

## SAMPLE NO. SAMPLE DESCRIPTION <br> DATE/TIME TAKEN

 707886 SBI002:FB2:W091701:52309/17/2001 18:45

| Methylphenol | <10 |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW 8270c |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| meta \& para-Methylphenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW 8270C |
| 2-Nitrophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | S* 8270C |
| Pentachlorophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jıw | SW 8270c |
| Phenol | <10 |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jxw | SW 8270C |
| 2,4,5-Trichlorophenol | <10 |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW 8270C |
| 2,4,6-Trichlorophenol | $<10$ |  | ug/L | 09/24/2001 | 1276 | 2708 | $<10$ | jrw | SW 8270C |
| Surrogate: d6-Phenol | 71 |  | \% | 09/24/2001. | 1276 | 2708 |  | jrw | SW 8270C |
| Surrogate: 2-Fluorophenol | 74 |  | \% | 09/24/2001 | 1276 | 2708 |  | jrw | SW 8270C |
| Surrogate: Tribromophenol | 86 | note | 8 | 09/24/2001 | 1276 | 2708 |  | jrw | SW 8270C |
| TPH - Method 418.1 (AQ) | $<0.2$ |  | mg/L | 09/27/2001 | 603 | 724 | <0.2 | 260 | EPA 418.1 |

# TestAmerica，Incorporated 

ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin，OH 43016

Job Number： 01.17216
Client Project ID：South Bend Indiana SBI002

|  |  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |

SAMPLE NO．SAMPLE DESCRIPTION
708064

DATE／TIME TAKEN 09／17／2001

| 8260 －SWB46（AQ） | Complete |  | 09／25／2001 | 3601 | Complete | ding |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | ＜20．0 | ug／L | 09／25／2001 | 3601 | ＜20．0 | dmg | SW 8260日 |
| Benzene | ＜1．0 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| tert－Butylbenzene | $<2.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| sec－Butylbenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| n－Butylbenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Bromochloromethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Bromodichloromethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | ding | SW 8260B |
| Bromoform | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Bromobenzene | ＜1．0 | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW 8260b |
| 2－Butanone（MEK） | $<12.5$ | ug／L | 09／25／2001 | 3601 | $<12.5$ | dmg | SW 8260B |
| Carbon disulfide | ＜1．0 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260 B |
| Chlorobenzene | ＜1．0 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Chloroethane | ＜ 5.0 | ug／L | 09／25／2001 | 3601 | $<5.0$ | dmg | SW 8260B |
| 2－Chlorotoluene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 4－Chlorotoluene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260 B |
| Chloroform | ＜1．0 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260日 |
| Chloromethane | ＜ 5.0 | ug／L | 09／25／2001 | 3601 | $<5.0$ | dmg | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW 8260b |
| Dibromomethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260日 |
| Dichlorodifluoromethane | ＜1．0 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 1，2－Dibromo－3－chloropropane | $<5.0$ | ug／L | 09／25／2001 | 3601 | ＜5．0 | ding | SW 8260b |
| 1，2－Dichlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 1，3－Dichlorobenzene | ＜1．0 | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW 8260B |

# TestAmerica，Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin） 6130 Wilcox Rd． Dublin，OH 43016

10／12／2001

Job Number： 01.17216
Client Project ID：South Bend Indiana SBI002

SAMPLE NO． 708064

SAMPLE DESCRIPTION
SBI002：TB1：091701

| Prep | Run |  |  |
| :--- | :--- | :--- | :--- |
| Batch | Batch | Reporting | Analyst |
| Number | Number | Limit | Initials |

Method Reference

DATE／TIME TAKEN 09／17／2001

| －Dichlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | amg | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1．1－Dichloroethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260 B |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW 8260B |
| 1，1－Dichloroethene | ＜1．0 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| cis－1，2－Dichloroethene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260 B |
| trans－1，2－Dichloroethene | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | ding | SW 8260日 |
| 1，2－Dichloropropane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | amg | SW 8260B |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW 8260B |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260日 |
| 1，1－Dichloropropene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260日 |
| cis－1，3－Dichloropropene | ＜1．0 | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260日 |
| trans－1，3－Dichloropropene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dimg | SW 8260B |
| Ethylbenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260日 |
| Hexachlorobutadiene | $<5.0$ | ug／L | 09／25／2001 | 3601 | $<5.0$ | dmg | SW 8260B |
| n －Hexane | $<5.0$ | ug／L | 09／25／2001 | 3601 | ＜5．0 | dmg | SW 8260b |
| 2－Hexanone | $<12.5$ | ug／L | 09／25／2001 | 3601 | $<12.5$ | dmg | SW 8260B |
| Isopropyibenzene（Cumene） | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| p－Isopropyltoluene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Bromomethane | ＜5．0 | ug／L | 09／25／2001 | 3601 | ＜5．0 | dmg | SW 8260B |
| Methylene Chloride | $<5.0$ | ug／L | 09／25／2001 | 3601 | ＜5．0 | dmg | SW 8260B |
| Methyl t－butyl ether（MTBE） | $<5.0$ | ug／L | 09／25／2001 | 3601 | $<5.0$ | dmg | SW 8260B |
| 4－Methyl－2－pentanone（MIBK） | $<12.5$ | ug／L | 09／25／2001 | 3601 | $<12.5$ | dmg | SW 8260B |
| n－Propylbenzene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Styrene | $<1.0$ | ug／L | 09／25／2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Naphthalene | $<5.0$ | ug／L | 09／25／2001 | 3601 | $<5.0$ | dmg | SW 8260B |
| 1，1，1，2－Tetrachloroethane | $<1.0$ | ug／L | 09／25／2001 | 3601 | ＜1．0 | dmg | SW 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)

10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17216
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. | SAMPLE DESCRIPTION | DATE/TIME TAKEN |
| :--- | :--- | :--- |
| 708064 | SBI002:TB1:091701 | $09 / 17 / 2001$ |


| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tetrachloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | <1.0 | ding | SW 8260日 |
| Toluene | $<1.0$ | $\underline{u g / L}$ | 09/25/2001 | 3601 | <1.0 | dmg | SW 8260B |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 09/25/2001 | 3601 | <5.0 | dmg | SW 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Trichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/25/2001 | 3601 | $<5.0$ | dmg | SW 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| Xylenes | $<1.0$ | ug/L | 09/25/2001 | 3601 | $<1.0$ | dmg | SW 8260B |
| d4-1,2-Dichloroethane (surr) | 107 | \% | 09/25/2001 | 3601 |  | dmg | SW 8260B |
| Dibromofluoromethane (surr) | 103 | 8 | 09/25/2001 | 3601 |  | dmg | SW 8260B |
| d8-Toluene (surr) | 96 | $\%$ | 09/25/2001 | 3601 |  | dmg | SW 8260B |
| Bromofluorobenzene (surr) | 108 | \% | 09/25/2001 | 3601 |  | dmg | SW 8260日 |

## QUALITY CONTROL FLAG DEFINITIONS

Job Number: 01.17216
(*) Indicates an out-of-control QC. The analytical data was reported based on other supporting quality control information.
(Note) Indicates to review the notes and comments section of the analytical report as there is additional information concerning this analytical result.
(MS) Indicates that the Matrix Spike (MS) was out of statistical advisory limits.
(MSD) Indicates that the Matrix Spike Duplicate (MSD) was out of statistical advisory limits.
(RPD) Indicates that the Relative Percent Difference (RPD) for the MS/MSD pair was outside of statistical advisory limits.
(SS) Indicates that the MS and MSD were out of statistical advisory limits.
(SSR) Indicates that the MS, MSD and RPD were out of statistical advisory limits.
(MSR) Indicates that the MS and RPD were out of statistical advisory limits.
(MSDR) Indicates that the MSD and RPD were out of statistical advisory limits.
(DL) Indicates that the MS and MSD were diluted out and the percent recoveries of the spikes could not be calculated.
(LS) Indicates that statistical accuracy and precision data is not available for spike concentrations which are <.1/4 of the sample amount. Care should be used in interpreting this data.
(J) Indicates estimated concentration due to internal standard areas or surrogate recoveries outside of control limits. A sample matrix effect is usually indicated.
(DW) Indicates Dry Weight.
Analytical Reporting Limits
The reporting limits listed for non-aqueous samples in the analytical report section are Practical Quantitation Limits (PQLS). These PQLs are based upon a typical standard weight used for a non-aqueous sample. The reporting limit for a sample may be different from the PQL listed depending upon the actual weight of sample used, the samples moisture content and any dilutions used during the analysis.

## NOTES AND COMMENTS

## TestAmerica Job Number: 01.17216

Sample Number: 707881
Analysis: 8260 Volatiles
The results for the unspiked sample did not match the MS/MSD samples. This was confirmed by duplicate analysis.

Sample Number: 707885-6, 707866, 707868-9
Analysis: 8270 BNA
The MB and LCS had the acid portion of a sample extract added to them. The acid portion of the LCS was concentrated and analyzed separately. All LCS recoveries were within method specifications and no target analytes were detected in the method blank.



## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016
Job Number: 01.17192

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

Sample Number

Sample Description
707749 SBI002:HMWIS:G091801:523 707750 707751 707752 707863 707965

SBI002:HMWII: G091801:523 SBI002:HMW1D: G091801:523 SBI002:TBI:091801 SBI002:19S:G091801:505 SBIO02:19S:G091801D:505

Date
Taken
09/18/2001 $09 / 18 / 2001$ $09 / 18 / 2001 \quad 09 / 19 / 2001$ $09 / 18 / 2001 \quad 09 / 19 / 2001$ 09/18/2001 09/18/2001

Date Received

09/19/2001 $09 / 19 / 2001$

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted only in its entirety.

Enclosure


# ANALYTICAL REPORT 

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION

 707729DATE/TIME TAKEN 09/18/2001 08:50

| ICPMS TOTAL METALS | Complete |  | 09/28/2001 |  | 2566 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | 0.0111 | mg/L | 09/28/2001 | 1847 | 3691 | <0.0050 | ekh | SW | 6020 |
| Barium, ICPMS | 0.163 | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3899 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3570 | $<0.0010$ | ekh | Sw | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3970 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | 0.0170 | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3648 | $<0.0010$ | ekh | Sw | 6020 |
| Mercury, CVAA | $<0.0002$ | mg/L | 09/25/2001 | 1414 | 1360 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | mg/L | 09/27/2001 | 752 | 578 | $<0.0050$ | 1nh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | mg/L | 09/28/2001 | 1847 | 3905 | $<0.0005$ | ekh | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1847 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 752 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1414 |  | Complete | epk | SW | 7470A |
| VOLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/26/2001 |  | 3603 | Complete | bmh |  |  |
| Acetone | $<20.0$ | ug/L | 09/26/2001 |  | 3603 | <20.0 | bmh | SW | 8260B |
| Benzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 82608 |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | <1.0 | bmh | Sw | 8260B |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 82608 |
| n-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| Bromochloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| Bromoform | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| Bromobenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 82608 |
| 2-Butanone (MEK) | <12.5 | ug/L | 09/26/2001 |  | 3603 | <12.5 | bmh | SW | 8260B |
| Carbon disulfide | <1.0 | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 707729

SAMPIE DESCRIPTION
SBI002:MW28S:G091801:505

10/12/2001
imit
Initials Method Reference
1

| Carbon tetrachloride | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260E |
| Chloroethane | $<5.0$ | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260 B |
| Chloroform | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260 - |
| Chloromethane | $<5.0$ | $u g / L$ | 09/26/2001 | 3603 | < 5.0 | bmh | SW 8260日 |
| Dibromochloromethane | <1.0 | $\mathrm{ug} / \mathrm{L}$ | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | Sw 8260b |
| DichlorodiEluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 82608 |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260 B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260b |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260B |
| 1,1-Dichloroethene | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| trans-1,2-Dichloroethene | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3603 | $<1.0$ | bmh | SW 8250日 |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | brh | SW 8260b |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | brih | SW 8260B |
| Cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| trans-1,3-Dichloropropene | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Ethylbenzene | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 707729

SAMPLE DESCRIPTION
SBI002:MW28S:G091801:505

DATE/TIME TAKEN 09/18/2001 08:50

| Hexachlorobutadiene | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n -Hexane | $<5.0$ | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3603 | $<12.5$ | bmh | SW | 82608 |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Bromomethane | < 5.0 | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8250b |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 82608 |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SN | 8260 B |
| 4-Methyl-2-pentanone (MIBK) | <12.5 | ug/L | 09/26/2001 | 3603 | $<12.5$ | bmh | SW | 8260B |
| n-Propylibenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| Styrene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW | 82608 |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| 1,1,2,2-Tetrachloroethane | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | Sw | 8260 B |
| Tetrachloroethene | 2.9 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Toluene | $<1.0$ | $u g / L$ | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260日 |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/26/2001 | 3603 | < 5.0 | bmh | SW | 8260 B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8250 B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Trichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | brih | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/25/2001 | 3603 | $<5.0$ | bmin | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| Vinyl Chloride | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bman | SW | 8260 B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Unita | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst Initials | Method R | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | PIION |  |  |  |  | DAT | /TIME | TAKEN |
| 707729 |  | SBI002:ML | 28S | G0918 | : 505 |  |  |  | 09/1 | 8/2001 | 1 08:50 |


| Xylenes | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260 B |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d4-1,2-Dichloroethane (surr) | 104 | 8 | 09/26/2001 | 3603 |  | bmh | SW 8260B |  |
| Dibromofluoromethane (surr) | 101 | \% | 09/26/2001 | 3603 |  | bmh | SW 8260b |  |
| d8-Toluene (surr) | 95 | 8 | 09/26/2001 | 3603 |  | bmh | SW 8260] |  |
| Bromofluorobenzene (surr) | 107 | 8 | 09/26/2001 | 3603 |  | bmh | SW 8260 B |  |
| $\begin{array}{ll} \text { SAMPLE NO. SA } \\ 707730 \end{array}$ | LE | TIO | $L: 505$ |  |  |  | E/TIME $18 / 2001$ | $\begin{gathered} \text { TAKEN } \\ 08: 40 \end{gathered}$ |


| ICPMS TOTAL METALS | Complete |  | 09/28/2001 |  | 2566 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | 0.0112 | mg/L | 09/28/2001 | 1847 | 3691 | <0.0050 | ekh | SW | 6020 |
| Barium, ICPMS | 0.0628 | mg/L | 09/28/2001 | 1847 | 3899 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3570 | $<0.0010$ | ekh | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | mg/L | 09/28/2001 | 184.7 | 3970 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | 0.0170 | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3648 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/25/2001 | 1414 | 1360 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/27/2001 | 752 | 578 | $<0.0050$ | 1nh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | mg/L | 09/28/2001 | 1847 | 3905 | $<0.0005$ | ekh | SW | 6020 |
| Metals Digestion, ICFMS | Complete |  | 09/26/2001 | 1847 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 752 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1414 |  | Complete | epk | SW | 7470A |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch Batch Reporting Analyst |  |
| Number Number Limit | Initials Method Reference |  |  |  |

SAMPLE NO. 707730

SAMPLE DESCRIPTION
SBI002:MW28D:G091801:505

DATE/TIME TAKEN 09/18/2001 08:40

| 8260 - SWB46 (AQ) | Complete |  | 09/26/2001 | 3603 | Complete | bmh |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | <20.0 | ug/L | 09/26/2001 | 3603 | <20.0 | bmh | SW | 8260 B |
| Benzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| n-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Bromochloromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | brah | SW | 8260 B |
| Bromodichloromethane | <1.0 | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| Eromoform | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| Bromobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 | 3603 | $<12.5$ | bmh | SW | 8260B |
| Carbon disulfide | <1.0 | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | brah | SW | 8260 B |
| Chloroethane | $<5.0$ | ug/L | 09/26/2001 | 3603 | <5.0 | bmic | SW | 8260日 |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3503 | $<1.0$ | bmh | SW | 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | Sw | 8260 B |
| Chloroform | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Chloromethane | < 5.0 | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| Dibromomethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Dichlorodifiuoromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | < 5.0 | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW | 82608 |
| 1,2-Dichlorobenzene | $<2.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |

# TestAmerica，Incorporated 

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \＆ASSOC．（Dublin）<br>10／12／2001<br>6130 Wilcox Rd． Dublin，OH 43016

Job Number：01．17192
Client Project ID：South Bend Indiana SBI002


SAMPLE NO．SAMPLE DESCRIPTION
707730 SBI002：MW28D：G091801：505

| 1，1－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | Sw 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1，2－Dichloroethane | ＜1．0 | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | Sw 8260 B |
| 1，1－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| cis－1，2－Dichloroethene | ＜1．0 | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260 B |
| trans－1，2－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260日 |
| 1，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | brih | SW 8260B |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1，1－Dichloropropene | ＜1．0 | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Cis－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmih | SW 8260B |
| trans－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Ethylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Hexachlorobutadiene | ＜5．0 | ug／L | 09／26／2001 | 3603 | ＜ 5.0 | bmh | SW 8260B |
| n －Hexane | $<5.0$ | ug／L | 09／26／2001 | 3603 | ＜5．0 | brun | SW 8260B |
| 2－Hexanone | $<12.5$ ． | ug／L | 09／26／2001 | 3603 | $<12.5$ | bmh | SW 8260B |
| Isopropylbenzene（Cumene） | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| p－Isopropyltoluene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Bromomethane | $<5.0$ | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| Methylene Chloride | $<5.0$ | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| Methyl t－butyl ether（MTBE） | ＜5．0 | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260b |
| 4－Methyl－2－pentanone（MIBK） | $<12.5$ | ug／L | 09／26／2001 | 3603 | $<12.5$ | bmh | SW 8260日 |
| $n$－Propylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Styrene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260日 |
| Naphthalene | ＜ 5.0 | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260 B |
| 1，1，1，2－Tetrachloroethane | ＜1．0 | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260日 |
| 1，1，2，2－Tetrachioroethane | ＜1．0 | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260B |

## TestAmerica, Incorporated

PAGE 9 of 127

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd
Dublin, OH. 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 707730 | SBIO02:MW28D:G091801:505 | $09 / 18 / 2001$ 08:40 |


| Tetrachloroethene | 12.8 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Toluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Trichlorocthene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1. 0 | bmh | SW | 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260] |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260日 |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| Xylenes | <1.0 | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 106 | $\%$ | 09/26/2001 | 3603 |  | bmh | SW | 8260B |
| Dibromofluoromethane (surr) | 102 | $\%$ | 09/26/2001 | 3603 |  | bmb | SW | 8260B |
| ds-Toluene (surr) | 96 | \% | 09/26/2001 | 3603 |  | bmh | SW | 82608 |
| Bromofluorobenzene (surr) | 100 | 8 | 09/26/2001 | 3603 |  | bmh | SW | 82608 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>10/12/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Reault Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analyed | Number | Number | Limit | Initials Method Reference |  |

SAMPLE NO. SAMPLE DESCRIPTION 707731

SBIO02:HMW12D:G091801:505

DATE/TIME TAKEN 09/18/2001 08:30

| -CPMS TOTAL METALS | Complete |  | 09/28/2001 |  | 2566 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | mg/L | 09/28/2001 | 1847 | 3691 | $<0.0050$ | ekh | SW | 6020 |
| Barium, ICPMS | 0.0626 | mg/L | 09/28/2001 | 1847 | 3899 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | mg/L | 09/28/2001 | 1847 | 3570 | $<0.0010$ | ekh | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3970 | $<0.0050$ | ekh | Sw | 6020 |
| Lead, ICPMS | 0.0028 | mg/L | 09/28/2001 | 1847 | 3648 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/25/2001 | 1414 | 1360 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/27/2001 | 752 | 578 | $<0.0050$ | 1 nh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | mg/L | 09/28/2001 | 1847 | 3905 | $<0.0005$ | ekh | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1847 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 752 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1414 |  | Complete | epk | SW | 7470A |
| VOLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complețe |  | 09/26/2001 |  | 3603 | Complete | bmh |  |  |
| Acetone | <20.0 | ug/L | 09/26/2001 |  | 3603 | <20.0 | bmh | SW | 8260B |
| Benzene | <1.0 | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| sec-Butylbenzene | <1.0 | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| n-Butylbenzene | <1.0 | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260 B |
| Bromochloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260 B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | <1.0 | bmh | SW | 8260B |
| Bromoform | <1.0 | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| Bromobenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 |  | 3603 | $<12.5$ | bmh | SW | 8260B |
| Carbon disulfide | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | <1.0 | bmh | SW | 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting Analyst |  |
| Number | Number | Limit | Initials Method Reference |  |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 707731


## TestAmerica, Incorporated

## ANALYTICAL REPORT

## Kevin Wildman

| HULI, \& ASSOC. (Dublin) | $10 / 12 / 2001$ |
| :--- | ---: |
| 6130 Wilcox Rd. |  |
| Dublin, OH 43016 |  |

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 707731

SBIO02:HMW12D:G091801:505

DATE/TIME TAKEN 09/18/2001 08:30

| Hexachlorobutadiene | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n -Hexane | <5.0 | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW | 8260 B |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3603 | $<12.5$ | bmh | SW | 8260B |
| Isopropylbenzene (Cumene) | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| p-Isopropyltoluene | <1.0 | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW | 8260b |
| 4-Methyl-2-pentanone (MIEK) | $<12.5$. | ug/L | 09/26/2001 | 3603 | $<12.5$ | bmh | SW | 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260b |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1,1,2,2-Tetrachloroethane | <1.0 | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| Tetrachloroethene | 1.4 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| Toluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 82608 |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW | 8260 B |
| 1,1,1-Trichloroethane | 1.6 | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | Sw | 82608 |
| Trichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260日 |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260日 |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 | 3603 | < 5.0 | brah | SW | 8260 B |
| Vinyl Chloride | <1.0 | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260 B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>10/12/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 707731

SAMPLE DESCRIPTION
SBIO02:HMW12D:G091801:505
DATE/TIME TAKEN 09/18/2001 08:30

| Xylenes | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d4-1,2-Dichloroethane (surr) | 105 | 8 | 09/26/2001 | 3603 |  | bmh | SW | 82608 |
| Dibromofluoromethane (surr) | 101 | 8 | 09/26/2001 | 3603 |  | bmh | SW | 8260 B |
| ds-Toluene (surr) | 97 | \% | 09/26/2001 | 3603 |  | bmh | SW | 82608 |
| Bromofluorobenzene (surr) | 101 | 8 | 09/26/2001 | 3603 |  | bmh | SW | 8250 B |

DATE/TIME TAKEN 09/18/2001 09:50

| ICPMS TOTAL METALS | Complete |  | 09/28/2001 |  | 2566 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | $\mathrm{mig} / \mathrm{L}$ | 09/28/2001 | 1847 | 3691 | $<0.0050$ | ekh | SW | 6020 |
| Barium, ICPMS | 0.0555 | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3899 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3570 | $<0.0010$ | ekh | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | mg/L | 09/28/2001 | 1847 | 3970 | $<0.0050$ | elch | SW | 6020 |
| Lead, ICPMS | 0.0036 | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3648 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/25/2001 | 1414 | 1360 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | mg/L | 09/27/2001 | 752 | 578 | $<0.0050$ | 1 nh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3905 | $<0.0005$ | ekh | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1847 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 752 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1414 |  | Complete | epk | SW | 7470A |

# TestAmerica, Incorporated 

ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192

## Client Project ID: South Bend Indiana SBI002

|  |  | Prep Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batch Reporting Analyst |  |
| Analy | Number |  |  |

SAMPLE DESCRIPTION SBI002:HMW11D:G091801:505

DATE/TIME TAKEN 09/18/2001 09:50

| 8260-SWE46 (AQ) | Complete |  | 09/26/2001 | 3603 | Complete | bmh |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | $<20.0$ | ug/L | 09/26/2001 | 3603 | <20.0 | bmh | SW 8260 B |
| Benzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| n-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Bromochloromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260 B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Bromoform | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Bromobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | Sw 8260B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 | 3603 | <12.5 | bmh | SW 8260B |
| Carbon disulfide | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Chloroethane | $<5.0$ | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 4-Chlorotoluene | <1.0 | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260B |
| Chloroform | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260日 |
| Chloromethane | < 5.0 | vg/L | 09/26/2002 | 3603 | <5.0 | bmh | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/25/2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| 1,2-Dichlorobenzene | $<2.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260B |
| 1,4-Dichlorobenzene | <1.0 | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260B |

## TestAmerica，Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin，OH 43016
$10 / 12 / 2001$

Job Number：01．17192

$\begin{array}{ll}\text { SAMPLE NO．SAMPLE DESCRIPTION } \\ 707732 & \text { SBIOO2：HMW11D：G091801：505 }\end{array}$
DATE／TIME TAKEN 09／18／2001 09：50

| 1，1－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260日 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260日 |
| 1，i－Dichloroethene | ＜1．0 | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260B |
| cis－1，2－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| trans－1，2－Dichloroethene | ＜1．0 | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260B |
| 1，2－Dichloropropane | $<1.0$ | $\underline{u g / L}$ | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3603 | ＜1．0． | bmh | SW 8260B |
| 2，2－Dichloropropane | ＜1．0 | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 82608 |
| 1，1－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | Sw 8260 B |
| cis－1，3－Dichloropropene | ＜1．0 | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| trans－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260日 |
| Ethylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Hexachlorobutadiene | $<5.0$ | ug／L | 09／26／2001 | 3603 | ＜5．0 | bmh | SW 8260 B |
| n －Hexane | $<5.0$ | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| 2－Hexanone | $<12.5$ ． | ug／L | 09／26／2002 | 3603 | $<12.5$ | bmh | SW 8260B |
| Isopropylbenzene（Cumene） | $<1.0$ | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260B |
| p－Isopropyltoluene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Bromomethane | ＜ 5.0 | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| Methylene Chloride | $<5.0$ | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260 B |
| Methyl t－butyl ether（MTBE） | ＜5．0 | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| 4－Methyl－2－pentanone（MIBK） | $<12.5$ | ug／L | 09／26／2001 | 3603 | $<12.5$ | bmh | SW 8260日 |
| n －Propylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260日 |
| Styrene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Naphthalene | $<5.0$ | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260日 |
| 1，1，1，2－Tetrachloroethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1，1，2，2－Tetrachloroethane | ＜1．0 | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260 B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION DATE/TIME TAKEN
707732 SBIO02:HMW11D:G091801:505

| Tetrachloroethene | 34.2 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Toluene | <1.0 | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| 1,2,4-Trichlorobenzene | $\leqslant 5.0$ | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 82608 |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Trichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0. | bmh | SW | 82608 |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | Sw | 8260 B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 | 3603 | < 5.0 | bmh | SW | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Xylenes | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| d4-1,2-Dichloroethane (surr) | 105 | $\%$ | 09/26/2001 | 3603 |  | bmh | SW | 8260B |
| Dibromofluoromethane (surr) | 102 | \% | 09/26/2001 | 3603 |  | bmh | SW | 82608 |
| d8-Toluene (surr) | 96 | \% | 09/26/2001 | 3603 |  | bmh | SW | 8260B |
| Bromofluorobenzene (surr) | 100 | 4 | 09/26/2001 | 3603 |  | bmh | SW | 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 707733 | SBIOO2:HMW1II:G091801:505 |

DATE/TIME TAKEN
09/18/2001 10:00

| ICPMS TOTAL METALS | Complete |  | 09/28/2001 |  | 2566 | Complete | ekh | SN | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICDMS | $<0.0050$ | mg/L | 09/28/2001 | 1847 | 3691 | $<0.0050$ | ekh | SW | 6020 |
| Barium, ICPMS | 0.0325 | mg/L | 09/28/2001 | 1847 | 3899 | $<0.0050$ | ekch | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | mg/L | 09/28/2001 | 1847 | 3570 | $<0.0010$ | ekh | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3970 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | 0.0025 | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3648 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/25/2001 | 1414 | 1360 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | mg/L | 09/27/2001 | 752 | 578 | $<0.0050$ | Inh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3905 | $<0.0005$ | ekh | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1847 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 752 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1414 |  | Complete | epk | SW | 7470A |
| VOLATILE COMPOUNDS - 8260 |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AO) | Complete |  | 09/26/2001 |  | 3603 | Complete | bmh |  |  |
| Acetone | $<20.0$ | ug/L | 09/26/2001 |  | 3603 | $<20.0$ | bmh | SW | 8260B |
| Benzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| sec-Butylbenzene | 1.3 | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| n-Butylbenzene | <1.0 | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | $8260 B$ |
| Bromochloromethane | <1.0 | ug/L | 09/26/2001 |  | 3603 | <1.0 | bmh | SW | 8260B |
| Bromodichloromethane | <1.0 | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | Sw | 8260B |
| Eromoform | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| Bromobenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| 2-Butanone (MEK) | <12:5 | ug/L | 09/26/2001 |  | 3603 | $<12.5$ | $b \mathrm{mh}$ | SW | 8260B |
| Carbon disulfide | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | <1.0 | bmh | SW | 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

10/12/2001


SAMPLE NO. SAMPLE DESCRIPTION 707733

SBI002:HMW11I: G091801:505

DATE/TIME TAKEN 09/18/2001 10:00

| Carbon tetrachloride | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260b |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Chloroethane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW 82608 |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001. | 3603 | $<1.0$ | bmh | SW 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260 B |
| Chloroform | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/26/2001 | 36.03 | $<5.0$ | bmb | SW 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | $u g / L$ | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260 B |
| cis-1,2-Dichloroethene | 35.5 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| trans-1,2-Dichloroethene | 5.1 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,2-Dichloropropane | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | brih | SW 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 82608 |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260 B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260 B |
| Cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| trans-1, 3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260 B |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 82608 |

ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)

10/12/2001 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Bnalyzed | Batch | Reporting Analyst |  |
| Number | Number Limit | Initials Method Reference |  |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 707733

SBI002:HMW11I: G091801:505

DATE/TIME TAKEN 09/18/2001 10:00


## TestAmerica, Incorporated

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
707733 SBIOO2:HMW11I:G091801:505

| Xylenes | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260 B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d4-1,2-Dichloroethane (surr) | 104 | 8 | 09/26/2001 | 3603 |  | bmh | SW ${ }^{\text {\% }}$ 8260B |
| Dibromofluoromethane (gurr) | 103 | 4 | 09/25/2001 | 3603 |  | bmh | SW 8260 B |
| d8-Toluene (surr) | 95 | \% | 09/26/2001 | 3603 |  | bmh | SW 8260] |
| Bromofluorobenzene (aurr) | 99 | \% | 09/26/2001 | 3603 |  | bmh | Sw 8260日 |

## SAMPLE NO. SAMPLE DESCRIPTION 707734 <br> SBI002:HMW11I:G091801D:505

| ICPMS TOTAL METALS | Complete |  | 09/28/2001 |  | 2566 | Complete | ekh |  | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | mg/L | 09/28/2001 | 1847 | 3691 | $<0.0050$ | ekh | SW | 6020 |
| Barium, ICPMS | 0.0335 | mg/L | 09/28/2001 | 1847 | 3899 | $<0.0050$ | ekh | S.W | 6020 |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3570 | $<0.0010$ | ekh | S | 6020 |
| Chromium, ICPMs (0.005) | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3970 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | 0.0022 | mg/L | 09/28/2001 | 1847 | 3648 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | mg/L | 09/25/2001 | 1414 | 1360 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | mg/L | 09/27/2001 | 752 | 578 | $<0.0050$ | Inh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3905 | <0.0005 | ekh | S | 6020 |
| Metals Digestion, ICFMS | Complete |  | 09/26/2001 | 1847 |  | Complete | clm | S | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 752 |  | Complete | clm | S | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1414 |  | Complete | epk | SW | 7470A |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

## HULI \& ASSOC. (Dublin)

10/12/2001

## 6130 Wilcox Rd.

Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 707734

SAMPLE DESCRIPTION SBI002:HMW11I:G091801D:505

DATE/TIME TAKEN 09/18/2001 10:00

| 8260 - SW846 (AQ) | Complete |  | 09/26/2001 | 3603 | Complete | bmh |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | <20.0 | ug/L | 09/26/2001 | 3603 | <20.0 | bmh | SW 8260日 |
| Benzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| tert-Butylbenżene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| sec-Butylbenzene | 1.4 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| n-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Bromochloromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260B |
| Bromoform | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Bromobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260b |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 | 3603 | $<12.5$ | bmh | SW 8260B |
| Carbon disulfide | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Chloroethane | $<5.0$ | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260B |
| Chloroform | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | brnh | SW 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bma | SW 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8250b |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW 82608 |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $\leqslant 1.0$ | bmh | SW 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260B |
| 1,4-Dichlorobenzene | <1.0 | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260B |

## ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin，OH 43016

Job Number：01．17192
Client Project ID：South Bend Indiana SBI002


SAMPLE NO．
707734
SAMPLE DESCRIPTION SBI002：HMW11I：G091801D：505

10／12／2001 Limit

DATE／TIME TAKEN 09／18／2001 10：00

| 1，1－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260b |
| 1，1－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260日 |
| Cis－1，2－Dichloroethene | 34.2 | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| trans－1，2－Dichloroethene | 5.3 | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260B |
| 1，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260日 |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260B |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1，1－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Cis－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| trans－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Ethylbenzene | ＜1．0 | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Hexachlorobutadiene | $<5.0$ | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| n －Hexane | $<5.0$ | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| 2－Hexanone | $<12.5$. | ug／L | 09／26／2001 | 3603 | $<12.5$ | bmh | SW 8260B |
| Isopropylbenzene（Cumene） | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| p－Isopropyltoluene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Bromomethane | $<5.0$ | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| Methylene Chloride | $<5.0$ | ug／L | 09／26／2001 | 3603 | ＜ 5.0 | bmh | SW 8260B |
| Methyl t－butyl ether（MTBE） | $<5.0$ | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260b |
| 4－Methyl－2－pentanone（MIBK） | $<12.5$ | ug／L | 09／26／2001 | 3603 | $<12.5$ | bmh | SW 82608 |
| n－Propylbenzene | 1.3 | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260日 |
| Styrene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Naphthalene | $<5.0$ | ug／L | 09／26／2001 | 3603 ＊ | ＜5．0 | bmh | SW 8260日 |
| 1，1，1，2－Tetrachloroethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bah | SW 8260B |
| 1，1，2，2－Tetrachloroethane | ＜1．0 | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 707734 | SBIOO2:HMW11I:GO91801D:505 |


| Tetrachloroethene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Toluene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 82608 |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/26/2001 | $\because$ | 3603 | $<5.0$ | bmh | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 82608 |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| Trichloroethene | 12.1 | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bma | SW | 8260B |
| 1,2.3-Trichloropropane | $<5.0$ | ug/L | 09/26/2001 |  | 3603 | <5.0 | bmh | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260 B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 |  | 3603 | $<5.0$ | bmh | SH | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 82608 |
| Xylenes | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260日 |
| d4-1,2-Dichloroethane (surr) | 103 | $\%$ | 09/26/2001 |  | 3603 |  | bmh | SW | 8260B |
| Dibromofluoromethane (surr) | 100 | \% | 09/26/2001 |  | 3603 |  | bmh | SW | 8260B |
| d8-Toluene (surr) | 96 | 8 | 09/26/2001 |  | 3603 |  | brh | SW | 8260 B |
| Bromofluorobenzene (surr) | 100 | \% | 09/26/2001 |  | 3603 |  | bmh | SW | 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

| HULL \& ASSOC. (Dublin) | 10/12/2001 |
| :--- | ---: |
| 6130 Wilcox Rd. |  |

Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch Reporting Analyst |  |
| Analy | Number | Number Limit | Initials Method Reference |  |

## SAMPLE NO. SAMPLE DESCRIPTION

 707735SBI002:MW24D:G091801:505

DATE/TIME TAKEN 09/18/2001

| ICPMS TOTAL METALS | Complete |  | 09/28/2001 |  | 2566 | Complete | ekh |  | 6020 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | 0.0100 | mg/L | 09/28/2001 | 1847 | 3691 | $<0.0050$ | ekh |  | 6020 |  |
| Barium, ICPMS | 0.0723 | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3899 | $<0.0050$ | ekh |  | 6020 |  |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3570 | $<0.0010$ | ekh | SN | 6020 |  |
| Chromium, ICPMS (0.005) | $<0.0050$ | mg/L | 09/28/2001 | 1847 | 3970 | $<0.0050$ | ekh |  | 6020 |  |
| Lead, ICPMS | 0.110 | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3648 | $<0.0010$ | ekh | SW | 6020 |  |
| Mercury, CVAA | $<0.0002$ | mg/L | 09/25/2001 | 1414 | 1360 | $<0.0002$ | epk | S | 7470A |  |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/27/2001 | 752 | 578 | $<0.0050$ | lnh | SH | 7740 |  |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3905 | $<0.0005$ | ekh | SW | 6020 |  |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1847 |  | Complete | clm |  | 3010A |  |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 752 |  | Complete | clm | SW | 3020A |  |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1414 |  | Complete | epk | SW | 7470A |  |
| Prep, Base Neutral | Complete |  | 09/24/2001 | 1277 |  | Complete | rec |  | A 625 | SW 352 |
| Prep, Acid Extractable | Complete |  | 09/24/2001 | 1277 |  | Complete | rec |  | A 625 : | SW 352 |
| Prep, TPH DRO Aqueous | Complete |  | 09/25/2001 | 125 |  | Complete | mem |  |  |  |
| VOLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/26/2001 |  | 3603 | Complete | bmh |  |  |  |
| Acetone | <20.0 | ug/L | 09/26/2001 |  | 3603 | $<20.0$ | bruh | SW | 8260B |  |
| Benzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |  |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |  |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |  |
| n -Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |  |
| Bromochloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh |  | 8260B |  |
| Bromodichloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bonh |  | 8260] |  |
| Bromoform | <1.0 | ug/L | 09/26/2001 |  | 3603 | <1.0 | brnh | SW | 8260B |  |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


SAMPLE DESCRIPTION
SBI002:MW24D:G091801:505

DATE/TIME TAKEN 09/18/2001

| Eromobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 | 3603 | $<12.5$ | bmh | SW 8260B |
| Carbon disulfide | <1.0 | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Chloroethane | <5.0 | ug/L | 09/26/2001 | 3603 | < 5.0 | bmh | SW 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 4-Chlorotoluene | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Chloroform | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Chloromethane | <5.0 | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW 8260 B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/25/2001 | 3603 | <1.0 | bmh | SW 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260日 |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,2-Dibromo-3-chloropropane | <5.0 | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260 B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260 B |
| 1.1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260b |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260b |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |

# TestAmerica，Incorporated 

## ANALYTICAL REPORT

Kevin Wildman

| HULL \＆ASSOC．（Dublin） | 10／12／2001 |
| :--- | ---: |
| 6130 Wilcox Rd． |  | Dublin，OH 43016

Job Number：01．17192
Client Project ID：South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
|  | Analyzed | Number | Number Limit | Initials Method Reference |  |

SAMPLE
707735

SAMPLE DESCRIPTION
SBIO02：MW24D：G091801：505

## DATE／TIME TAKEN 09／18／2001

| Cis－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | Sw 8260b |
| Ethylbenzene | ＜1．0 | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260b |
| Hexachlorobutadiene | $<5.0$ | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| n －Hexane | ＜ 5.0 | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmin | SW 8260B |
| 2－Hexanone | $<12.5$ | ug／L | 09／25／2001 | 3603 | $<12.5$ | bmh | SW 8260日 |
| Isopropylbenzene（Cumene） | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260b |
| p－Isopropyltoluene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Bromomethane | $<5.0$ | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260 B |
| Methylene Chloride | $<5.0$ | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| Methyl t－butyl ether（MTBE） | $<5.0$ | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| 4－Methyl－2－pentanone（MIBK） | $<12.5$ | ug／L | 09／26／2001 | 3603 | $<12.5$ | bmh | SW 8260B |
| n－Propylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260B |
| Styrene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260日 |
| Naphthalene | $<5.0$ | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| 1，1，1，2－Tetrachloroethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260日 |
| 1，1，2，2－Tetrachloroethane | ＜1．0 | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Tetrachloroethene | 8.8 | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Toluene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260日 |
| 1，2，4－Trichlorobenzene | ＜5．0 | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| 1，1，1－Trichloroethane | 3.2 | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260日 |
| 1，1，2－Trichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Trichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Trichlorofluoromethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1，2，3－Trichioropropane | ＜ 5.0 | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| 1，2，4－Trimethylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002



## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin) 6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Bnalyzed | Batch Reporting Analyst |  |
| Number | Number Limit | Initials Method Reference |  |  |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |
| :--- | :--- | :--- |
| 707735 | SBIO02:MW24D:G091801:505 |


| Chrysene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82706 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | $8270{ }^{\text {c }}$ |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/26/2001 | 1277 | 2705 | $<50$ | dmg | SW | 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Dimethyl phthalate | $<10$ | $\underline{u g / L}$ | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Fluoranthene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Fluorene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| Hexachlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/26/2001 | 1277 | 2705 | $<20$ | dmg | SW | 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Indeno(1, 2, 3-cd) pyrene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | Sw | $8270{ }^{\text {c }}$ |
| Isophorone | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270C |
| Naphthalene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Nitrobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Phenanthrene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Pyrene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
$\begin{array}{ll}\text { HULI, \& ASSOC. (Dublin) } & \text { 10/12/2001 } \\ 6130 \text { Wilcox Rd. }\end{array}$
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method R | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE NO. | SAMPLE D | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 707735 | SBI002:MT | 4D : | 091 | : 505 |  |  |  | 09/ | 8/200 |  |


| Surrogate: d5-Nitrobenzene | 83 | 5 | 09/26/2001 | 1277 | 2705 |  | dmg | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorobiphenyl | 88 | 8 | 09/26/2001 | 1277 | 2705 |  | dmg | Sw | 8270 C |
| Surrogate: di4-Terphenyl | 63 | 8 | 09/26/2001 | 1277 | 2705 |  | ding | SW | 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/26/2001 | 1277 | 2705 | $<50$ | dmg | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2-Chlorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2-Methylphenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2-Nitrophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Pentachlorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Phenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Surrogate: d6-Phenol | 82 | 8 | 09/26/2001 | 1277 | 2705 |  | dmg | SW | 8270C |
| Surrogate: 2-Fluorophenal | 82 | 8 | 09/26/2001 | 1277 | 2705 |  | dmg | SW | 8270C |
| Surrogate: Tribromophenol | 79 | 8 | 09/26/2001 | 1277 | 2705 |  | dmg | SW | 8270 C |
| TPH - DRO AQUEOUS | $<1$ | $\mathrm{mg} / \mathrm{L}$ | 09/25/2001 | 125 | 213 | $<1$ | meb | SW | 8015M |
| TPH - GRO (Aqueous) | <1 | mg/L | 09/21/2001 |  | 85 | <1 | meb | SW | 8015M |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 707736

DATE/TIME TAKEN 09/18/2001


## TestAmerica，Incorporated

# ANALYTICAL REPORT 

Kevin Wildman
HULL \＆ASSOC．（Dublin）
10／12／2001
6130 Wilcox Rd．
Dublin，OH 43016

Job Number：01．17192
Client Project ID：South Bend Indiana SBI002


| SAMPLE NO．SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 707736 | SBI002：HMW23D：G091801：505 |

DATE／TIME TAKEN 09／18／2001

| Bromobenzene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2－Butanone（MEK） | ＜12．5 | ug／L | 09／26／2001 | 3603 | $<12.5$ | bmh | SW 8260B |
| Carbon disulfide | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug／r | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260日 |
| Chlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260b |
| Chloroethane | ＜5．0 | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| 2－Chlorotoluene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 4－Chlorotoluene | $<1.0$ | ug／L | ．09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260B |
| Chloroform | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Chloromethane | $<5.0$ | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260日 |
| Dibromomethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260b |
| 1，2－Dibromo－3－chloropropane | $<5.0$ | ug／L | 09／26／2001 | 3603 | ＜5．0 | bmb | SW 8260B |
| 1，2－Dichlorobenzene | ＜1．0 | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1，3－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260b |
| 1；4－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | brih | SW 8260B |
| 1，1－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 82608 |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1，1－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Cis－1，2－Dichloroethene | ＜1．0 | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| trans－1，2－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1，2－Dichloropropane | $<2.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260］ |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260b |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1，1－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8250日 |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

SAMPLE NO.
707736

SAMPLE DESCRIPTION SBIO 02:HMW23D:G091801:505

DATE/TIME TAKEN 09/18/2001

| Cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmin | SW | 82608 |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/26/2001 | 3603 | < 5.0 | bmh | SW | 8260 B |
| n -Hexane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260E |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3603 | $<12.5$ | bmin | SW | 82608 |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW | 8260 B |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 82608 |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/26/2001 | 3603 | <5.0 | bmin | SW | 82608 |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 | 3603 | $<12.5$ | bmh | SW | 8260 E |
| n-Propylbenzene | 61.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Styrene | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| Naphthalene | <5.0 | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| Tetrachloroethene | $<2.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| Toluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW | 8260 B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Trichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| 1,2,3-Trichloropropane | <5.0 | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260 B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 |  | 3603 | $<5.0$ | bmh | SW | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260 B |
| Xylenes | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | <1.0 | bmh | SW | 8260B |
| d4-1,2-Dichloroethane(surr) | 106 | \% | 09/26/2001 |  | 3603 |  | bmh | SW | 8260B |
| Dibromofluoromethane (surr) | 104 | \% | 09/26/2001 |  | 3603 |  | bmh | SW | 8260 B |
| ds-Toluene (aurr) | 95 | \% | 09/26/2001 |  | 3603 |  | bmh | SW | 8260B |
| Bromofluorobenzene (surr) | 100 | 4 | 09/26/2001 |  | 3603 |  | bmh | SW | 82608 |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | sw | 8270C |
| Acenaphthylene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | SW | 82700 |
| Anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 82700 |
| Benzo (a) anthracene | $<10$ | ug/L | 09/27/2001 | 1277. | 2705 | $<10$ | dmg | SW | 8270 C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Benzo(k) fluoranthene | $<10$ | $u g / L$ | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Benzo(a) pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270C |
| bia (2-Chloroethoxy) methane | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | <10 | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| 4-Bromophenyi phenyl ether | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 4-Chloroaniline | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |

[^45]
# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 707736

SAMPLE DESCRIPTION
SBIO02:HMW23D: G091801:505

DATE/TIME TAKEN 09/18/2001

| Chrysene | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Dibenzofuran | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270C |
| 1,2-Dichlorobenzene | $<10$ | , | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 1,3-Dichlorobenzene | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 1.4-Dichlorobenzene | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<50$ |  | ug/L | 09/27/2001 | 1277 | 2705 | $<50$ | ding | SW | $8270 C^{\circ}$ |
| Diethyl phthalate | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Dimethyl phthalate | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2,4-Dinitrotoluene | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2,6-Dinitrotoluene | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Di-n-octylphthalate | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2705 | <10 | drig | SW | 8270 C |
| Fluoranthene | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Fluorene | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2705 | <10 | dmg | SW | 8270C |
| Hexachlorobenzene | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270C |
| Hexachloro-1,3-butadiene | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Hexachlorocyclopentadiene | $<20$ |  | ug/L | 09/27/2001 | 1277 | 2705 | $<20$ | dmg | SW | 82700 |
| Hexachloroethane | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Indeno (1,2,3-cd) pyrene | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270C |
| Isophorone | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Naphthalene | <10 |  | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Nitrobenzene | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| N-Nitrosodi-n-propylamine | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Phenanthrene | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Pyrene | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$10 / 12 / 2001$

Job Number: 01.17192
Client Project ID: South Bend Indiana SBIOO2


SAMPLE DESCRIPTION
SBIO02: HMW23D: G091801:505

DATE/TIME TAKEN 09/18/2001

| Surrogate: d5-Nitrobenzene | 83 | $\%$ | 09/27/2001 | 1277 | 2705 |  | ding | Sw | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorobiphenyl | 80 | 8 | 09/27/2001 | 1277 | 2705 |  | dmg | SW | 82700 |
| Surrogate: d14-Terphenyl | 47 | $\%$ | 09/27/2001 | 1277 | 2705 |  | dmg | SW | 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | <50 | ug/L | 09/27/2001 | 1277 | 2705 | $<50$ | dmg | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2-Chiorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 05/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270c |
| 2-Methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | sw | 8270 C |
| 2-Nitrophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270C |
| Pentachlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270c |
| Phenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Surrogate: d6-phenol | 43 | \% | 09/27/2001 | 1277 | 2705 |  | dmg | SW | 8270C |
| Surrogate: 2-Fluorophenol | 80 | \% | 09/27/2001 | 1277 | 2705 |  | dmg | SW | 8270C |
| Surrogate: Tribromophenol | 76 | \% | 09/27/2001 | 1277 | 2705 |  | dimg | SW | 8270C |
| TPH - DRO AQUEOUS | $<1$ | mg/L | 09/26/2001 | 125 | 213 | <1 | meb | SW | 8015M |
| TPH - GRO (Aqueous) | $<1$ | mg/L | 09/21/2001 |  | 85 | <1 | meb | SW | 8015M |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION
707737
SBIO02:FBI:W091801:505

DATE/TIME TAKEN 09/18/2001 18:00


# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman

HULL \& ASSOC. (Dublin)<br>10/12/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


| Eromoform | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bromobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bma | SW | 8260 B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 | 3603 | $<12.5$ | bmh | SW | 8260B |
| Carbon disulfide | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| Chlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | Sw | 8260B |
| Chloroethane | <5.0 | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 4-Chlorotoluene | <1.0 | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 82608 |
| Chloroform | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | birh | SW | 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260] |
| Dibromomethane | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1.2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | Sw | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | brh | SW | 8260B |
| 2,2-Dichloropropane | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 10/12/2001 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 707737

SAMPLE DESCRIPTION
SBI002:FB1:W091801:505

DATE/TIME TAKEN 09/18/2001 18:00

| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| cis-1,3-Dichioropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| trans-1,3-Dichloropropene | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Hexachlorobutadiene | <5.0 | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| n -Hexane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3603 | $<12.5$ | bmh | SW | 8260B |
| İsopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| Methylene Chloride | <5.0 | ug/L | 09/26/2001 | 3603 | $<5.0$ | binh | SW | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 | 3603 | $<12.5$ | bmh | SW | 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| Styrene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260日 |
| 1,1,2,2-Tetrachloroethane | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| Tetrachloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| Toluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| 1,2,4-Trichlorobenzene | < 5.0 | ug/L | 09/26/2001 | 3603 | < 5.0 | $\dot{\text { binh }}$ | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Trichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| 1,2,3-Trichloropropane | <5.0 | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.17192

## Client Project ID: South Bend Indiana SBI002



SAMPLE NO. 707737

SAMPLE DESCRIPTION
SBI002:FBI:W091801:505

DATE/TIME TAKEN 09/18/2001 18:00

| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 82608 |
| Vinyl Acetate | <5.0 | ug/L | 09/26/2001 |  | 3603 | $<5.0$ | bmh | SW | 82608 |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| Kylenes | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 101 | \% | 09/26/2001 |  | 3603 |  | bmh | SW | 8260B |
| Dibromofluoromethane (surr) | 101 | 8 | 09/26/2001 |  | 3603 |  | bmh | SW | 8260B |
| d8-Toluene (surr) | 98 | \% | 09/26/2001 |  | 3603 |  | bmin | SW | 8260B |
| Bromofluorobenzene (surr) | 104 | $\%$ | 09/26/2001 |  | 3603 |  | bmh | SW | 8260B |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Acenaphthylene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| Anthracene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Benzo(b)fluoranthene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | amg | SW | 8270 C |
| Benzo(k)fluoranthene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Benzo (a) pyrene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| Benzyl alcohol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | <10 | dmg | SW | 8270 C |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| bis (2-Chloroethoxy) methane | $<10$ | $\mathrm{ug} / \mathrm{L}$ | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | $8270{ }^{\text {c }}$ |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/25/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 4-Chloroaniline | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | <10 | dmg | SW | 8270C |

# TestAmerica, Incorporated 

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## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
$10 / 12 / 2001$
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CR | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 707737 |  | SBIO02: F | : W0 | 1801 | 505 |  |  |  | 09/ | 8/2001 | 1 18:00 |


| 2-Chloronaphthalene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chrysene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | ding | SW 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | ding | SW 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/26/2001 | 1277 | 2705 | $<50$ | dmg | Sw 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW 8270C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | ding | SW 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW 8270C |
| Fluoranthene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Fluorene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Hexachlorocyclopentadiene | <20 | ug/L | 09/26/2001 | 1277 | 2705 | <20 | dmg | SW 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Indeno(1,2,3-cd) pyrene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Isophorone | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Naphthalene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Nitrobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Phenanthrene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Pyrene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batyzed | Reporting Analyst |  |  |
| Anmber | Number | Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION DATE/TIME TAKEN 707737

SBI002:FB1:W091801:505

| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270c |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: d5-Nitrobenzene | 86 | $\%$ | 09/26/2001 | 1277 | 2705 |  | dmg | SW 8270C |
| Surrogate: 2-Fluorobiphenyl | 88 | $\%$ | 09/26/2001 | 1277 | 2705 |  | dmg | SW 8270C |
| Surrogate: d14-Texphenyl | 80 | $\%$ | 09/26/2001 | 1277 | 2705 |  | dmg | SW 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/26/2001 | 1277 | 2705 | $<50$ | dmg | SW 8270C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 2-Chiorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | Sw 8270C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | ding | SW 8270C |
| 2-Methylphenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | ding | SW 8270C |
| 2-Nitrophenol | $<10$ | $u g / L$ | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Pentachlorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW 8270C |
| Phenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Surrogate: d6-Phenol | 82 | \% | 09/26/2001 | 1277 | 2705 |  | dimg | SW 8270C |
| Surrogate: 2-Fluorophenol | 85 | 8 | 09/26/2001 | 1277 | 2705 |  | dmg | SW 8270C |
| Surrogate: Tribromophenol | 74 | 8 | 09/26/2001 | 1277 | 2705 |  | dmg | SW 8270C |
| TPH - DRO AQUEOUS | $<1$ | mg/L | 09/26/2001 | 125 | 213 | <1 | meb | SW 8015M |
| TPH - GRO (Aqueous) | $<1$ | mg/L | 09/21/2001 |  | 85 | $<1$ | meb | SW 8015M |
| TPH - Method 418.1 (AQ) | $<0.2$ | $\mathrm{mg} / \mathrm{L}$ | 09/27/2001 | 602 | 723 | <0.2 | 260 | EPA 418.1 |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


DATE/TIME TAKEN
09/18/2001 11:40

| rrep, TPH DRO Aqueous | Complete |  | 09/25/2001 | 125 |  | Complete | mir |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VOLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/26/2001 |  | 3603 | Complete | bmh |  |
| Acetone | $<20.0$ | ug/L | 09/26/2001 |  | 3603 | <20.0 | bmh | SW 82608 |
| Benzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW 8260B |
| sec-Butylbenzene | 4.0 | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW 8260日 |
| $n$-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | <1.0 | bmh | SW 8260B |
| Bromochloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | <1.0 | bmh | SW 8260B |
| Bromoform | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW 82608 |
| Bromobenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW 8260 B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 |  | 3603 | $<12.5$ | bmh | SW 8260B |
| Carbon disulfide | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | <1.0 | bmh | SW 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW 8260B |
| Chloroethane | $<5.0$ | ug/L | 09/26/2001 |  | 3603 | $<5.0$ | bmh | SW 8260B |
| 2-Chlorotoluene | <1.0 | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW 8260日 |
| Chloroform | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmb | SW 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/26/2001 |  | 3603 | $<5.0$ | bmh | SW 8260 B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW 8260 B |
| Dibromomethane | $<1.0$ | ug/L | 09/26/2002 |  | 3603 | $<1.0$ | bmh | SW 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/26/2001 |  | 3603 | $<5.0$ | bmh | SW 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Bumber | Batch | Reporting Analyst | Limit | Initials Method Reference |

## SAMPLE NO. 707738 <br> SAMPLE DESCRIPIION <br> SBI002:HMW10S:G091801:505

DATE/TIME TAKEN 09/18/2001 11:40

| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,3-Dichlorobenzene | <1.0 | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | Sw 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| cis-1,2-Dichloroethene | 4.2 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | brah | SW 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260B |
| 2.2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 82608 |
| Cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260B |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW 8260b |
| n -Hexane | $<5.0$ | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3603 | <12.5 | bmh | SW 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmih | SW 8260B |
| Bromomethane | $<5.0$ | ug/L | -09/26/2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW 8260日 |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 | 3603 | $<12.5$ | bmh | SW 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Styrene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 707738

SBI002:HMW10S: G091801:505

DATE/TIME TAKEN
09/18/2001 11:40


## TestAmerica, Incorporated

# ANALYTICAL REPORT 

Kevin Wildman HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method R | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | SCR | TIO1 |  |  |  |  | DAT | /TIME | TAKEN |
| 707739 |  | SBIO 02 : H | N16D | G091 | 1:505 |  |  |  | 09/ | 8/2001 | 1 06:15 |



# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192

Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |

## SAMPLE NO. 707739

SAMPLE DESCRIPTION
SBIO02:HMW16D:G091801:505

DATE/TIME TAKEN 09/18/2001 06:15

| Libromomethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | binh | SW | 8260日 |
| 1,4-Dichlorobenzene | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1,1-Dichloroethane | 1.2 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| cis-1, 2 -Dichloroethene | 2.8 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| trans-1, 2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | brah | SW | 8260 B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | Sw | 8260B |
| Cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260b |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/25/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| n -Hexane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 82608 |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3603 | $<12.5$ | bmh | SW | B260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<2.0$ | bmh | SW | 82608 |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260日 |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260E |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |

## TestAmerica，Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin，OH 43016

Job Number：01．17192

## Client Project ID：South Bend Indiana SBI002

|  |  | Result | Flag | Unite | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO． | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | ／TIME | TAKEN |
| 707739 |  | SBIOO2 ：HM | N16D | G09 | $1: 505$ |  |  |  | 091 | 8／2001 | 1 06：15 |


| 4－Methyl－2－pentanone（MIBK） | $<12.5$ | ug／L | 09／26／2001 | 3603 | ＜12．5 | bmh | SW 8260b |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n－Fropylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260日 |
| Styrene | $<1.0$ | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260B |
| Naphthalene | $<5.0$ | ug／L | 09／26／2001 | 3603 | ＜5．0 | brah | SW 8260B |
| 1，1，1，2－Tetrachloroethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 82608 |
| 1，1，2，2－Tetrachloroethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260 B |
| Tetrachloroethene | $<1.0$ | ug／L | 09／26／2002 | 3603 | ＜1．0 | bmh | SW 8260B |
| Toluene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1，2，4－Trichlorobenzene | ＜5．0 | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| 1，1，1－Trichloroethane | 1.2 | ug／L | 09／26／2001 | 3603 | $\leqslant 1.0$ | bmh | SW 8260B |
| 1，1，2－Trichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SN 8260 B |
| Trichloroethene | 2.3 | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260 B |
| Trichlorofluoromethane | ＜1．0 | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260 B |
| 1，2，3－Trichloropropane | ＜5．0 | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW 82608 |
| 1，2，4－Trimethylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1，3，5－Trimethylbenzene | $<1.0$ | ug／L | 05／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Vinyl Acetate | ＜ 5.0 | ug／L | 09／26／2001 | 3603 | ＜ 5.0 | bmh | Sw 8260 B |
| Vinyl Chloride | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Xylenes | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| d4－1，2－Dichloroethane（surr） | 104 | \％ | 09／26／2001 | 3603 |  | bah | SW 8260B |
| Dibromofluoromethane（Burr） | 101 | ＊ | 09／26／2001 | 3603 |  | bmh | SW 8260日 |
| d8－Toluene（aurr） | 97 | 8 | 09／26／2001 | 3603 |  | brih | SW 8260日 |
| Bromofluorobenzene（surr） | 103 | $\%$ | 09／26／2001 | 3603 |  | bmh | SW 8260B |
| BASE NEUTRAL COMP．（AQ） 8270 Acenaphthene | $<10$ | ug／L | 09／26／2001 | 2705 | $<10$ | dmg | SW 8270C |

# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


SAMPLE NO SAMPLE DESCRIPM 707739

SBI002:HMW16D:G091801:505

| Acenaphthylene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | ding | Sw | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Anthracene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270C |
| Benzo(k)fluoranthene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270 C |
| Benzo(a) pyrene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/26/2001 | 2277 | 2705 | $<10$ | ding | SW | B270C |
| bis (2-Chloroethyl)ether | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270 C |
| bis(2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270C |
| 2,2'-oxybis(1-Chloropropane) | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270 C |
| 4-Eromophenyl phenyl ether | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 4-Chloroaniline | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Chrysene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Dibenzo( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | sw | 8270 C |
| 3,3'-Dichlorobenzidine | < 50 | ug/L | 09/26/2001 | 1277 | 2705 | $<50$ | dmg | SW | 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Dimethyl phthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | <10 | dmg | SW | 8270C |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |

SAMPLE NO. SAMPLE DESCRIPTION 707739

DATE/TIME TAKEN 09/18/2001 06:15

| Di-n-octylphthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | Sw | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fluoranthene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270C |
| Fluorene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Hexachlorobenzene | $<10$ | ,ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/26/2001 | 1277 | 2705 | <20 | dmg | SW | 8270 C |
| Hexachloroethane | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| Indeno (1,2,3-cd) pyrene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Isophorone | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270 C |
| Naphthalene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270 C |
| Nitrobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | $8270{ }^{\text {c }}$ |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Phenanthrene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | $8270{ }^{\text {c }}$ |
| Pyxene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | ding | SW | 82700 |
| Surrogate: d5-Nitrobenzene | 81 | \% | 09/26/2001 | 1277 | 2705 |  | ding | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 85 | 8 | 09/26/2001 | 1277 | 2705 |  | dmg | SW | 8270C |
| Surrogate: di4-Terphenyl | 51 | 8 | 09/26/2001 | 1277 | 2705 |  | dmg | SW | 8270 C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/26/2001 | 1277 | 2705 | $<50$ | dimg | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2-Chlorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270 C |
| 2,4-Dichlorophemol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 707739 | SBIOO2:HMW16D:G091801:505 |

DATE/TIME TAKEN
09/18/2001 06:15


| Prep, Base Neutral | Complete | 09/24/2001 | 1277 | Complete | rec | EPA 625 ; SW 3510C ; SW 352 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prep, Acid Extractable | Complete | 09/24/2001 | 1277 | Complete | rec | EPA 625 ; SW 3510C ; SW 352 |
| Prep, TPH - 418.1 aq | Complete | 09/26/2001 | 602 | Complete | 260 | EPA 418.1 |
| Prep, TPH DRO Aqueous | Complete | 09/25/2001 | 125 | Complete | mem |  |
| VOLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete | 09/26/2001 |  | Complete | bmh |  |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Reault Flag Units | Date | Batch | Batch | Reporting Analyst |

SAMPLE DESCRIPTION
SBI002:MW11S:G091801:505

DATE/TIME TAKEN 09/18/2001 06:20


# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 707740

SBI002:MW11S:G091801:505

DATE/TIME TAKEN
09/18/2001 06:20

| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260E |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| cis-1,2-Dichloroethene. | 1.1 | $\underline{u g / L}$ | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | brnh | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260日 |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | brih | SW | 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW | 8260B |
| n-Hexane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3603 | $<12.5$ | bmh | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | Sw | 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| Methylene Chloride | $<5.0$ | Ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | sw | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/i | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260 B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 | 3603 | $<12.5$ | bnh | SW | 8260B |
| n -Propylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | Sw | 8260日 |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Tetrachloroethene | <1.0 | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION 707740 <br> SBI002:MW11S: G091801:505

DATE/TIME TAKEN 09/18/2001 06:20

| Toluene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 09/26/2001 |  | 3603 | <5.0 | bmh | SW | 8260B |
| 1,1,1-Trichloroethane | 1.8 | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 82608 |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 |  | 3503 | <1.0 | bmh | SW | 82608 |
| Trichloroethene | 1.1 | ug/L | 09/26/2001 |  | 3603 | <1.0 | bmh | Sw | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | Sw | 8260日 |
| 1,2,3-Trichloropropane | <5.0 | ug/L | 09/26/2001 |  | 3603 | $<5.0$ | bmh | Sw | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 82608 |
| 1,3,5-Trimethyibenzene | <1.0 | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 |  | 3603 | $<5.0$ | bmh | SW | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| Xylenes | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 103 | $\%$ | 09/26/2001 |  | 3603 |  | bmh | SW | 8260B |
| Dibromofluoromethane (surr) | 101 | 4 | 09/26/2001 |  | 3603 |  | bmh | SW | 8260B |
| ds-Toluene (surr) | 97 | 8 | 09/26/2001 |  | 3603 |  | bmh | SW | 8260日 |
| Bromofluorobenzene (surr) | 101 | $\%$ | 09/26/2001 |  | 3603 |  | bmh | SW | 8260 B |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Acenaphthylene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | sw | 8270C |
| Anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Benzo (a)anthracene | <10 | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270 C |
| Benzo(b) fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270C |
| Benzo(k)fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | $8270{ }^{\text {c }}$ |
| Benzo(a) pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | Sw | 8270 C |
| Benzyl alcohol | <10 | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |

## ANALYTICAL REPORT

Kevin Wildman

| HULL \& ASSOC. (Dublin) |  |
| :--- | :--- |
| 6130 Wilcox Rd. | $10 / 12 / 2001$ |

Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 707740

SAMPLE DESCRIPTION
SBI002:MW11S:G091801:505

DATE/TIME TAKEN 09/18/2001 06:20

| Benzyl butyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| bis (2-Chloroethyl)ether | $<10$ | $\underline{u g / L}$ | 09/27/2001 | 1277 | 2705 | <10 | dmg | SW 8270C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/s | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 4-Bromophenyl phenyl ether. | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Chrysene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270 C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/27/2001 | 1277 | 2705 | <50 | dmg | SW 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | Sw 8270 C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Fluorene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | <10 | dmg | SW 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/27/2001 | 1277 | 2705 | $<20$ | dimg | SW 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | SW 8270C |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  |  |  | Prep | Run |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Result |  |  | Date | Batch Number | Batch <br> Number | Reporting | Aralyst |  |
| Result | Flag | Units | Analyzed | Number | Number | Limit | Initials | Method Reference |

## SAMPLE NO. 707740

SAMPLE DESCRIPTION
SBI002:MW11S:G091801:505

| Indeno (1,2,3-cd) pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Isophorone | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10^{\circ}$ | ding | SW | 82700 |
| Naphthalene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270c |
| Nitrobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| N-Nitrosodi-n-propylamine | <10 | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | SW | 82700 |
| Phenanthrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | Sw | 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | <10 | dmg | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 86 | \% | 09/27/2001 | 1277 | 2705 |  | dmg | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 87 | \% | 09/27/2001 | 1277 | 2705 |  | dmg | SW | 8270 C |
| Surrogate: d14-Texphenyl | 65 | 8 | 09/27/2001 | 1277 | 2705 |  | dmg | SW | 8270 C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/27/2001 | 1277 | 2705 | $<50$ | dimg | SW | 8270C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2-Chlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2-Methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270C |
| 2-Nitrophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Pentachlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Phenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION
707740 SBIOO2:MWIIS:G091801:505
DATE/TIME TAKEN 09/18/2001 06:20

| Surrogate: d6-Phenol | 76 | \% | 09/27/2001 | 1277 | 2705 |  | dimg | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorophenol | 82 | \% | 09/27/2001 | 1277 | 2705 |  | dmg | SW 8270C |
| Surrogate: Tribromophenol | 68 | $\%$ | 09/27/2001 | 1277 | 2705 |  | dmg | SW 8270C |
| TPH - DRO AQUEOUS | $<1$ | mg/L | 09/26/2001 | 125 | 213 | $<1$ | meb | SW 8015M |
| TPH - Method 418.1 (AQ) | $<0.2$ | $\mathrm{mg} / \mathrm{L}$ | 09/27/2001 | 602 | 723 | <0.2 | 260 | EPA 418.1 |

## SAMPLE NO. SAMPLE DESCRIPTION 707741 SBI002:MW11D:G091801:505

DATE/TIME TAKEN
09/18/2001 06:25


## TestAmerica，Incorporated

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \＆ASSOC．（Dublin）<br>10／12／2001<br>6130 Wilcox Rd．<br>Dublin，OH 43016

Job Number：01．17192
Client Project ID：South Bend Indiana SBI002


| SAMPLE NO．SAMPLE DESCRIPTION | DATE／TIME TAKEN |  |
| :--- | :--- | :--- |
| 707741 | SBIOO2：MWIID：G091801：505 | $09 / 18 / 200106: 25$ |


| Bromoform | $<1.0$ | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | Sw 8260 B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bromobenzene | ＜1．0 | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260B |
| 2－Butanone（MEK） | ＜12．5 | ug／L | 09／26／2001 | 3603 | ＜12．5 | bmh | SW 8260 B |
| Carbon disulfide | $<1.0$ | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260 B |
| Chlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Chloroethane | ＜5．0 | ug／L | 09／26／2001 | 3603 | ＜5．0 | bmh | SW 82608 |
| 2－Chlorotoluene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | Sw 82608 |
| 4－Chlorotoluene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | Sw 82608 |
| Chloroform | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 82608 |
| Chloromethane | $<5.0$ | ug／L | 09／26／2001 | 3603 | ＜5．0 | bmh | Sw ${ }^{\text {82608 }}$ |
| Dibromochloromethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260日 |
| Dibromomethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | Sw 8260b |
| Dichlorodifluoromethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260 B |
| 1，2－Dibromo－3－chloropropane | $<5.0$ | ug／L | 09／26／2001 | 3603 | ＜5．0 | bmh | SW 8260 B |
| 1，2－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | Sw 8260 B |
| 1，3－Dichlorobenzene | ＜1．0 | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260 B |
| 1，4－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 82608 |
| 1，1－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 8260 B |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260B |
| 1，1－Dichloroethene | ＜1．0 | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW 82608 |
| cis－1，2－Dichloroethene | 1.2 | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260B |
| trans－1，2－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | Sw 82608 |
| 1，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | Sw 8260日 |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW 8260日 |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／25／2001 | 3603 | ＜1．0 | bmh | SW 8260B |

# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

## Kevin Wildman

## HULL \& ASSOC. (Dublin)

10/12/2001

## 6130 Wilcox Rd.

Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 707741

SAMPLE DESCRIPTION
SBIO 02 :MWI1D: G091801:505

DATE/TIME TAKEN
09/18/2001 06:25

| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | binh | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | Sw | 82608 |
| trans-1, 3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 82608 |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmih | SW | 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/26/2001 | 3603 | < 5.0 | bmh | SW | 8260B |
| n -Hexane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3603 | <12.5 | bmh | SW | 82608 |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3603 | < 5.0 | brh | SW | 82608 |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3603 | < 5.0 | bmh | SW | 8260B |
| Methyl t-butyl ether (MTBE) | <5.0 | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 | 3603 | $<12.5$ | bmh | SW | 82608 |
| n-Propylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 82608 |
| Naphthalene | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260b |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Tetrachloroethene | 1.7 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| Toluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmah | SW | 8260B |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| 1,1,1-Trichloroethane | 1.4 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Trichloroethene | 1.1 | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 82608 |
| Trichlorofluoromethane | <1.0 | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| 1,2,3-Trichloropropane | <5.0 | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | Sw | 8260 B |

# ANALYTICAL REPORT 

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17192

## Client Project ID: South Bend Indiana SBI002

|  |  | Prep Run |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date Analyzed | Batch Batch Reporting Analyst |
| Number Number Limit | Initials Method Reference |  |

SAMPLE NO. SAMPLE DESCRIPTION DATE/TIME TAKEN

| 1,2,4-Trimethyibenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | <1.0 | bmh | SW | 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 |  | 3603 | < 5.0 | bmh | SW | 82608 |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | <1.0 | brih | SW | 8260日 |
| Xylenes | <1.0 | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmih | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 105 | $t$ | 09/26/2001 |  | 3603 |  | bmh | SW | 8260 B |
| Dibromofluoromethane (burr) | 102 | \% | 09/26/2001 |  | 3603 |  | bmh | SW | 8260B |
| d8-Toluene (surr) | 96 | \% | 09/26/2001 |  | 3603 |  | bmh | SW | 8260B |
| Bromofluorobenzene (surr) | 100 | 4 | 09/26/2001 |  | 3603 |  | bmh | SW | 8260 B |
| BASE NEUTRAL COMP. (AQ) B270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Acenaphthylene | $<10$ | $\mathrm{ug} / \mathrm{L}$ | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Anthracene | $<10$ | . ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Benzo (a)anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Benzo(b) fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270 C |
| Benzo (k) fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Benzo (a) pyrene | $<10$ | us/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Bemzyl alcohol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | $8270{ }^{\text {c }}$ |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| bis (2-Chloroethyl)ether | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 4-Chloroaniline | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270 C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$10 / 12 / 2001$

Job Number: 01.17192
Client Project ID: South Bend Indiana SBIOO2


## SAMPLE NO. SAMPLE DESCRIPTION

 707741DATE/TIME TAKEN 09/18/2001 06:25

| 2-Chloronaphthalene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chrysene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | $8270{ }^{\text {C }}$ |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | <10 | dmg | SW | 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | <10 | ding | SW | 8270 C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/27/2001 | 1277 | 2705 | $<50$ | dmg | SW | 8270 C |
| Diethyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270 C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | <10 | dmg | SW | 8270C |
| Fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Fluorene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 82700 |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270 C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/27/2001 | 1277 | 2705 | $<20$ | dmg | SW | 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Indeno (1, 2,3-cd) pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| Isophorone | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | drng | SW | 8270 C |
| Naphthalene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Nitrobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Phenanthrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270 C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  | Prep Run |
| :--- | :--- | :--- |
| Date Batch Batch Reporting Analyst |  |

Result Flag Units Analyzed Number Number Limit Initials Method Reference

SAMPLE NO. SAMPLE DESCRIPTION 707741

DATE/TIME TAKEN 09/18/2001 06:25

| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: d5-Nitrobenzene | 88 | 8 | 09/27/2001 | 1277 | 2705 |  | dmg | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 87 | \% | 09/27/2001 | 1277 | 2705 |  | dmg | SW | 8270C |
| Surrogate: d14-Terphenyl | 71 | \% | 09/27/2001 | 1277 | 2705 |  | dmg | SH | 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Eenzoic acid | $<50$ | ug/L | 09/27/2001 | 1277 | 2705 | $<50$ | dmg | SW | 8270C |
| 4-Chloro-3-methyiphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | S* | 8270C |
| 2-Chlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SN | 8270C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2-Methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2-Nitrophenol | <10 | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270C |
| Pentachlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Phenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SK | 8270 C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SH | 82700 |
| Surrogate: d6-Phenol | 76 | 8 | 09/27/2001 | 1277 | 2705 |  | dmg | SW | 8270C |
| Surrogate: 2-Fluorophenol | 87 | \% | 09/27/2001 | 1277 | 2705 |  | dmg | SW | 8270 C |
| Surrogate: Tribromophenol | 82 | \% | 09/27/2001 | 1277 | 2705 |  | dmg | SW | 8270C |
| TPH - DRO AQUEOUS | $<1$ | $\mathrm{mg} / \mathrm{L}$ | 09/26/2001 | 125 | 213 | $<1$ | meb | SW | 8015M |
| TPH - Method 418.1 (AQ) | $<0.2$ | $\mathrm{mg} / \mathrm{L}$ | 09/27/2001 | 602 | 723 | $<0.2$ | 260 |  | 418.1 |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


SAMPLE DESCRIPTION
SBIO02:HMW19D:G091801:505

DATE/TIME TAKEN 09/18/2001 06:30

| ICPMS TOTAL METALS | Complete |  | 09/28/2001 |  | 2566 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | <0.0050 | mg/L | 09/28/2001 | 1847 | 3691 | <0.0050 | ekh | sw | 6020 |
| Barium, ICPMS | 0.0561 | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3899 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | mg/L | 09/28/2001 | 1847 | 3570 | $<0.0010$ | ekh | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3970 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICFMS | 0.0014 | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3648 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | mg/L | 09/25/2001 | 1414 | 1360 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/27/2001 | 752 | 578 | $<0.0050$ | 1nh | SW | 7740 |
| Silver, ICPMS | <0.0005 | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3905 | $<0.0005$ | ekh | S* | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1847 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 752 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1414 |  | Complete | epk | SW | 7470A |
| VOLATILE COMPOUNDS - 8260 |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/27/2001 |  | 3607 | Complete | bmh |  |  |
| Acetone | <20.0 | ug/L | 09/27/2001 |  | 3607 | $<20.0$ | bmh | SW | 8260B |
| Benzene | $<1.0$ | ug/L | 09/27/2001 |  | 3607 | $<1.0$ | bmh | SW | 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/27/2001 |  | 3607 | $<1.0$ | bmh | SW | 8260B |
| sec-Butylbenzene | <1.0 | ug/L | 09/27/2001 |  | 3607 | <1.0 | bmh | SW | 8260B |
| n -Butylbenzene | $<1.0$ | ug/L | 09/27/2001 |  | 3607 | <1.0 | bmh | SW | 8260 B |
| Bromochloromethane | $<1.0$ | ug/L | 09/27/2001 |  | 3607 | $<1.0$ | bmh | SW | 8260 B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/27/2001 |  | 3607 | $<1.0$ | bmh | SW | 8260B |
| Bromoform | $<1.0$ | ug/L | 09/27/2001 |  | 3607 | $<1.0$ | brah | SW | 8260B |
| Bromobenzene | <1.0 | ug/L | 09/27/2001 |  | 3607 | $<1.0$ | binh | SW | 8260B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/27/2001 |  | 3607 | $<12.5$ | bmh | SW | 8260B |
| Carbon disulfide | $<1.0$ | ug/L | 09/27/2001 |  | 3607 | <1.0 | bmh | SW | 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBIOO2

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |

SAMPLE NO. SAMPLE DESCRIPTION 707742 SBI002:HMW19D:G091801:505

| Carbon tetrachloride | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260 B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260b |
| Chloroethane | $<5.0$ | ug/L | 09/27/2001 | 3607 | <5.0 | bmh | SW 8260B |
| 2-Chlorotoluene | <1.0 | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 82608 |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| Chloroform | <1.0 | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| Chloromethane | <5.0 | ug/L | 09/27/2001 | 3607 | < 5.0 | bmh | SW 8260B |
| Dibromochloromethane | <1.0 | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| Dibromomethane | <1.0 | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| Dichlorodifluoromethane | <1.0 | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| 1,2-Dibromo-3-chloropropane | <5.0 | ug/L | 09/27/2001 | 3607 | <5.0 | bmh | SW 8260B |
| 1,2-Dichlorobenzene | <1.0 | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bruh | SW 8260B |
| 1,4-Dichlorobenzene | <1.0 | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260日 |
| 1,1-Dichloroethane | <1.0 | ug/L | 09/27/2001 | 3607 | $<1.0$ | buht | SW 8260B |
| 1,2-Dichloroethane | <1.0 | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| 1,1-Dichloroethene | <1.0 | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| trans-1,2-Dichloroethene | $-1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 82608 |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| 2,2-Dichloropropane | <1.0 | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| 1,1-Dichloropropene | <1.0 | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| cis-1,3-Dichloropropene | <1.0 | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| trans-1,3-Dichloropropene | <1.0 | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| Ethylbenzene | <1.0 | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |

## TestAmerica，Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin，OH 43016

10／12／2001

Job Number：01．17192
Client Project ID：South Bend Indiana SBI002


| SAMPLE NO．SAMPLE DESCRIPTION | DATE／TIME TAKEN |  |
| :--- | :--- | :--- |
| 707742 | SBIO02：HMW19D：G091801：505 | $09 / 18 / 200106: 30$ |


| －．exachlorobutadiene | $<5.0$ | ug／L | 09／27／2001 | 3607 | $<5.0$ | bmh | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n －Hexane | ＜ 5.0 | ug／L | 09／27／2001 | 3607 | $<5.0$ | bmh | SW 8260B |
| 2－Hexanone | $<12.5$ | ug／L | 09／27／2001 | 3607 | $<12.5$ | bmh | SW 8260B |
| Isopropylbenzene（Cumene） | $<1.0$ | ug／L | 09／27／2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| p－Isopropyltoluene | $<1.0$ | ug／L | 09／27／2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| Bromomethane | $<5.0$ | ug／L | 09／27／2001 | 3607 | $<5.0$ | bmh | SW 8260B |
| Methylene Chloride | $<5.0$ | ug／L | 09／27／2001 | 3607 | $<5.0$ | bmh | SW 8260日 |
| Methyl t－butyl ether（MTBE） | $<5.0$ | ug／L | 09／27／2001 | 3607 | ＜ 5.0 | bmh | SW 8260B |
| 4－Methyl－2－pentanone（MIEK） | $<12.5$ | ug／L | 09／27／2001 | 3607 | $<12.5$ | bmi | SW 8260B |
| n－Propylbenzene | $<1.0$ | ug／L | 09／27／2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| Styrene | $<1.0$ | ug／L | 09／27／2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| Naphthalene | ＜5．0 | ug／L | 09／27／2001 | 3607 | ＜ 5.0 | bmh | SW 8260B |
| 1，1，1，2－Tetrachloroethane | $<1.0$ | ug／L | 09／27／2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| 1，1，2，2－Tetrachloroethane | $<1.0$ | ug／L | 09／27／2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| Tetrachloroethene | 46.9 | ug／L | 09／27／2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| Toluene | $<1.0$ | ug／L | 09／27／2001 | 3607 | ＜1．0 | bmh | SW 8260B |
| 1，2，4－Trichlorobenzene | $<5.0$ | ug／L | 09／27／2001 | 3607 | ＜ 5.0 | bmh | SW 8260日 |
| 1，1，1－Trichloroethane | $<1.0$ | ug／L | 09／27／2001 | 3607 | $<1.0$ | bmin | SW 8260日 |
| 1，1，2－Trichloroethane | $<1.0$ | ug／L | 09／27／2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| Trichloroethene | $<1.0$ | ug／L | 09／27／2001 | 3607 | ＜1．0 | bmh | SW 8260b |
| Trichlorofluoromethane | $<1.0$ | ug／L | 09／27／2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| 1，2，3－Trichloropropane | ＜5．0 | ug／L | 09／27／2001 | 3607 | $<5.0$ | bmh | SW 8260B |
| 1，2，4－Trimethylbenzene | $<1.0$ | ug／L | 09／27／2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| 1，3，5－Trimethylbenzene | $<1.0$ | ug／L | 09／27／2001 | 3607 | $<1.0$ | brah | SW 8260B |
| Vinyl Acetate | $<5.0$ | ug／L | 09／27／2001 | 3607 | $<5.0$ | bmh | SW 8260B |
| Vinyl Chloride | ＜1．0 | ug／L | 09／27／2001 | 3607 | $<1.0$ | bmh | SW 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002
10/12/2001


SAMPLE NO. 707742

SAMPLE DESCRIPTION
SBIO 02 :HMW19D:G091801:505

DATE/TIME TAKEN 09/18/2001 06:30

| Xylenes | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d4-1,2-Dichloroethane (surr) | 100 | $\%$ | 09/27/2001 | 3507 |  | bila | SW 8260日 |
| Dibromofluoromethane (surr) | 102 | $\%$ | 09/27/2001 | 3607 |  | bmh | SW 8260B |
| ds-Toluene (surr) | 98 | 8 | 09/27/2001 | 3607 |  | buh | SW 8260日 |
| Bromofiugrobenzene (surr) | 103 | \% | 09/27/2001 | 3607 |  | bmh | SW 8260B |

## SAMPLE NO. SAMPLE DESCRIPTION 707743 SBI002:MW15D:G091801:505

## DATE/TIME TAKEN

09/18/2001 06:35

| icems total metals | Complete |  | 09/28/2001 |  | 2566 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3691 | $<0.0050$ | ekh | sw | 6020 |
| Barium, ICPMS | 0.0648 | mg/L | 09/28/2001 | 1847 | 3899 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3570 | $<0.0010$ | ekh | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3970 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | 0.0017 | mg/L | 09/28/2001 | 1847 | 3648 | $<0.0010$ | ekh | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/25/2001 | 1414 | 1360 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/27/2001 | 752 | 578 | $<0.0050$ | lnh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3905 | $<0.0005$ | elch | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1847 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 752 |  | Complete | clm | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1414 |  | Complete | epk | SW | 7470A |

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## TestAmerica, Incorporated

# ANALYTICAL REPORT 

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>10/12/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


| -260-SW846 (AQ) | Complete |  | 09/27/2001 | 3607 | Complete | bmh |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | $<20.0$ | ug/L | 09/27/2001 | 3607 | $<20.0$ | bmh | SW 8260 B |
| Benzene | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/27/2001 | 3607 | <1.0 | bmh | SW 8260B |
| sec-Butylbenzene | 4.1 | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260日 |
| n-Butylbenzene | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| Bromochloromethane | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260 B |
| Bromoform | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260 B |
| Bromobenzene | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| 2-Butanone (MEK) | <12.5 | ug/L | 09/27/2001 | 3607 | $<12.5$ | bmh | SW 8260日 |
| Carbon disulfide | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/27/2001 | 3607 | <1.0 | bmh | SW 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| Chloroethane | <5.0 | ug/L | 09/27/2001 | 3607 | $<5.0$ | bmh | SW 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| 4 -Chlorotoluene | $<1.0$ | ug/L | 09/27/2001 | 3607 | <1.0 | bmh | SW 8260B |
| Chloroform | $<1.0$ | ug/L | 09/27/2001 | 3607 | <1.0 | bmh | SW 8260B |
| chloromethane | <5.0 | ug/L | 09/27/2001 | 3607 | < 5.0 | bmh | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| 1,2-Dibromo-3-chloropropane | <5.0 | ug/L | 09/27/2001 | 3607 | $<5.0$ | bmh | SW 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBIOO2

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting | Analyst |  |
| Number | Limit | Initials Method Reference |  |  |  |  |  |

SAMPLE NO. 707743

SAMPLE DESCRIPTION
SBI002:MW15D:G091801:505

DATE/TIME TAKEN
09/18/2001 06:35

| 1.1-Dichloroethane | <1.0 | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane | <1.0 | ug/L | 09/27/2001 | 3607 | <1.0 | bmh | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/27/2001 | 3607 | <1.0 | bmh | SW | 8260B |
| Cis-1,2-Dichloroethene | 7.6 | ug/L | 09/27/2001 | 3607 | <1.0 | bmh | SW | 8260B |
| trans-1,2-Dichloroethene | 1.5 | ug/L | 09/27/2001 | 3607 | <1.0 | bmh | SW | 82608 |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/27/2001 | 3607 | <1.0 | bmht | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW | 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW | 82608 |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/27/2001 | 3607 | <1.0 | bmh | SW | 8260B |
| Cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW | 8260B |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW | 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/27/2001 | 3607 | $<5.0$ | bmh | SW | 8260B |
| n -Hexane | 48.8 | ug/L | 09/27/2001 | 3607 | <5.0 | bmh | SW | 8260B |
| 2-Hexanone | <12.5. | ug/L | 09/27/2001 | 3607 | $<12.5$ | bmh | Sw | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW | 8260E |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/27/2001 | 3607 | $<5.0$ | bmh | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/27/2001 | 3607 | $<5.0$ | bouk | SW | 8260 B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/27/2001 | 3607 | $<5.0$ | bmh | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/27/2001 | 3607 | $<12.5$ | bmh | SW | 8260B |
| n-Propylbenzene | 2.4 | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW | 82608 |
| Styrene | <1. 0 | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW | 82608 |
| Naphthalene | $<5.0$ | ug/L | 09/27/2001 | 3607 | $<5.0$ | bmh | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | Sw | 8260B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/27/2001 | 3607 | <1.0 | bmh | SW | 82608 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001

6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

1

| - Cetrachloroethene | 270 | ug/L | 09/27/2001 | 3610 | $<10$ | eap | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Toluene | <1.0 | ug/L | 09/27/2001 | 3607 | <1.0 | bmh | SW 8260B |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 09/27/2001 | 3607 | <5.0 | bmh | SW 8260B |
| 1,1,1-Trichloroethane | <1.0 | ug/L | 09/27/2001 | 3607 | <1.0 | bmh | SW 8260 B |
| 1,1,2-Trichloroethane | <1.0 | ug/L | 09/27/2001 | 3607 | <1.0 | bmh | SW 8260B |
| Trichloroethene | 14.8 | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| Trichlorofluoromethane | <1.0 | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260日 |
| 1,2,3-Trichloropropane | <5.0 | ug/L | 09/27/2001 | 3607 | <5.0 | bmh | SW 8260B |
| 1,2,4-Trimethylbenzene | <1.0 | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260日 |
| 1,3,5-Trimethylbenzene | 1.4 | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/27/2001 | 3607 | $<5.0$ | bmh | SW 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| Xylenes | $<1.0$ | ug/L | 09/27/2001 | 3607 | $<1.0$ | bmh | SW 8260B |
| d4-1,2-Dichloroethane (surr) | 100 | $\%$ | 09/27/2001 | 3607 |  | bmh | SW 8260B |
| Dibromofluoromethane (surr) | 101 | \% | 09/27/2001 | 3607 |  | bmh | SW 8260B |
| d8-Toluene (surr) | 93 | 7 | 09/27/2001 | 3607 |  | bmh | SW 8260B |
| Bromofluorobenzene (surr) | 102 | $\%$ | 09/27/2001 | 3607 |  | bmh | SW 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildmari
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


DATE/TIME TAKEN 09/18/2001 07:00


# TestAmerica，Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin，OH 43016

10／12／2001

Job Number：01．17192
Client Project ID：South Bend Indiana SBI002


SAMPLE DESCRIPTION
SBI 002 ：HMW23S：G091801：505

DATE／TIME TAKEN 09／18／2001 07：00

| 1，2－Dibromo－3－chioropropane | ＜ 5.0 | ug／L | 09／27／2001 | 3610 | $<5.0$ | eap | SW 8260b |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1，2－Dichlorobenzene | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 1，3－Dichlorobenzene | ＜1．0 | ug／L， | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 1，4－Dichlorobenzene | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260b |
| 1，1－Dichloroethane | ＜1．0 | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260E |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 1，1－Dichlorocthene | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260B |
| cis－1，2－Dichloroethene | $<1.0$ | ug／L | 09／27／2001 | 3610 | ＜1．0 | eap | SW 8260B |
| trans－1，2－Dichloroethene | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 1，2－Dichloropropane | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260日 |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260日 |
| 1，1－Dichloropropene | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260B |
| cis－1，3－Dichloropropene | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260B |
| trans－1，3－Dichloropropene | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260B |
| Ethylbenzene | 4.8 | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260B |
| Hexachlorobutadiene | $<5.0$ | ug／L | 09／27／2001 | 3610 | $<5.0$ | eap | SW 8260B |
| n －Hexane | ＜5．0 | ug／L | 09／27／2001 | 3610 | $<5.0$ | eap | SW 8260B |
| 2－Hexanone | $<12.5$ | ug／L | 09／27／2001 | 3610 | $<12.5$ | eap | SW 82608 |
| Isopropylbenzene（Cumene） | 78.3 | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260B |
| p－Isopropyltoluene | 430 | ug／L | 09／27／2001 | 3610 | $<100$ | eap | SW 8260B |
| Bromomethane | ＜5．0 | ug／L | 09／27／2001 | 3610 | $<5.0$ | eap | SW 8260］ |
| Methylene Chloride | ＜ 5.0 | ug／L | 09／27／2002 | 3610 | ＜5．0 | eap | SW 8260日 |
| Methyl t－butyl ether（MTBE） | ＜5．0 | ug／L | 09／27／2001 | 3610 | $<5.0$ | eap | SW 8260B |
| 4－Methyl－2－pentanone（MIBK） | $<12.5$ | ug／L | 09／27／2001 | 3610 | $<12.5$ | eap | SW 8260b |
| n－Propylbenzene | 161 | ug／L | 09／27／2001 | 3610 | ＜100 | eap | SW 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION

 707744SBIO 02 : HMW23S:G091801:505

| Styrene | <1.0 | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW | 8260b |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Naphthalene | 371 | ug/L | 09/27/2001 |  | 3610 | $<100$ | eap | SW | 8260 B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW | 8260B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW | 8260B |
| Tetrachloroethene | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW | 8260B |
| Toluene | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW | 8260B |
| 1,2,4-Trichlorobenzene | < 5.0 | ug/L | 09/27/2001 |  | 3610 | $<5.0$ | eap | SW | 82608 |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW | 8260B |
| Trichloroethene | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW | 8260 B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW | 8260B |
| 1,2,3-Trichloropropane | <5.0 | ug/L | 09/27/2001 |  | 3610 | $<5.0$ | eap | SW | 8260B |
| 1,2,4-Trimethylbenzene | 7,740 | ug/L | 09/27/2001 |  | 3610 | $<100$ | eap | SW | 8260B |
| 1,3,5-Trimethylbenzene | 2,330 | ug/L | 09/27/2001 |  | 3610 | $<100$ | eap | SW | 8260B |
| Vinyl Acetate | <5.0 | ug/L | 09/27/2001 |  | 3610 | $<5.0$ | eap | SW | 8260日 |
| Vinyl Chloride | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW | 8260B |
| Xylenes | 146 | ug/L | 09/27/2001 |  | 3610 | <1.0 | eap | SW | 82608 |
| d4-1,2-Dichloroethane (surr) | 103 | $\%$ | 09/27/2001 |  | 3610 |  | eap | SW | 8260B |
| Dibromofluoromethane (surr) | 102 | \% | 09/27/2001 |  | 3610 |  | eap | SW | 8260B |
| ds-Toluene (surr) | 95 | $\frac{8}{6}$ | 09/27/2001 |  | 3610 |  | eap | SW | 8260 B |
| Bromofluorobenzene (surr) | 94 | \% | 09/27/2001 |  | 3610 |  | eap | SW | 8260B |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Acenaphthylene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jıw | SW | 8270 C |

## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.17192<br>Client Project ID: South Bend Indiana SBIO02

10/12/2001

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CR | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 707744 |  | SBI002: H | N23 | G09 | 1:505 |  |  |  | 09/ | 8/2001 | 1 07:00 |


| Benzo(a) anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | $8270{ }^{\circ}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | j5w | SW | 8270 C |
| Benzo(k)fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | <10 | jxw | SW | 82700 |
| Benzo (a) pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Benzyl alcohol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| bis(2-Chloroethyl)ether | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 2.2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/27/200. | 1277 | 2712 | $<10$ | jxw | SW | 8270 C |
| 4-Chloroaniline | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jnw | SW | 8270 C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 82700 |
| Chrysene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Dibenzofuran | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/27/2001 | 1277 | 2712 | $<50$ | jrw | SW | 8270 C |
| Diethyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SN | 82700 |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. | SAMPLE DESCRIPTION |
| :--- | :--- |
| 707744 | SBIO02:HMW23S:G091801:505 |

DATE/TIME TAKEN 09/18/2001 07:00

| Fluorene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | Sw 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hexachlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270c |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/27/2001 | 1277 | 2712 | $<20$ | jrw | SW 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Indeno (1,2,3-cd) pyrene | <10 | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Isophorone | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Naphthalene | $<10$ | $\mathbf{u g} / \mathrm{L}$ | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Nitrobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Phenanthrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Surrogate: d5-Nitrobenzene | 87 | 8 | 09/27/2001 | 1277 | 2712 |  | jrw | SW 8270C |
| Surrogate: 2-Fluorobiphenyl | 78 | $\%$ | 09/27/2001 | 1277 | 2712 |  | jrw | SW 8270C |
| Surrogate: di4-Terphenyl | 62 | $\%$ | 09/27/2001 | 1277 | 2712 |  | jrw | SW 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/27/2001 | 1277 | 2712 | $<50$ | jxw | SW 8270C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 2-Chlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | sw 8270C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | S* 8270C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jxw | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 2-Methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| meta \& para-Methylphenol | <10 | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

2-Nitrophenol
Pentachlorophenol
Phenol
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
Surrogate: d6-Phenol
Surrogate: 2-Fluorophenol
Surrogate: Tribromophenol
TPH - GRO (Aqueous)
$\begin{array}{ll}\text { SAMPLE NO. SAMPLE DESCRIPTION } \\ 707745 & \text { SBIOO2:MW23S:G091801:505 }\end{array}$


## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  |  |  | Prep | Run |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Date | Batch | Batch | Reporting | Analyst |  |
| Result | Flag | Units | Analyzed | Number | Number | Limit | Initials | Method Reference |

SAMPLE NO. 707745

SAMPLE DESCRIPTION
SBI002:MW23S:G091801:505

DATE/TIME TAKEN 09/18/2001 07:05

| Bromochloromethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bromodichloromethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW 8260B |
| Bromoform | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| Bromobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/27/2001 | 3610 | $<12.5$ | eap | SW 8260B |
| Carbon disulfide | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| Chloroethane | <5.0 | ug/L | 09/27/2001 | 3610 | <5.0 | eap | SW 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| Chioroform | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260 B |
| Chloromethane | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260日 |
| Dibromomethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 1,2-Dibromo-3-chloropropane | < 5.0 | ug/L | 09/27/2001 | 3610 | <5.0 | eap | SW 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 1,2-Dichloropropane | <1.0 | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

10/12/2001

|  | Prep Run |
| :--- | :--- | :--- |
| Date | Batch Batch Reporting Analyst |


| Date | Batch | Batch | Reporting | Analyst |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Analyzed | Number | Number | Limit | Initials Method Reference |  |

DATE/TIME TAKEN 09/18/2001 07:05

| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $\leqslant 1.0$ | eap | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| cis-1, 3-Dichloropropene | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 8260B |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 8260B |
| n -Hexane | $<5.0$ | ug/L | 09/27/2001 | 3610 | <5.0 | eap | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/27/2001 | 3610 | $<12.5$ | eap | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/27/2001 | 3610 | <5.0 | eap | SW | 82608 |
| Methyl t-butyl ether (MTBE) | <5.0 | ug/L | 09/27/2001 | 3610 | <5.0 | eap | sw | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/27/2001 | 3610 | $<12.5$ | eap | SW | 82608 |
| n -Propylbenzene | <1.0 | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Naphthalene | <5.0 | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| Tetrachloroethene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| Toluene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | Sw | 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 8260B |
| 1,1,1-Trichloroethane | 2.3 | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | Sw | 8260日 |
| Trichloroethene | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 8260日 |

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>6130. Wilcox Rd.<br>Dublin, OH 43016<br>$10 / 12 / 2001$<br>Job Number: 01.17192<br>Client Project ID: South Bend Indiana SBI002

|  |  | Prep Run |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batyzed Reporting Analyst |
| Anamber Number Limit | Initials Method Reference |  |

## SAMPLE NO. 707745

SAMPLE DESCRIPTION
SBIOO2:MW23S:G091801:505

DATE/TIME TAKEN 09/18/2001 07:05


# TestAmerica, Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBIO02


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |
| :--- | :--- | :--- |
| 707745 | SBI002:MW23S:G091801:505 09/18/2001 07:05 |


| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Chloroaniline | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | Sw 8270C |
| Chrysene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | Sw 8270C |
| Dibenzo (a, h) anthracene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | Sw 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 1,3-Dichiorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | ding | SW 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/25/2001 | 1277 | 2705 | $<50$ | ding | SW 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270 C |
| Dimethyl phthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | <10 | amg | SW 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | ding | Sw 8270C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Fluoranthene | $<10$ | ug/L | 09/25/2001 | 1277 | 2705 | $<10$ | dmg | SW. 8270 C |
| Fluorene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | ding | SW 8270C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/26/2001 | 1277 | 2705 | $<20$ | dimg | SW 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Indeno (1,2,3-cd) pyrene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Isophorone | <10 | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Naphthalene | 417 | ug/L | 09/27/2001 | 1277 | 2712 | $<100$ | j2w | SW 8270C |
| Nitrobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | <10 | dmg | SW 8270C |

# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  | Prep Run |
| :--- | :--- |
| Date | Batch Batch Reporting Analyst |

Result Flag Units Analyzed Number Number Limit Initials Method Reference

| SAMPLE NO. | SAMPLE DESCRIPTION |
| :--- | :--- |
| 707745 | SBI002:MW23S:G091801:505 |


| Phenanthrene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pyrene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW 8270C |
| Surrogate: d5-Nitrobenzene | 60 | * | 09/26/2001 | 1277 | 2705 |  | dmg | SW 8270C |
| Surrogate: 2-Fluorobiphenyl | 71 | 7 | 09/26/2001 | 1277 | 2705 |  | dmg | SW 8270C |
| Surrogate: d14-Terphenyl | 50 | 8 | 09/26/2001 | 1277 | 2705 |  | dmg | SW 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |
| Benzoic acia | <50 | ug/L | 09/26/2001 | 1277 | 2705 | <50 | dmg | SW 8270C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 2-Chlorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 2-Methylphenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 2-Nitrophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Pentachlorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Phenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | Sw 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW 8270C |
| Surrogate: d6-Phenol | 23 | \% | 09/26/2001 | 1277 | 2705 |  | dmg | SW 8270C |
| Surrogate: 2-Fluorophenol | 91 | $\frac{9}{8}$ | 09/26/2001 | 1277 | 2705 |  | dmg | SW 8270C |
| Surrogate: Tribromophenol | 83 | \% | 09/26/2001 | 1277 | 2705 |  | dmg | SW 8270c |
| TPH - GRO (Aqueous) | 36.2 | mg/L | 09/21/2001 |  | 85 | $<10$ | meb | SW 8015M |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batch Reporting Analyst |  |
| Analyzed | Number | Number Limit | Initials Method Reference |

DATE/TIME TAKEN
09/18/2001 07:10
Prep, Base Neutral
Prep, Acid Extractable
VOLATILE COMPOUNDS - 8260 (AQ)

| 8260 - SW846 (AQ) | Complete |  | 09/27/2001 | 3610 | Complete | eap |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | <20.0 | ug/L | 09/27/2001 | 3610 | $<20.0$ | eap | SW | 82608 |
| Benzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| n -Butylbenzene | <1.0 | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 8260日 |
| Bromochloromethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 8260 B |
| Bromoform | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| Bromobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 82608 |
| 2-Butanone (MEK) | $<12.5$. | ug/L | 09/27/2001 | 3610 | $<12.5$ | eap | SW | 82608 |
| Carbon disulfide | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| Chlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | Sw | 82608 |
| Chloroethane | <5.0 | ug/L | 09/27/2001 | 3610 | < 5.0 | eap | SW | 82608 |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| Chloroform | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Dibromomethane | <1.0 | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |

## ANALY7ICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TION |  |  |  |  | DAT | TIME | TAKEN |
| 707746 |  | SBI002 : MW | 3D: | G0918 | : 505 |  |  |  | 09/ | $8 / 2001$ | 07:10 |


| 1,2-Dibromo-3-chloropropane | < 5.0 | ug/L | 09/27/2001 | 3610 | < 5.0 | eap | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260日 |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260日 |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260 B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW 8260B |
| Cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW 8260B |
| Hexachiorobutadiene | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW 8260B |
| $n$-Hexane | <5.0 | ug/i | 09/27/2001 | 3610 | <5.0 | eap | SW 8260 B |
| 2-Hexanone | $<12.5$ | ug/L | 09/27/2001 | 3610 | $<12.5$ | eap | SW 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW 8260] |
| Methylene Chloride | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW 8260B |
| Methyl t-butyl ether (MTBE) | < 5.0 | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/27/2001 | 3610 | $<12.5$ | eap | SW 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW 8260B |

# TestAmerica，Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

HULI \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin，OH 43016

10／12／2001

Job Number： 01.17192
Client Project ID：South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result |  | Date | Batch | Batch | Reporting Analyst |


| SAMPLE NO．SAMPLE DESCRIPTION | DATE／TIME TAKEN |  |
| :--- | :--- | :--- |
| 707746 | SBIOO2：MW23D：G091801：505 | $09 / 18 / 200107: 10$ |


| Styrene | $<1.0$ | ug／L | 09／27／2001 |  | 3610 | $<1.0$ | eap | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Naphthalene | $<5.0$ | ug／L | 09／27／2001 |  | 3610 | $<5.0$ | eap | SW 8260B |
| 1，1，1，2－Tetrachloroethane | $<1.0$ | ug／L | 09／27／2001 |  | 3610 | $<1.0$ | eap | SW 8260B |
| 1，1，2，2－Tetrachloroethane | $<1.0$ | ug／L | 09／27／2001 |  | 3610 | $<1.0$ | eap | SW 8260日 |
| Tetrachloroethene | $<1.0$ | ug／L | 09／27／2001 |  | 3610 | $<1.0$ | eap | SW 8260B |
| Toluene | $<1.0$ | ug／L | 09／27／2001 |  | 3610 | $<1.0$ | eap | SW 8260B |
| 1，2，4－Trichlorobenzene | ＜ 5.0 | ug／L | 09／27／2001 |  | 3610 | ＜5．0 | eap | SW 8260B |
| 1，1，1－Trichloroethane | 3.7 | ug／L | 09／27／2001 |  | 3610 | $<1.0$ | eap | SW 8260B |
| 1，1，2－Trichloroethane | $<1.0$ | ug／L | 09／27／2001 |  | 3610 | $<1.0$ | eap | SW 8260B |
| Trichloroethene | $<1.0$ | ug／L | 09／27／2001 |  | 3610 | ＜1．0 | eap | SW 8260B |
| Trichlorofluoromethane | $<1.0$ | ug／L | 09／27／2001 |  | 3610 | $<1.0$ | eap | SW 8260B |
| 1，2，3－Trichloropropane | $<5.0$ | ug／L | 09／27／2001 |  | 3610 | $<5.0$ | eap | SW 8260日 |
| 1，2，4－Trimethylbenzene | ＜1．0 | ug／L | 09／27／2001 |  | 3610 | ＜1．0 | eap | SW 8260B |
| 1，3，5－Trimethylbenzene | $<1.0$ | ug／L | 09／27／2001 |  | 3610 | $<1.0$ | eap | SW 8260日 |
| Vinyl Acetate | $<5.0$ | ug／L | 09／27／2001 |  | 3610 | $<5.0$ | eap | SW 8260日 |
| Vinyl Chloride | $<1.0$ | ug／L | 09／27／2001 |  | 3610 | ＜1．0 | eap | SN 8260B |
| Xylenes | $<1.0$ | ug／L | 09／27／2001 |  | 3610 | ＜1．0 | eap | SW 8260b |
| d4－1，2－Dichloroethane（surr） | 106 | $\%$ | 09／27／2001 |  | 3610 |  | eap | SW 8260B |
| Dibromofluoromethane（surr） | 103 | $\%$ | 09／27／2001 |  | 3610 |  | eap | SW 8260B |
| ds－Toluene（surr） | 98 | 8 | 09／27／2001 |  | 3610 |  | eap | SW 8260B |
| Bromofluorobenzene（surr） | 106 | \％ | 09／27／2002 |  | 3610 |  | eap | SW 8260B |
| EASE NEUTRAL COMP．（AQ）B270 |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug／L | 09／26／2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Acenaphthylene | $<10$ | ug／L | 09／26／2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Anthracene | $<10$ | ug／L | 09／26／2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)<br>10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
707746 DATE/TIME TAKEN
$09 / 18 / 2001$ 07:10

| Benzo (a) anthracene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eenzo (b) fluoranthene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | $8270{ }^{\text {C }}$ |
| Benzo(k)fluoranthene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270C |
| Benzo(a) pyrene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270c |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| Chrysene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 3,3'-Dichlorobenzidine | <50 | ug/L | 09/26/2001 | 1277 | 2705 | $<50$ | dmg | SW | $8270{ }^{\text {c }}$ |
| Diethyl phthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dng | SW | 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| Di-n-octylphthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Fluoranthene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin) : 10/12/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


| Fluorene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hexachlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/25/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270 C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/26/2001 | 1277 | 2705 | $<20$ | dmg | SW | 8270 C |
| Hexachloroethane | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270C |
| Indeno (1, 2,3-cd) pyrene | $<10$ | ug/s | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| Isophorone | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270 C |
| Naphthalene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| Nitrobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Phenanthrene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270 C |
| Pyrene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 80 | $\%$ | 09/26/2001 | 1277 | 2705 |  | ding | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 85 | 8 | 09/26/2001 | 1277 | 2705 |  | dimg | Sw | 8270 C |
| Surrogate: d14-Terphenyl | 57 | \% | 09/26/2001 | 1277 | 2705 |  | dmg | SW | 8270 C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/26/2001 | 1277 | 2705 | $<50$ | dmg | SW | 8270 C |
| 4-Chioro-3-methylphenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2-Chlorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2-Methylphenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| meta \& para-Methylphenol | <10 | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. <br> 707746

SAMPLE DESCRIPTION
SBI002:MW23D:G091801:505

| $<10$ | ug/L | $09 / 26 / 2001$ | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $<10$ | ug/L | $09 / 26 / 2001$ | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| $<10$ | ug/L | $09 / 26 / 2001$ | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| $<10$ | ug/L | $09 / 26 / 2001$ | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| $<10$ | ug/L | $09 / 26 / 2001$ | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 75 | t | $09 / 26 / 2001$ | 1277 | 2705 |  | dmg | SW 8270C |
| 78 | q | $09 / 26 / 2001$ | 1277 | 2705 |  | dmg | SW 8270C |
| 77 | f | $09 / 26 / 2001$ | 1277 | 2705 |  | dmg | SW 8270C |
| $<1$ | $m g / L$ | $09 / 21 / 2001$ |  | 85 | $<1$ | meb | SW 8015M |

## SAMPLE NO.

707747
SAMPLE DESCRIPTION
SBIO02:HMW13S:G091801:523

DATE/TIME TAKEN 09/18/2001 07:10
2-Nitrophenol
Pentachlorophenol
Phenol
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
Surrogate: d6-Phenol
Surrogate: 2-Fluorophenol
Surrogate: Tribromophenol
TPH - GRO (Aqueous)


# TestAmerica, Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192

## Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method R | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DA | /TIME | TAKEN |
| 707747 |  | SBIO02:HM | 13 S | G091 | $1: 523$ |  |  |  | 09/ | 8/2001 | 1 15:45 |


| sec-Butylbenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n-Butylbenzene | <1.0 | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Bromochloromethane | <1.0 | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| Bromodichloromethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| Bromoform | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Bromobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| 2-Butanone (MEK) | <12.5 | ug/L | 09/27/2001 | 3610 | $<12.5$ | eap | Sw | 82608 |
| Carbon disulfide | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 8260日 |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Chloroethane | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| Chloroform | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | Sw | 8260B |
| Chloromethane | < 5.0 | ug/L | 09/27/2001 | 3610 | < 5.0 | eap | SW | 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| 1,3-Dichlorobenzene | <1.0 | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Cis-1,2-Dichloroethene | 2.8 | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 82608 |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. 707747

SAMPLE DESCRIPTION
SBIO02:HMW13S:G091801:523
$10 / 12 / 2001$

| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichloropropane | <1.0 | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260日 |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| cis-1.3-Dichloropropene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260 B |
| Ethylbenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW 8260B |
| n -Hexane | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/27/2001 | 3610 | $<12.5$ | eap | SW 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/27/2001 | 3610. | $<1.0$ | eap | SW 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW 8260B |
| Methylene Chloride | < 5.0 | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW 8260B |
| 4-Methyl-2-pentanone (MIBK) | <12.5 | ug/L | 09/27/2001 | 3610 | $<12.5$ | eap | SW 8260B |
| $n$-Propylbenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260 B |
| Styrene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW 8260B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260日 |
| Tetrachloroethene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 82608 |
| Toluene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Bumber | Batch | Reporting Analyst |  |
| Number Limit | Initials Method Reference |  |  |  |  |  |

SAMPLE NO. 707747

SAMPLE DESCRIPTION
SBIO02:HMW13S:G091801:523

DATE/TIME TAKEN
09/18/2001 15:45

| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | Sw | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Trichloroethene | 19.0 | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW | 82608 |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW | 82608 |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/27/2001 |  | 3610 | $<5.0$ | eap | SW | 82608 |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW | 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW | 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/27/2001 |  | 3610 | $<5.0$ | eap | SW | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW | 8260B |
| Xylenes | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | <1.0 | eap | SW | 8260B |
| d4-1,2-Dichloroethane (8urr) | 102 | \% | 09/27/2001 |  | 3610 |  | eap | Sw | 8260 B |
| Dibromofluoromethane (surr) | 102 | 8 | 09/27/2001 |  | 3610 |  | eap | SW | 8260B |
| d8-Toluene (surr) | 96 | 8 | 09/27/2001 |  | 3610 |  | eap | SW | 8260B |
| Bromofluorobenzene (surr) | 106 | \% | 09/27/2001 |  | 3610 |  | eap | sw | 8260日 |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | sw | 82700 |
| Acenaphthylene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jıw | SW | 8270 C |
| Benzo(b) fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jıw | SW | 8270C |
| Benzo(k) fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 82700 |
| Benzo (a) pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Benzyl butyl phthalate | $<10$ | $\underline{u g / L}$ | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jxw | sw | 8270C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


DATE/TIME TAKEN 09/18/2001 15:45

| bis (2-Ethylhexyl)phthalate | <10 | ug/L | 09/27/2001 | 1277 | 2712 | <10 | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Chrysene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | Sw 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/27/2001 | 1277 | 2712 | $<50$ | jrw | SW 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 2,6-Dinitrotoluene | <10 | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jıw | SW 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jxw | SW 8270C |
| Fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Fluorene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/27/2001 | 1277 | 2712 | $<20$ | jrw | SW 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | sw 8270 C |
| Indeno (1,2,3-cd) pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Isophorone | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Naphthalene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>10/12/2001<br>6130 Wilcox Rd.

Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


| Nitrobenzene | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N-Nitrosodi-n-propylamine | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Phenanthrene | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2712 | <10 | jrw | SW | 8270C |
| Pyrene | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 84 |  | $\%$ | 09/27/2001 | 1277 | 2712 |  | jrw | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 74 |  | 8 | 09/27/2001 | 1277 | 2712 |  | jrw | SW | 8270C |
| Surrogate: d14-Terphenyl | 40 |  | \% | 09/27/2001 | 1277 | 2712 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |  |
| Benzoic acid | <50 |  | ug/L | 09/27/2001 | 1277 | 2712 | $<50$ | jrw | SW | 82700 |
| 4-Chloro-3-methylphenol | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 82700 |
| 2-Chlorophenol | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | $8270{ }^{\text {c }}$ |
| 2.4-Dichlorophenol | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 2.4-Dimethylphenol | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 2-Methylphenol | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| meta \& para-Methylphenol | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | sW | 8270C |
| 2-Nitrophenol | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Pentachlorophenol | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2712 | <10 | jrw | SW | 8270C |
| Phenol | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jww | SW | 8270C |
| 2,4,5-Trichlorophenol | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jıw | SW | 8270C |
| 2,4,6-Trichlorophenol | $<10$ |  | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Surrogate: d6-Phenol | 12 |  | 8 | 09/27/2001 | 1277 | 2712 |  | jrw | SW | 8270c |
| Surrogate: 2-Fluorophenol | 7 |  | \% | 09/27/2001 | 1277 | 2712 |  | jrw | SW | 8270C |
| Surrogate: Tribromophenol | 6 | note | \% | 09/27/2001 | 1277 | 2712 |  | jrw | SW | 8270 C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

TPH - DRO AQUEOUS
TPH - Method 418.1 (AQ)

SAMPLE NO. 707748

Prep Run

|  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Date | Batch | Batch | Reporting | Analyst |  |
| Analyzed | Number | Number | Limit | Initials | Method Reference |

09/18/2001 15:45

| ICPMS TOTAL METALS | Complete |  | 09/28/2001 |  | 2566 | Complete | ekh | SW 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | 0.146 | mg/L | 09/28/2001 | 1847 | 3691 | $<0.0050$ | ekh | SW 6020 |
| Barium, ICPMS | 0.448 | mg/L | 09/28/2001 | 1847 | 3899 | $<0.0050$ | ekh | SW 6020 |
| Cadmium, ICPMS | 0.0041 | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3570 | $<0.0010$ | ekh | SW 6020 |
| Chromium, ICPMS (0.005) | 0.163 | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3970 | $<0.0050$ | ekh | SW 6020 |
| Lead, ICPMS | 0.531 | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3648 | $<0.0010$ | ekh | SW 6020 |
| Mercury, CVAA | <0.0002 | mg/L | 09/25/2001 | 1414 | 1360 | $<0.0002$ | epk | SW 7470A |
| Selenium, GFAA | $<0.0050$ | mg/L | 09/27/2001 | 752 | 578 | $<0.0050$ | 1 nh | SW 7740 |
| Silver, ICPMS | 0.0007 | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 1847 | 3905 | $<0.0005$ | ekh | SW 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/26/2001 | 1847 |  | Complete | clm | SW 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 752 |  | Complete | clm | SW 3020A |
| Manual Mercury Digestion | Complete |  | 09/24/2001 | 1414 |  | Complete | epk | SW 7470A |
| Prep, TPH - 418.1 aq | Complete |  | 09/26/2001 | 602 |  | Complete | 260 | EPA 418.1 |
| VOLATILE COMPOUNDS - 8260 |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/27/2001 |  | 3610 | Complete | eap |  |
| Acetone | <20.0 | ug/L | 09/27/2001 |  | 3610 | <20.0 | eap | SW 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TIO |  |  |  |  | DAT | TIME | TAKEN |
| 707748 |  | SBI002:H | N2S | G091 | : 523 |  |  |  | 09/ | 8/2001 | 16:20 |


| Benzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 8260 B |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 8260B |
| n -Butylbenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| Bromochloromethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Bromofortn | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | sw | 8260B |
| Bromobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/27/2001 | 3610 | $<12.5$ | eap | SW | 8260 B |
| Carbon disulfide | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 82608 |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| Chloroethane | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 8260 B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/27/2001 | 3620 | $<1.0$ | eap | SW | 8260B |
| 4-Chlorotoluene | <1.0 | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 8260B |
| Chloroform | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 8260b |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260日 |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260日 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Reporting Analyst |  |
| Number | Number | Limit | Initials Method Reference |  |  |

## SAMPLE NO. 707748

SAMPLE DESCRIPTION
SBI002:HMW2S:G091801:523
DATE/TIME TAKEN
09/18/2001 16:20

| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| cis-1.2-Dichloroethene | 1.3 | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| 1,3-Dichloropropane | <1.0 | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 82608 |
| 2,2-Dichloropropane | $\leqslant 1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 82608 |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8250B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 8260 B |
| $n$-Hexane | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/27/2001 | 3610 | $<12.5$ | eap | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/27/2001 | 3610 | $<12.5$ | eap | SW | 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | sw | 82608 |
| Styrene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/27/2001 | 3510 | $<1.0$ | eap | SW | 82608 |
| Tetrachloroethene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Toluene | <1.0 | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 8260日 |

## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)
$10 / 12 / 2001$
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. | SAMPLE DESCRIPTION |
| :--- | :--- |
| 707748 | SBIOO2:HMW2S:G091801:523 |

SBI002:HMW2S:G091801:523

| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/27/2001 |  | 3610 | <5.0 | eap | SW 8260日 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW 8260B |
| Trichloroethene | 8.0 | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW 8260B |
| 1,2,3-Trichloropropane | <5.0 | ug/L | 09/27/2001 |  | 3610 | $<5.0$ | eap | SW 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/27/2001 |  | 3610 | <5.0 | eap | SW 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW 8260B |
| Xylenes | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW 8260B |
| d4-1,2-Dichloroethane (surr) | 108 | 8 | 09/27/2001 |  | 3610 |  | eap | SW 8260B |
| Dibromofluoromethane (surr) | 103 | \% | 09/27/2001 |  | 3610 |  | eap | SW 8260B |
| ds-Toluene (surr) | 96 | 8 | 09/27/2001 |  | 3610 |  | eap | SW 8260B |
| Bromofluorobenzene (surr) | 108 | \% | 09/27/2001 |  | 3610 |  | eap | SW 8260B |
| TPH - GRO (Aqueous) | <1 | $\mathrm{mg} / \mathrm{L}$ | 09/21/2001 |  | 85 | $<1$ | meb | SW 8015M |
| TPH - Method 418.1 (AQ) | $<0.2$ | $\mathrm{mg} / \mathrm{L}$ | 09/27/2001 | 602 | 723 | $<0.2$ | 260 | EPA 418.1 |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192


## SAMPLE NO. 707749

SAMPLE DESCRIPTION
SBI002:HMW1S:G091801:523

DATE/TIME TAKEN 09/18/2001 17:00


# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 707749 | SBI002:HMW1S:G091801:523 | $09 / 18 / 2001$ 17:00 |


| Bromobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Butanone (MEK) | <12.5 | ug/L | 09/27/2001 | 3610 | $<12.5$ | eap | SW | 8260 B |
| Carbon disulfide | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Chloroethane | $<5.0$ | ug/L | 09/27/2001 | 3610 | < 5.0 | eap | SW | 82608 |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| 4-Chlorotoluene | $<1.0$ | ug/is | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| Chloroform | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 82608 |
| Dibromochloromethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 82608 |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 8260 B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260日 |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 82608 |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 1.1-Dichloroethene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| cis-1,2-Dichloroethene | <1.0 | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| trans-1, 2-Dichloroethene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<2.0$ | eap | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |

# TestAmerica，Incorporated 

## ANALYTICAL REPORT

Kevin Wildman HULL \＆ASSOC．（Dublin）

10／12／2001
6130 Wilcox Rd．
Dublin，OH 43016

Job Number：01．17192
Client Project ID：South Bend Indiana SBI002


SAMPLE NO．
SAMPLE DESCRIPTION 707749

SBI002：HMW1S：G091801：523

DATE／TIME TAKEN 09／18／2001 17：00

| Cis－1，3－Dichloropropene | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans－1，3－Dichloropropene | ＜1．0 | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260日 |
| Ethylbenzene | ＜1．0 | ug／L | 09／27／2001 | 3610 | ＜1．0 | eap | SW 8260B |
| Hexachlorobutadiene | $<5.0$ | ug／L | 09／27／2001 | 3610 | $<5.0$ | eap | SW 8260B |
| n－Hexane | $<5.0$ | ug／L | 09／27／2001 | 3610 | ＜5．0 | eap | SW 8260B |
| 2－Hexanone | $<12.5$ | ug／L | 09／27／2001 | 3610 | $<12.5$ | eap | SW 82608 |
| Isopropylbenzene（Cumene） | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 82608 |
| p－Isopropyltoluene | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260 B |
| Bromomethane | $<5.0$ | ug／L | 09／27／2001 | 3610 | $<5.0$ | eap | SW 8260B |
| Methylene Chloride | $<5.0$ | ug／L | 09／27／2001 | 3610 | $<5.0$ | eap | SW 8260 B |
| Methyl t－butyl ether（MTBE） | $<5.0$ | ug／L | 09／27／2001 | 3610 | $<5.0$ | eap | SW 8260b |
| 4－Methyl－2－pentanone（MIBK） | $<12.5$ | ug／L | 09／27／2001 | 3610 | $<12.5$ | eap | SW 8260B |
| n－Propylbenzene | ＜1．0 | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260B |
| Styrene | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260B |
| Naphthalene | $<5.0$ | ug／L | 09／27／2001 | 3610 | $<5.0$ | eap | SW 8260日 |
| 1，1，1，2－Tetrachloroethane | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 1，1，2，2－Tetrachloroethane | $<1.0$ | ug／L | 09／27／2001 | 3610 | ＜1．0 | eap | SW 8260日 |
| Tetrachloroethene | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260 B |
| Toluene | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260b |
| 1，2，4－Trichlorobenzene | $<5.0$ | ug／L | 09／27／2001 | 3610 | $<5.0$ | eap | SW 8260b |
| 1，1，1－Trichloroethane | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 1，1，2－Trichloroethane | $<1.0$ | ug／L | 09／27／2001 | 3610 | ＜1．0 | eap | SW 8260B |
| Trichloroethene | 2.3 | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW 82608 |
| Trichlorofluoromethane | $<1.0$ | ug／L | 09／27／2001 | 3610 | ＜1． 0 | eap | SW 8260B |
| 1，2，3－Trichloropropane | $<5.0$ | ug／L | 09／27／2001 | 3610 | $<5.0$ | eap | SW 8260b |
| 1，2，4－Trimethylbenzene | $<1.0$ | ug／L | 09／27／2001 | 3610 | ＜1．0 | eap | SW 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>$10 / 12 / 2001$<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Numbex | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method R | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 707749 |  | SBIOO2:HM | 1S: | G091 | 523 |  |  |  | 09/ | 8/200 | 1 17:00 |


| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Acetate | $<5.0$ | ug/L | 09/27/2001 |  | 3610 | $<5.0$ | eap | SW | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW | 8260B |
| Xylenes | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 108 | \% | 09/27/2001 |  | 3610 |  | eap | SW | 8260 B |
| Dibromofluoromethane(surr) | 104 | \% | 09/27/2001 |  | 3610 |  | eap | SW | 82608 |
| ds-Toluene (surr) | 94 | $t$ | 09/27/2001 |  | 3610 |  | eap | Sw | 8260B |
| Bromofluorobenzene (surr) | 104 | \% | 09/27/2001 |  | 3610 |  | eap | sw | 8260B |
| BASE NEUTTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | Sw | $8270{ }^{\text {c }}$ |
| Acenaphthylene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jTw | SW | 8270C |
| Anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Benzo(b) fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Benzo(k)fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Benzo (a) Pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | $8270{ }^{\circ}$ |
| Benzyl alcohol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | $8270{ }^{\text {c }}$ |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jxw | SW | 8270C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 2,2'-oxybis(1-Chloropropane) | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 82700 |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 4-Chloroaniline | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | <10 | jrw | sw | 8270 C |

## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBIO02

SAMPLE NO. SAMPLE DESCRIPTION
707749

DATE/TIME TAKEN 09/18/2001 17:00

| Chrysene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jxw | SW 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzo (a, h) anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270c |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/27/2001 | 1277 | 2712 | $<50$ | jrw | SW 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Fluorene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jxw | SW 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/27/2001 | 1277 | 2712 | $<20$ | jrw | SW 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Indeno (1, 2, 3-cd) pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Isophorone | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Naphthalene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Nitrobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jıw | SW 8270C |
| Phenanthrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192

## Client Project ID: South Bend Indiana SBI002



## SAMPLE NO. SAMPLE DESCRIPTION 707749 SBI002:HMW1S:G091801:523

DATE/TIME TAKEN

| Surrogate: d5-Nitrobenzene | 82 | 8 | 09/27/2001 | 1277 | 2712 |  | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorobiphenyl | 75 | 8 | 09/27/2001 | 1277 | 2712 |  | jrw | SW | 8270 C |
| Surrogate: d1.4-Terphenyl | 56 | 4 | 09/27/2001 | 1277 | 2712 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | <50 | ug/L | 09/27/2001 | 1277 | 2712 | $<50$ | jrw | SN | 8270 C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2-Chlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2-Methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2-Nitrophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Pentachlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Phenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 2,4,6-Trichlorophenol | $<10$ | $\mathrm{ug} / \mathrm{L}$ | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Surrogate: d6-Phenol | 73 | $\%$ | 09/27/2001 | 1277 | 2712 |  | jrw | SH | 8270 C |
| Surrogate: 2-Fluorophenol | 76 | 8 | 09/27/2001 | 1277 | 2712 |  | jrw | SW | 8270C |
| Surrogate: Tribromophenol | 65 | 8 | 09/27/2001 | 1277 | 2712 |  | jrw | SW | 8270C |
| TPH - GRO (Aqueous) | $<1$ | mg/L | 09/21/2001 |  | 85 | $<1$ | meb | SW | 8015M |
| TPH - Method 418.1 (AQ) | $<0.2$ | mg/L | 09/27/2001 | 602 | 723 | <0.2 | 260 |  | 418.1 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

## Job Number: 01.17192

## Client Project ID: South Bend Indiana SBI002

## SAMPLE NO 707750

SAMPLE DESCRIPTION
SBI002:HMW1I: G091801:523

|  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Date | Batch | Batch | Reporting | Analyst |  |
| Analyzed | Number | Number | Limit | Initials | Method Reference |



# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$10 / 12 / 2001$

Job Number: 01.17192
Client Project ID: South Bend Indiana SBIOO2

SAMPLE NO. SAMPLE DESCRIPTION
707750 SBIOO2:HMW1I:G091801:523

DATE/TIME TAKEN 09/18/2001 17:10

| Bromobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/27/2001 | 3610 | $<12.5$ | eap | SW | 82608 |
| Carbon disulfide | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260日 |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| Chloroethane | $<5.0$ | ug/L | 09/27/2001 | 3610 | <5.0 | eap | SW | 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| Chloroform | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/27/2001 | 3610 | <5.0 | eap | Sw | 8260B |
| Dibromochloromethane | <1.0 | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Dibromomethane | $<1.0$ | $\mathrm{ug} / \mathrm{L}$ | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 8260 B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| 1,3-Dichlorobenzene | <1.0 | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 8260B |
| 1,4-Dichlorobenzene | <1.0 | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 1,1-Dichloroethane | $<1.0$ | $\mathrm{ug} / \mathrm{L}$ | 09/27/2001 | 3610 | <1.0 | eap | SW | 8260日 |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 82608 |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Cis-1,2-Dichloroethene | 4.3 | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| 1,3-Dichloropropane | <1.0 | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 8260 B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
10/12/2001

## 6130 Wilcox Rd.

Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


| cis-1,3-Dichloropropene | <1.0 | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 82608 |
| Ethylbenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/y | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 82608 |
| n -Hexane | $<5.0$ | ug/L | 09/27/2001 | 3610 | <5.0 | eap | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/27/2001 | 3610 | $<12.5$ | eap | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 8260B |
| p -Isopropyltoluene | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 82608 |
| Bromomethane | $<5.0$ | ug/Le | 09/27/2001 | 3610 | <5.0 | eap | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | sw | 8260B |
| Methyl t-butyl ether (MIBE) | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/27/2001 | 3610 | $<12.5$ | eap | SW | 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| Styrene | $<1.0$ | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 82608 |
| Naphthalene | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Tetrachloroethene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Toluene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 09/27/2001 | 3610 | <5.0 | eap | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Trichloroethene | 16.8 | ug/L | 09/27/2001 | 3610 | <1.0 | eap | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW | 82608 |
| 1,2.3-Trichloropropane | <5.0 | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW | 82608 |
| 1,2,4-Trimethylbenzene | <1.0 | ug/L | 09/27/2001 | 3610 | $<2.0$ | eap | SW | 82608 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HUL工 \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | $<1.0$ | eap | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Acetate | $<5.0$ | ug/L | 09/27/2001 |  | 3610 | <5.0 | eap | SW | 8260 B |
| Vinyl Chloride | <1.0 | ug/L | 09/27/2001 |  | 3610 | <1.0 | eap | SW | 8260] |
| XYlenes | $<1.0$ | ug/L | 09/27/2001 |  | 3610 | <1.0 | eap | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 109 | \% | 09/27/2001 |  | 3610 |  | eap | SW | 8260B |
| Dibromofluoromethane (surr) | 104 | \% | 09/27/2001 |  | 3610 |  | eap | SW | 82608 |
| d8-Toluene (surr) | 95 | \% | 09/27/2001 |  | 3610 |  | eap | SW | 82608 |
| Bromofluorobenzene (surr) | 105 | 8 | 09/27/2001 |  | 3610 |  | eap | SN | 82608 |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Acenaphthylene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Benzo (k) fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Benzo(a) pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | <10 | jrw | SW | 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jxw | SW | 8270 C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | $8270{ }^{\text {c }}$ |
| bis (2-Chloroethyl)ether | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| bis (2-Ethylhexyl)phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 09/27/2001 | 1277 | 2.712 | $<10$ | jrw | SW | 8270 C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SN | $8270{ }^{\text {c }}$ |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 707750 |  | SBI 002 : HI | II: | 091 | : 523 |  |  |  | $09 /$ | 8/2001 | 1 17:10 |


| Chrysene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Dibenzofuran | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jxw | SW | 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 82700 |
| 3.3'-Dichlorobenzidine | $<50$ | ug/L | 09/27/2001 | 1277 | 2712 | < 50 | jrw | SW | 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | $8270{ }^{\text {C }}$ |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Fluorene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Hexachlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/27/2001 | 1277 | 2712 | $<20$ | jıw | SW | 8270 C |
| Hexachloroethane | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Indeno (1, 2,3-ed) pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Isophorone | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Naphthalene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 82700 |
| Nitrobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | $8270{ }^{\circ}$ |
| Phenanthrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jıw | SW | 8270C |
| Pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jIw | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 707750 <br> SAMPLE DESCRIPTION SBIO 02 :HMW1I:G091801:523

DATE/TIME TAKEN
09/18/2001 17:10

| Surrogate: d5-Nitrobenzene | 89 | \% | 09/27/2001 | 1277 | 2712 |  | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorobiphenyl | 84 | \% | 09/27/2001 | 1277 | 2712 |  | jrw | SW | 8270C |
| Surrogate: d14-Terphenyl | 51 | 4 | 09/27/2001 | 1277 | 2712 |  | jrw | SW | 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/27/2001 | 1277 | 2712 | $<50$ | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2-Chlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jxw | SW | 8270C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 2-Methyiphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2-Nitrophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Pentachlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Phenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Surrogate: d6-Phenol | 69 | 8 | 09/27/2001 | 1277 | 2712 |  | jrw | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 72 | 8 | 09/27/2001 | 2277 | 2712 |  | jrw | SW | 8270C |
| Surrogate: Tribromophenol | 62 | \% | 09/27/2001 | 1277 | 2712 |  | jrw | SW | 8270C |
| TPH - GRO (Aqueous) | $<1$ | $\mathrm{mg} / \mathrm{L}$ | 09/21/2001 |  | 85 | $<1$ | meb | SW | 8015M |
| TPH - Method 418.1 (AQ) | $<0.2$ | $\mathrm{mg} / \mathrm{L}$ | 09/27/2001 | 602 | 723 | <0.2 | 260 | EP | 418.1 |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>10/12/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002



## TestAmerica，Incorporated

## Kevin Wildman

HULI \＆ASSOC．（Dublin） 6130 Wilcox Rd．
Dublin，OH 43016

10／12／2001

Job Number：01．17192
Client Project ID：South Bend Indiana SBI002


| ／ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bromobenzene | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 2－Butanone（MEK） | $<12.5$ | ug／L | 09／27／2001 | 3610 | $<12.5$ | eap | SW | 8260B |
| Carbon disulfide | $<1.0$ | ug／L | 09／27／2001 | 3610 | ＜1．0 | eap | SW | 8250b |
| Carbon tetrachloride | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Chlorobenzene | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Chloroethane | $<5.0$ | ug／L | 09／27／2001 | 3610 | $<5.0$ | eap | Sw | 8260 B |
| 2－Chlorotoluene | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| 4－Chlorotoluene | ＜1．0 | ug／L | 09／27／2001 | 3610 | ＜1．0 | eap | SW | 8260 B |
| Chloroform | $<1.0$ | $\underline{u g / L}$ | 09／27／2001 | 3610 | $<1.0$ | eap | SW | 8260日 |
| Chloromethane | ＜5．0 | ug／L | 09／27／2001 | 3610 | $<5.0$ | eap | SW | 8260日 |
| Dibromochloromethane | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | sw | 8260 B |
| Dibromomethane | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| Dichiorodifluoromethane | $<1.0$ | ug／L | 09／27／2001 | 3610 | ＜1．0 | eap | SW | 8260B |
| 1，2－Dibromo－3－chloropropane | $<5.0$ | ug／L | 09／27／2001 | 3610 | $<5.0$ | eap | SW | 8260 B |
| 1，2－Dichlorobenzene | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | Sw | 8260B |
| 1，3－Dichlorobenzene | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW | 82603 |
| 1，4－Dichlorobenzene | $<1.0$ | ug／L | 09／27／2001 | 3610 | ＜1．0 | eap | SW | 8260B |
| 1，1－Dichloroethane | $<1.0$ | ug／L | 09／27／2．001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 1，1－Dichloroethene | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| cis－1，2－Dichloroethene | 1.8 | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW | 8260日 |
| trans－1，2－Dichloroethene | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 1．2－Dichloropropane | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW | 8260B |
| 2，2－Dichloropropane | ＜1．0 | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW | 8260 B |
| 1，1－Dichloropropene | $<1.0$ | ug／L | 09／27／2001 | 3610 | $<1.0$ | eap | SW | 8260B |

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION
707751 SBIOO2:HMW1D:G091801:523

DATE/TIME TAKEN 09/18/2001 17:20

| Cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260 B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260E |
| Ethylbenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| Hexachiorobutadiene | < 5.0 | ug/L | 09/27/2001 | 3610 | <5.0 | eap | SW 8260B |
| $n$-Hexane | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/27/2001 | 3610 | $<12.5$ | eap | SW 8260b |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260b |
| Bromomethane | $<5.0$ | ug/L | 09/27/2001 | 3610 | <5.0 | eap | SW 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW 8260日 |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/27/2001 | 3610 | $<5.0$ | eap | SW 8260] |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/27/2001 | 3610 | $<12.5$ | eap | SW 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| Styrene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SN 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/27/2001 | 3610 | <5.0 | eap | SW 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| Tetrachloroethene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| Toluene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/27/2001 | 3610 | < 5.0 | eap | SW 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260b |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| Trichloroethene | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260日 |
| 1,2,3-Trichloropropane | < 5.0 | ug/L | 09/27/2001 | 3610 | <5.0 | eap | SW 8260B |
| 1,2,4-Trimethylbenzene | <1.0 | ug/L | 09/27/2001 | 3610 | $<1.0$ | eap | SW 8260B |

# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION

 707751 SBIO02:HMWID:G091801:523DATE/TIME TAKEN
09/18/2001 17:20


# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


SAMPLE DESCRIPTION
SBI002:HMW1D:G091801:523

DATE/TIME TAKEN 09/18/2001 17:20

| Chrysene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | <10 | dmg | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | drig | SW | 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | $8270{ }^{\text {c }}$ |
| 1,3-Dichlorobenzene | $<10$ | $\underline{u g / L}$ | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270 C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/27/2001 | 1277 | 2705 | $<50$ | dmg | SW | $8270{ }^{\circ}$ |
| Diethyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | Sw | 8270 C |
| Dimethyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | Sw | 8270 C |
| Fluorene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| Hexachlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | SW | 82700 |
| Hexachloro-1, 3 -butadiene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/27/2001 | 1277 | 2705 | $<20$ | dmg | SW | 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270C |
| Indeno(1,2,3-cd) pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Isophorone | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Naphthalene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Nitrobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Phenanthrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270C |
| 1,2,4-Trichlorobenzene | <10 | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |

# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

Kevin Wildman HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBIOO2


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 707751 | SBIO02:HMW1D:G091801:523 |

## DATE/TIME TAKEN 09/18/2001 17:20

| Surrogate: d5-Nitrobenzene | 75 | $t$ | 09/27/2001 | 1277 | 2705 |  | dmg | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorobiphenyl | 79 | \% | 09/27/2001 | 1277 | 2705 |  | dmg | SW | 8270 C |
| Surrogate: di4-Terphenyl | 48 | \% | 09/27/2001 | 1277 | 2705 |  | dmg | SW | 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/27/2001 | 1277 | 2705 | $<50$ | dmg | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2-Chlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 82700 |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2-Methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2-Nitrophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | sw | 8270c |
| Pentachlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Phenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/t | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Surrogate: d6-Phenol | 44 | \% | 09/27/2001 | 1277 | 2705 |  | dmg | SW | 8270 C |
| Surrogate: 2-Fluorophenol | 45 | 8 | 09/27/2001 | 1277 | 2705 |  | dmg | SW | 8270C |
| Surrogate: Tribromophenol | 43 | $\%$ | 09/27/2001 | 1277 | 2705 |  | dmg | S* | 8270 C |
| TPH - GRO (Aqueous) | $<1$ | $\mathrm{mg} / \mathrm{L}$ | 09/21/2001 |  | 85 | $<1$ | meb | SW | 8015M |
| TPH - Method 418.1 (AQ) | $<0.2$ | $\mathrm{mg} / \mathrm{L}$ | 09/27/2001 | 602 | 723 | $<0.2$ | sub | EPA | 418.1 |

TestAmerica, Incorporated

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ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

SAMPLE NO. SAMPLE DESCRIPTION DATE/TIME TAKEN 707752

SBI002:TB1:091801

09/18/2001
VOLLATILE COMPOUNDS - 8260 (AQ)

| 8260 - SW846 (AO) | Complete |  | 09/26/2001 | 3603 | Complete | bmh |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | $<20.0$ | ug/L | 09/26/2001 | 3603 | $<20.0$ | bmh | SW 8260B |
| Benzene | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| sec-Butylbenzene | $<1.0$ | ug/r | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| n-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260B |
| Bromochloromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260B |
| Bromoform | $<1.0$ | ug/L | 09/25/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Bromobenzene | $<1.0$ | ug/L | 09/26/2002 | 3603 | <1.0 | bmh | SW 8260B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 | 3603 | <12.5 | bmh | SW 8260B |
| Carbon disulfide | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Chlorobenzene | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Chloroethane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 82608 |
| Chloroform | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/26/2001 | 3603 | < 5.0 | bmh | SW 8260B |
| Dibromochloromethane | <1.0 | ug/L | 09/26/2001 | 3503 | $<1.0$ | bmh | SW 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8250B |
| 1,2-Dibromo-3-chloropropane | <5.0 | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW 8260B |
| 1,3-Dichlorobenzene | <1.0 | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW 8260B |

# ANALYTICAL REPORT 

Kevin Wildman HULL \＆ASSOC．（Dublin）

10／12／2001
6130 Wilcox Rd．
Dublin，OH 43016

Job Number： 01.17192
Client Project ID：South Bend Indiana SBI002


| SAMPLE NO．SAMPLE DESCRIPTION | DATE／TIME TAKEN |  |
| :--- | :--- | :--- |
| 707752 | SBIOO2：TBI：091801 | $09 / 18 / 2001$ | 707752 SBI002：TBI：091801


| 1，4－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1，1－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW | 8260B |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW | 8260B |
| 1，1－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW | 82603 |
| cis－1，2－Dichloroethene | ＜1．0 | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| trans－1，2－Dichloroethene | ＜1．0 | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW | 8260日 |
| 1，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001． | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW | 82608 |
| 1，1－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<2.0$ | brih | SW | 8260B |
| cis－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| trans－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | sw | 8260B |
| Ethylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Hexachlorobutadiene | $<5.0$ | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| n －Hexane | $<5.0$ | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW | 8260 B |
| 2－Hexanone | $<12.5$ | ug／L | 09／26／2001 | 3603 | $<12.5$ | brah | SW | 8260 B |
| Isopropylbenzene（Cumene） | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | Sw | 8260 B |
| p－Isopropyltoluene | ＜1．0 | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Eromomethane | $<5.0$ | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW | 8260 B |
| Methylene Chloride | $<5.0$ | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW | 8260日 |
| Methyl t－butyl ether（MTBE） | $<5.0$ | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW | 82608 |
| 4－Methyl－2－pentanone（MIBK） | $<12.5$ | ug／L | 09／26／2001 | 3603 | $<12.5$ | bmh | SW | 8260日 |
| n－Propylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Styrene | $<1.0$ | ug／L | 09／26／2001 | 3603 | $<1.0$ | brah | SW | 8260 B |
| Naphthalene | $<5.0$ | ug／L | 09／26／2001 | 3603 | $<5.0$ | bmh | SW | 8260 B |
| 1，1，1，2－Tetrachloroethane | $<1.0$ | ug／L | 09／26／2001 | 3603 | ＜1．0 | bmh | SW | 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016
$10 / 12 / 2001$

Job Number: 01.17192
Client Project.ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |

SAMPLE NO. SAMPLE DESCRIPTION 707752

DATE/TIME TAKEN
09/18/2001

| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tetrachioroethene | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| Toluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 09/26/2001 | 3603 | < 5.0 | bmh | SW | 82608 |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82508 |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| Trichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | Sw | 8260 B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1,3,5-Trimethylbenzene | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Xylenes | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 101 | $\%$ | 09/26/2001 | 3603 |  | bmh | SW | 8260B |
| Dibromofluoromethane (surr) | 101 | \% | 09/26/2001 | 3603 |  | bmh | SW | 8260B |
| d8-Toluene (surr) | 97 | 8 | 09/26/2001 | 3603 |  | bmin | SW | 8260B |
| Bromofluorobenzene (surr) | 105 | $\%$ | 09/26/2001 | 3603 |  | bmh | SW | 8260B |

# TestAmerica, Incorporated 

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## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 707863

SAMPLE DESCRIPTION SBI002:19S:G091801:505

DATE/TIME TAKEN 09/18/2001 07:30


## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. | SAMPLE DESCRIPTION |
| :--- | :--- |
| 707863 | SBIO02:19S:G091801:505 |

DATE/TIME TAKEN 09/18/2001 07:30

| Bromobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 | 3603 | $<12.5$ | bmh | SW | 8260B |
| Carbon disulfide | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<2.0$ | bmh | SW | 8260B |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Chloroethane | $<5.0$ | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW | 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| Chloroform | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 82608 |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | Sw | 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260 B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| 1,1-Dichloropropene | <1.0 | ug/L | 09/26/2001 | 3603 | <1.0 | buh | SW | 82608 |

## TestAmerica, Incorporated

# ANALYTICAL REPORT 

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 707863

SAMPLE DESCRIPTION
SBIO02:19S:G091801:505

DATE/TIME TAKEN 09/18/2001 07:30

| Cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans-1,3-Dichloropropene | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bruh | SW | 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/26/2001 | 3603 | < 5.0 | bmh | SW | 8260日 |
| n -Hexane | $<5.0$ | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3603 | $<12.5$ | bmh | SW | 8260B |
| Isopropylbenzene (Cumene) | <1.0 | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | Sw | 8260B |
| P-Isopropyltoluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | Sw | 82608 |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | Sw | 82508 |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 | 3603 | $<12.5$ | bmh | SW | 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Naphthalene | < 5.0 | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| Tetrachloroethene | 185 |  | 09/27/2001 | 3607 | $<10$ | bmh | SW | 8260B |
| Toluene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260 B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/26/2001 | 3603 | <5.0 | bmh | SW | 8260B |
| 1,1,1-Trichloroethane | 1.8 | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260b |
| Trichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3603 | $<1.0$ | bmh | SW | 82608 |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/26/2001 | 3603 | $<5.0$ | bmh | SW | 82608 |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3603 | <1.0 | bmh | SW | 8260 B |

## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 707863 |  | SBI002:1 | : G0 | 180 | 05 |  |  |  | 09/ | 8/2001 | 1. $07: 30$ |


| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 |  | 3603 | <5.0 | bmh | sw | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| XYlenes | $<1.0$ | ug/L | 09/26/2001 |  | 3603 | $<1.0$ | bmh | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 101 | \% | 09/26/2001 |  | 3603 |  | bmh | SW | 8260B |
| Dibromofluoromethane (surr) | 101 | 8 | 09/26/2001 |  | 3603 |  | bmb | SW | 8260B |
| d8-Toluene (surr) | 96 | 8 | 09/26/2001 |  | 3603 |  | bmh | SW | 82608 |
| Bromofluorobenzene (surr) | 102 | 8 | 09/26/2001 |  | 3603 |  | bmh | SW | 8260B |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | .09/26/2001 | 1277 | 2705 | $<10$ | dmg | Sw | 82700 |
| Acenaphthylene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | Sw | 8270C |
| Anthracene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Benzo(a)anthracene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Benzo(k) fluoranthene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| Benzo(a) pyrene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| bis(2-Chloroethyl)ether | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2,2'-oxybis(1-Chloropropane) | <10 | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dng | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 4-Chloroaniline | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |

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## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


DATE/TIME TAKEN
09/18/2001 07:30

| nrysene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Dibenzofuran | $<10$ | $\underline{u g / L}$ | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 1,2-Dichlorobenzene | . $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/26/2001 | 1277 | 2705 | <50 | dmg | SW 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | sw 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Fluoranthene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Fluorene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/26/2001 | 1277 | 2705 | $<20$ | dmg | SW 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Indeno (1, 2, 3-cd) pyrene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | ding | SW 8270C |
| Isophorone | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Naphthalene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270c |
| Nitrobenzene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Phenanthrene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Pyrene | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 1,2,4-Trichlorobenzene | <10 | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: Soụth Bend Indiana SBI002


SAMPLE NO. 707863

SAMPLE DESCRIPTION
SBIO02:19S:G091801:505

10/12/2001

Limit
DATE/TIME TAKEN 09/18/2001 07:30

| Surrogate: d5-Nitrobenzene | 82 | $t$ | 09/26/2002 | 1277 | 2705 |  | dmg | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 2-Fluorobiphenyl | 91 | 8 | 09/26/2001 | 1277 | 2705 |  | dmg | SW | 8270C |
| Surrogate: dl4-Terphenyl | 71 | 4 | 09/26/2001 | 1277 | 2705 |  | dmg | SW | 8270 C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/26/2001 | 1277 | 2705 | $<50$ | dmg | SW | 82700 |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/25/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2-Chlorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2-Methylphenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | ding | Sw | 8270 C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2-Nitrophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | Sw | 8270C |
| Pentachlorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | $8270{ }^{\text {c }}$ |
| Phenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | amg | SW | 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/26/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Surrogate: d6-Phenol | 53 | 4 | 09/26/2001 | 1277 | 2705 |  | dmg | SW | 82700 |
| Surrogate: 2-Fluorophenol | 52 | \% | 09/26/2001 | 1277 | 2705 |  | dmg | SW | 8270 C |
| Surrogate: Tribromophenol | 27 | \% | 09/26/2001 | 1277 | 2705 |  | amg | SW | 8270 C |
| TPH - Method 418.1 (AQ) | $<0.2$ | $\mathrm{mg} / \mathrm{L}$ | 09/27/2001 | 602 | 723 | $<0.2$ | 260 | EPA | 418.1 |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 707965 |  | SBI002:19 | : GO | 180 | : 505 |  |  |  | 09/ | 8/2001 | 07:30 |



# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting | Analyst |  |
| Analyzed | Number | Number Limit | Initials Method Reference |  |  |  |


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 707965 | SBIO02:19S:G091801D:505 |

DATE/TIME TAKEN
09/18/2001 07:30


# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01. 17192
Client Project ID: South Bend Indiana SBIO02

| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 707965 | SBI002:19S:G091801D:505 | $09 / 18 / 200107: 30$ |


| sophorone | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Naphthalene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | <10 | jrw | SW | 8270C |
| Nitrobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jıw | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Phenanthrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | <10 | jxw | SW | 8270 C |
| 1,2,4-Trichlorobenzene | <10 | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 101 | \% | 09/27/2001 | 1277 | 2712 |  | jrw | Sw | 8270C |
| Surrogate: 2-Fluorobiphenyl | 87 | \% | 09/27/2001 | 1277 | 2712 |  | jrw | SW | 8270 C |
| Surrogate: dl4-Terphenyl | 67 | \% | 09/27/2001 | 1277 | 2712 |  | jrw | SW | 8270 C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/27/2001 | 1277 | 2712 | $<50$ | jrw | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2-Chlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | $\underline{u g / L}$ | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2-Methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2-Nitrophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Pentachlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 82700 |
| Phenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Surrogate: d5-Phenol | 74 | \% | 09/27/2001 | 1277 | 2712 |  | jrw | SW | 8270 C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)<br>10/12/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17192
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAREN |  |
| :--- | :--- | :--- |
| 707965 | SBIOO2:19S:G091801D:505 | $09 / 18 / 2001$ 07:30 |


| Surrogate: 2-Fluorophenol | 72 | 4 | 09/27/2001 | 1277 | 2712 |  | jrw |  | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: Tribromophenol | 33 | \% | 09/27/2001 | 1277 | 2712 |  | jrw |  | 8270C |
| TPH - Method 418.1 (AQ) | <0.2 | mg/L | 09/27/2001 | 602 | 723 | $<0.2$ | 260 |  | A 418. |

## QUALITY CONTROL FLAG DEFINITIONS

Job Number: 01.17192
(*) Indicates an out-of-control QC. The analytical data was reported based on other supporting quality control information.
(Note) Indicates to review the notes and comments section of the analytical report as there is additional information concerning this analytical result.
(MS) Indicates that the Matrix Spike (MS) was out of statistical advisory limits.
(MSD) Indicates that the Matrix Spike Duplicate (MSD) was out of statistical advisory limits.
(RPD) Indicates that the Relative Percent Difference (RPD) for the MS/MSD pair was outside of statistical advisory limits.
(SS) Indicates that the MS and MSD were out of statistical advisory limits.
(SSR) Indicates that the MS, MSD and RPD were out of statistical advisory limits.
(MSR) Indicates that the MS and RPD were out of statistical advisory limits.
(MSDR) Indicates that the MSD and RPD were out of statistical advisory limits.
(DL) Indicates that the MS and MSD were diluted out and the percent recoveries of the spikes could not be calculated.
(LS) Indicates that statistical accuracy and precision data is not available for spike concentrations which are < $1 / 4$ of the sample amount. Care should be used in interpreting this data.
(J) Indicates estimated concentration due to internal standard areas or surrogate recoveries outside of control limits. A sample matrix effect is usually indicated.
(DW) Indicates Dry Weight.
Analytical Reporting Limits
The reporting limits listed for non-aqueous samples in the analytical report section are Practical Quantitation Limits ( PQLS ) . These PQLs are based upon a typical standard weight used for a non-aqueous sample. The reporting limit for a sample may be different from the PQL listed depending upon the actual weight of sample used, the samples moisture content and any dilutions used during the analysis.

## TestAmerica, Incorporated

PAGE 127 of 127<br>NOTES AND COMMENTS<br>TestAmerica Job Number: 1.17192<br>Sample Number: 707747<br>Analysis: 8270 BNA<br>Recoveries of surrogates 2-fluorophenol and 2,4,6-tribromophenol were below recommended levels.

$61.17192$
CHAIN OF CUSTODY RECORD
$01,1192707722-823$


# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016
Job Number: 01.17192

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

Sample
Number
Sample Description
Date Taken

Date Received

707729 SBI002:MW28S:G091801:505
707730 SBI002:MW28D:G091801:505
707731 SBIO02:HMW12D:G091801:505
707732 SBIO02:HMW11D:G091801:505
707733 SBI002:HMW11I:G091801:505
707734 SBI002:HMWIII:G091801D:505
707735 SBI002:MW24D:G091801:505
707736 SBI002:HMW23D:G091801:505
707737 SBI002:FBI:W091801:505
707738 SBI002:HMW10S:G091801:505
707739 SBI002:HMW16D:G091801:505
707740 SBI002:MW11S:G091801:505
707741 SBI002:MW1ID:G091801:505
707742 SBI002:HMW19D:G091801:505
707743 SBI002:MW15D:G091801:505
707744 SBIO02:HMW23S:G091801:505
707745
707746
707747
707748
SBI002:MW23S:G091801:505
SBIO 02:MW23D:G091801:505
SBI002:HMW13S:G091801:523
SBI002:HMW2S:G091801:523

| $09 / 18 / 2001$ | $09 / 19 / 2001$ |
| :--- | :--- |
| $09 / 18 / 2001$ | $09 / 19 / 2001$ |
| $09 / 18 / 2001$ | $09 / 19 / 2001$ |
| $09 / 18 / 2001$ | $09 / 19 / 2001$ |
| $09 / 18 / 2001$ | $09 / 19 / 2001$ |
| $09 / 18 / 2001$ | $09 / 19 / 2001$ |
| $09 / 18 / 2001$ | $09 / 19 / 2001$ |
| $09 / 18 / 2001$ | $09 / 19 / 2001$ |
| $09 / 18 / 2001$ | $09 / 19 / 2001$ |
| $09 / 18 / 2001$ | $09 / 19 / 2001$ |
| $09 / 18 / 2001$ | $09 / 19 / 2001$ |
| $09 / 18 / 2001$ | $09 / 19 / 2001$ |
| $09 / 18 / 2001$ | $09 / 19 / 2001$ |
| $09 / 18 / 2001$ | $09 / 19 / 2001$ |
| $09 / 18 / 2001$ | $09 / 19 / 2001$ |
| $09 / 18 / 2001$ | $09 / 19 / 2001$ |
| $09 / 18 / 2001$ | $09 / 19 / 2001$ |
| $09 / 18 / 2001$ | $09 / 19 / 2001$ |
| $09 / 18 / 2001$ | $09 / 19 / 2001$ |
| $09 / 18 / 2001$ | $09 / 19 / 2001$ |

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted only in its entirety.

Enclosure


Approved By

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001
Job Number: 01.17466

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

Sample
Number
708665
708666
708667
708668
708669
708670
708671
708672
708673
708674
708675
708676

Sample Description
SBI002:HMW25S:G091901:523
SBIO02: HMW26S:G091901:523
SBI002:MW13S:G091901:523
SBIO02:HMW13D:G091901:523 SBI002:MW13D:G091901:523
SBIO 02 :HMW14S:G091901:523
SBI002:HMW14S:G091901D:523
SBI002:HMW15S:G091901:523
SBI002:HMW15D:G091901:523
SBI002:HMW27S:G091901:523 SBI002:HMW18S:G091901:523 SBI002:HMW34S:G091901:523

## Date

 Taken09/19/2001
09/19/2001
09/19/2001
09/19/2001
09/19/2001
09/19/2001
09/19/2001
09/19/2001
09/19/2001
09/19/2001
09/19/2001
09/19/2001

Date Received

09/21/2001
09/21/2001
09/21/2001
09/21/2001
09/21/2001
09/21/2001
09/21/2001
09/21/2001
09/21/2001
09/21/2001
09/21/2001
09/21/2001

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted only in its entirety.

Enclosure


## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


## SAMPLE DESCRIPTION 708665 <br> SBIO02:HMW25S:G091901:523

DATE/TIME TAKEN 09/19/2001.07:25


## TestAmerica，Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin，OH 43016

Job Number：01．17466
Client Project ID：South Bend Indiana SBI002


SAMPLE NO．SAMPLE DESCRIPTION 708665

SBIO02：HMW25S：G091901：523

DATE／TIME TAKEN
09／19／2001 07：25

| ＜－Butanone（MEK） | $<12.5$ | ug／L | 09／25／2001 | 3604 | $<12.5$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carbon disulfide | $<1.0$ | ug／L | 09／25／2001 | 3604 | ＜1．0 | dimg | Sw | 8260B |
| Carbon tetrachloride | $<1.0$ | ug／L | 09／25／2001 | 3604 | ＜i．0 | dmg | SW | 8260B |
| Chlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3604 | ＜1．0 | dmg | SW | 82608 |
| Chloroethane | $<5.0$ | ug／L | 09／25／2001 | 3604 | $<5.0$ | dmg | SW | 8260B |
| 2－Chlorotoluene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 4－Chlorotoluene | $<1.0$ | ug／L | 09／25／2001 | 3604 | ＜1．0 | dmg | SW | 8260B |
| Chloroform | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Chloromethane | $<5.0$ | ug／L | 09／25／2001 | 3604 | $<5.0$ | dimg | Sw | 8260B |
| Dibromochloromethane | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | ding | SW | 82608 |
| Dibromomethane | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW | 82608 ． |
| Dichlorodifluoromethane | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1，2－Dibromo－3－chloropropane | $<5.0$ | ug／L | 09／25／2001 | 3604 | $<5.0$ | dmg | SW | 8260日 |
| 1，2－Dichlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1，3－Dichlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1，4－Dichlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1，1－Dichloroethane | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | ding | SW | 8260日 |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW | $8260 B$ |
| 1，1－Dichloroethene | $<1.0$ | ug／L | 09／25／2001 | 3604 | ＜1．0 | drng | SW | 8260B |
| cis－1．2－Dichloroethene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | ding | SW | 8260B |
| trans－1．2－Dichloroethene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | drgg | SW | 8260B |
| 1，2－Dichloropropane | $<1.0$ | ug／L | 09／25／2001 | 3504 | $<1.0$ | dmg | SW | 8260日 |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1，1－Dichloropropene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | Sw | 82608 |
| cis－1，3－Dichloropropene | $<1.0$ | ug／L | 09／25／2001 | 3604 | ＜1．0 | dimg | SW | 8260日 |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


SAMPLE DESCRIPTION
SBI002:HMW25S:G091901:523

DATE/TIME TAKEN 09/19/2001 07:25

| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | ding | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ethylbenzene | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260 B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 8260B |
| n-Hexane | $<5.0$ | ug/L | 09/25/2001 | 3604 | <5.0 | ding | SW | 8260 B |
| 2-Hexanone | $<12.5$ | ug/L | 09/25/2001 | 3604 | $<12.5$ | dmg | SW | 8260B |
| Isopropylbenzene (Cumene) | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/25/2001 | 3604 | <5.0 | dmg | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/25/2001 | 3604 | <5.0 | dmg | SW | 8260B |
| Methyl t-butyl ether (MTBE) | < 5.0 | ug/L | 09/25/2001 | 3604 | <5.0 | dmg | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/25/2001 | 3604 | $<12.5$ | dmg | SW | 8260B |
| n-Propylbenzene | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | sw | 82608 |
| Styrene | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | Sw | 8260B |
| Naphthalene | <5.0 | ug/L | 09/25/2001 | 3604 | <5.0 | dmg | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | sw | 8260 B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Tetrachloroethene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 8260B |
| Toluene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 09/25/2001 | 3604 | <5.0 | dmg | SW | 8260B |
| 1,1,1-Trichloroethane | 2.4 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 8260B |
| Trichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260日 |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | Sw | 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/25/2001 | 3604 | <5.0 | dmg | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 8260B |

# TestAmerica, Incorporated 

PAGE 5 of 61
ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)

10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016
Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION

 708665SBIOO2 : HMW2 5S:G091901:523

DATE/TIME TAKEN 09/19/2001 07:25

| vinyl Acetate | $<5.0$ | ug/L | 09/25/2001 |  | 3604 | <5.0 | dmg | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Chloride | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | Sw | 8260B |
| Xylenes | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | <1.0 | dmg | SW | 82608 |
| d4-1,2-Dichloroethane (surr) | 101 | \% | 09/25/2001 |  | 3604 |  | dmg | SW | 8250B |
| Dibromofluoromethane (surr) | 96 | \% | 09/25/2001 |  | 3604 |  | dmg | SW | 8260b |
| ds-Toluene (surr) | 99 | \% | 09/25/2001 |  | 3604 |  | ding | SW | 8260B |
| Bromofluorobenzene (surr) | 104 | 8 | 09/25/2001 |  | 3604 |  | aing | SW | 8260B |
| BASE NEUTRAJ COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 82700 |
| Acenaphthylene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | <10 | jes | SW | 8270C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Benzo (k) fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Benzo(a) pyrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |
| Benzy1 butyl phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| bis (2-Chloroethyl)ether | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| bis(2-Chloroethoxy) methane | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| 4-Chloroaniline | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 2-Chloronaphthalene | $<10$ | ug/z | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | $8270{ }^{\text {c }}$ |
| Chrysene | <10 | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 708665

SAMPLE DESCRIPTION
SBIO02:HMW25S:G091901:523
DATE/TIME TAKEN 09/19/2001 07:25

| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzofuran | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | <10 | jcs | SW 8270C |
| 1.2-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 1,3-Dichiorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/28/2001 | 1279 | 2710 | $<50$ | jes | SW 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270 C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | <10 | jes | SW 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Fluorene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Hexachloro-1, 3-butadiene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | sw 8270 C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/28/2001 | 1279 | 2710 | <20 | jes | SW 8270C |
| Hexachlorcethane | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Indeno (1, 2, 3-cd) pyrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Isophorone | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Naphthalene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | Sw 8270C |
| Nitrobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | <10 | jes | SW 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Phenanthrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Pyrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Surrogate: d5-Nitrobenzene | 73 | $\%$ | 09/28/2001 | 1279 | 2710 |  | jes | SW 8270C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 708665 | SBIO02:HMW25S:GO91901:523 |


| Surrogate: 2-Fluorobiphenyl | 73 |  | $\%$ | 09/28/2001 | 1279 | 2710 |  | jes | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: di4-Terphenyl | 54 |  | 8 | 09/28/2001 | 1279 | 2710 |  | jes | SW | 8270 C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |  |
| Benzoic acid | <50 |  | ug/L | 09/28/2001 | 1279 | 2710 | $<50$ | jcs | SW | 8270C |
| 4-Chloro-3-methylphenol | $<10$ |  | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 82700 |
| 2 -Chlorophenol | $<10$ |  | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2,4-Dichlorophenol | $<10$ |  | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | j¢ | SW | 8270 C |
| 2,4-Dimethyiphenol | $<10$ |  | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ |  | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 2-Methylphenol | $<10$ |  | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| meta \& para-Methylphenol | $<10$ |  | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | j¢ ${ }_{\text {ces }}$ | SW | 82700 |
| 2-Nitrophenol | $<10$ |  | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Pentachlorophenol | $<10$ |  | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Phenol | $<10$ |  | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 2,4,5-Trichlorophenol | <10 |  | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| 2,4,6-Trichlorophenol | $<10$ |  | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 82700 |
| Surrogate: d6-Phenol | 43 |  | \% | 09/28/2001 | 1279 | 2710 |  | jes | SW | 8270C |
| Surrogate: 2-Fluorophenol | 32 |  | 8 | 09/28/2001 | 1279 | 2710 |  | jcs | SW | 8270C |
| Surrogate: Tribromophenol | 18 | note | \% | 09/28/2001 | 1279 | 2710 |  | jcs | SW | 8270C |
| TPH - GRO (Aqueous) | <1 |  | $\mathrm{mg} / \mathrm{L}$ | 10/02/2001 |  | 86 | $<1$ | meb | SW | 8015M |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |

SAMPLE NO. SAMPLE DESCRIPTION
708666

DATE/TIME TAKEN 708666

SBI 002 :HMW26S:G091901:523

| ICPMS TOTAL METALS | Complete |  | 10/04/2001 |  | 2586 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | 0.112 | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3715 | $<0.0050$ | kcnb | SW | 6020 |
| Barium; ICPMS | 0.240 | $\mathrm{mg} / \mathrm{L}$ | 10/04/2001 | 1851 | 3927 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | 0.0010 | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3594 | $<0.0010$ | kmb | SW | 6020 |
| Chromium, ICPMS (0.005) | 0.0332 | mg/L | 10/04/2001 | 1851 | 3997 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | 0.127 | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3672 | $<0.0010$ | kmb | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | mg/L | 09/26/2001 | 1417 | 1363 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | mg/L | 09/28/2001 | 754 | 579 | $<0.0050$ | 1nh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3929 | <0.0005 | kmb | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/27/2001 | 1851 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 754 |  | Complete | mrt | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/25/2001 | 1417 |  | Complete | epk | SW | 7470A |
| VOLATILE COMPOUNDS - 8260 |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AO) | Compleţe |  | 09/25/2001 |  | 3604 | Complete | dmg |  |  |
| Acetone | <20.0 | ug/L | 09/25/2001 |  | 3604 | $<20.0$ | ding | SW | 8260B |
| Benzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| tert-Butylbenzene | <1.0 | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| sec-Butylbenzene | 2.0 | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| n-Butylbenzene | <1.0 | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | ding | SW | 82608 |
| Bromochloromethane | <1.0 | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| Bromoform | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 82608 |
| Bromobenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | ding | SW | 82608 |
| 2-Butanone (MEK) | <12.5 | ug/L | 09/25/2001 |  | 3604 | $<12.5$ | dmg | SW | 8260日 |
| Carbon disulfide | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | <1.0 | ding | SW | 8260B |

## TestAmerica, Incorporated

PAGE 9 of 61

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting | Analyst |  |
| Anal |  | Number | Number | Limit | Initials Method Reference |  |


| SAMPLE NO. | SAMPLE DESCRIPTION |
| :--- | :--- |
| 708666 | SBIOO2:HMW26S:G091901:523 |


| -arbon tetrachloride | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Chloroethane | $<5.0$ | ug/L | 09/25/2001 | 3604 | < 5.0 | dmg | SW | 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Chloroform | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dimg | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/25/2001 | 3604 | <5.0 | dmg | SW | 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 82608 |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 82608 |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260 B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260日 |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dimg | SW | $8260 B$ |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dimg | SW | 8260 B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 2,2-Dichloropropane | $<1.0$ | $\mathrm{ug} / \mathrm{L}$ | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260 B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 82608 |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260 B |
| Ethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 8260 B |

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION 708666 <br> SBIO02:HMW26S:G091901:523

| Hexachlorobutadiene | $<5.0$ | ug/L | 09/25/2001 | 3604 | <5.0 | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n -Hexane | $<5.0$ | ug/L | 09/25/2001 | 3604 | <5.0 | dmg | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/25/2001 | 3604 | $<12.5$ | dmg | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 8260B |
| p-Isopropydtoluene | 1.2 | ug/L | 09/25/2001 | 3604 | <1.0 | ding | SW | 8260B |
| Bromomethane | <5.0 | ug/L | 09/25/2001 | 3604 | <5.0 | dmg | SW | 8260B |
| Methylene Chloride | <5.0 | ug/L | 09/25/2001 | 3604 | <5.0 | ding | SW | 82608 |
| Methyl t-butyl ether (MTBE) | <5.0 | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/25/2001 | 3604 | $<12.5$ | dmig | SW | 82608 |
| n-Propylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 82608 |
| Styrene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 82608 |
| Naphthalene | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 82608 |
| 1,1,1,2-Tetrachloroethane | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 8260B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 82608 |
| Tetrachloroethene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | S* | 8260B |
| Toluene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | -dmg | SW | 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Trichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 8260日 |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 8260b |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 8260B |
| Vinyl Chloride | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 708666

SAMPLE DESCRIPTION
SBI002:HMW26S:G091901:523

DATE/TIME TAKEN 09/19/2001 07:55

| ..ylenes | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260b |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d4-1,2-Dichloroethane (surr) | 101 | $\%$ | 09/25/2001 | 3604 |  | dmg | SW | 8260B |
| Dibromofluoromethane (surr) | 98 | 8 | 09/25/2001 | 3604 |  | dmg | SW | 8260B |
| d8-Toluene (surr) | 100 | 4 | 09/25/2001 | 3604 |  | dmig | SW | 8260B |
| Bromofluorobenzene (surr) | 100 | \% | 09/25/2001 | 3604 |  | dmg | SW | 8260B |
| TPH - GRO (Aqueous) | <1 | $\mathrm{mg} / \mathrm{L}$ | 10/02/2001 | 日6 | <1 | meb | SW | 8015M |

## SAMPLE NO.

SAMPLE DESCRIPTION
SBI002:MW13S: G091901:523

## DATE/TIME TAKEN

 09/19/2001 12:40| ICPMS total metals | Complete |  | 10/04/2001 |  | 2586 | Complete | ekh |  | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | mg/L | 10/03/2001 | 1851 | 3715 | $<0.0050$ | knb | SW | 6020 |
| Barium, ICPMS | 0.0578 | $\mathrm{mg} / \mathrm{L}$ | 10/04/2001 | 1851 | 3927 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$. | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3594 | $<0.0010$ | kmb | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | mg/L | 10/03/2001 | 1851 | 3992 | $<0.0050$ | kmb | SW | 6020 |
| Lead, ICPMS | 0.0015 | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3672 | $<0.0010$ | kmb | Sw | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/26/2001 | 1417 | 1363 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 754 | 579 | $<0.0050$ | Inh | SW | 7740 |
| Silver, ICPMS | <0.0005 | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3929 | $<0.0005$ | kmb | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/27/2001 | 1851 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 754 |  | Complete | mrt |  | - 3020 A |
| Manual Mercury Digestion | Complete |  | 09/25/2001 | 1417 |  | Complete | epk | SW | 7470A |

[^47]
## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)<br>10/12/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 708667

SAMPLE DESCRIPTION
SBI002:MW13S:G091901:523

DATE/TIME TAKEN 09/19/2001 12:40


# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17466

## Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analyzed | Number | Number | Limit | Initials Method Reference |  |

SAMPLE NO. SAMPLE DESCRIPTION 708667

DATE/TIME TAKEN 09/19/2001 12:40
_,4-Dichlorobenzene
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene
1,2-Dichloropropane
1,3-Dichloropropane
2,2-Dichloropropane
1,1-Dichloropropene
cis-1,3-Dichloropropene
trans-1,3-Dichloropropene
Ethylbenzene
Hexachlorobutadiene
n-Hexane
2-Hexanone
Isopropylbenzene (Cumene)
p-Isopropyltoluene
Bromomethane
Methylene Chloride
Methyl t-butyl ether (MIBE)
4-Methyl-2-pentanone (MIBK)
n-propylbenzene
Styrene
Naphthalene
1,1,1,2-Tetrachloroethane

| $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW 8260B |
| $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW 8260B |
| $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW 8260B |
| $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW 8260B |
| $<12.5$ | ug/L | 09/25/2001 | 3604 | $<12.5$ | dmg | SW 8260B |
| $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260 B |
| $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | ding | SW 8260B |
| $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW 8260B |
| $<5.0$ | ug/L | 09/25/2001 | 3604 | <5.0 | dmg | SW 8260B |
| <5.0 | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW 8260 B |
| $<12.5$ | ug/L | 09/25/2001 | 3604 | $<12.5$ | dimg | SW 8260日 |
| $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW 8260B |
| <1.0 | ug/L | 09/25/2001 | 3604 | <1.0 | ding | SW 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
$10 / 12 / 2001$
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. | SAMPLE DESCRIPT゙ION |
| :--- | :--- |
| 708667 | SBIOO2:MW13S:G091901:523 |


| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | amg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tetrachloroethene | 638 | ug/L | 09/25/2001 | 3604 | $<10$ | dimg | SW | 8260B |
| Toluene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dimg | SW | 8260B |
| 1,1,2-Trichloroethane | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8250B |
| Trichloroethene | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260 B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,2,3-Trichloropropane | <5.0 | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 8260B |
| 1,2,4-Trimethylbenzene | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | Sw | 8260日 |
| 1,3,5-Trimethylbenzene | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 8260B |
| XYlenes | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 101 | 4 | 09/25/2001 | 3604 |  | dimg | SW | 8260B |
| Dibromofluoromethane (surr) | 100 | 8 | 09/25/2001 | 3604 |  | dmg | SW | 8260B |
| ds-Toluene (surr) | 99 | 8 | 09/25/2001 | 3604 |  | dmg | SW | 82600 |
| Bromofluorobenzene (surr) | 100 | 8 | 09/25/2001 | 3604 |  | dmg | SW | 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 708668 SBIO02:HMW13D:G091901:523

DATE/TIME TAKEN 09/19/2001 12:50

| LSPMS TOTAL METALS | Complete |  | 10/04/2001 |  | 2586 | Complete | ekh | Sw | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | <0.0050 | mg/L | 10/03/2001 | 1851 | 3715 | $<0.0050$ | kmb | SW | 6020 |
| Barium, ICPMS | 0.138 | mg/L | 10/04/2001 | 1851 | 3927 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3594 | $<0.0010$ | kmb | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | mg/L | 10/03/2001 | 1851 | 3992 | $<0.0050$ | kmb | SW | 6020 |
| Lead, ICPMS | 0.0077 | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3672 | $<0.0010$ | kmb | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/26/2001 | 1417 | 1363 | $<0.0002$ | epk | SW | 74.70A |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 754 | 579 | $<0.0050$ | 1nh | SW | 7740 |
| Silver, ICPMS | <0.0005 | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3929 | $<0.0005$ | kmb | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/27/2001 | 1851 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 754 |  | Complete | mrt | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/25/2001 | 1417 |  | Complete | epk | SW | 7470A |
| VOLATILE COMPOUNDS - 8260 |  |  |  |  |  |  |  |  |  |
| B260 - SW846 (AQ) | Complete |  | 09/25/2001 |  | 3604 | Complete | dimg |  |  |
| Acetone | <20.0 | ug/L | 09/25/2001 |  | 3604 | $<20.0$ | dmg | SW | 8260B |
| Benzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| $n$-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| Bromochloromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | ding | SW | 8260B |
| Bromoform | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| Bromobenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/25/2001 |  | 3604 | <12.5 | dmg | SW | 8260B |
| Carbon disulfide | <1.0 | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001 6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag | Date | Batch | Batch | Reporting Analyst |

## SAMPLE NO. 708668

SAMPLE DESCRIPTION
SBI002:HMW13D:G091901:523

DATE/TIME TAKEN 09/19/2001 12:50

| Carbon tetrachloride | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 8260 B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 82608 |
| Chloroethane | <5.0 | ug/L | 09/25/2002 | 3604 | $<5.0$ | dmg | SW | 82608 |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | Sw | 82608 |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260 B |
| Chloroform | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 8260 B |
| Chloromethane | <5.0 | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260 B |
| Dibromomethane | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | < 5.0 | ug/L | 09/25/2001 | 3604 | $<5.0$ | dimg | SW | 82608 |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 82608 |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260 B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Cis-1,2-Dichloroethene | 8.9 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260 B |
| trans-1,2-Dichloroethene | 8.1 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 82608 |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 82608 |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 82608 |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260日 |
| Ethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 8260B |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 708668

SAMPLE DESCRIPTION
SBI002:HMW13D:G091901:523

DATE/TIME TAKEN 09/19/2001 12:50

| Hexachlorobutadiene | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n -Hexane | $<5.0$ | $\underline{u g / L ~}$ | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/25/2001 | 3604 | <12.5 | dmg | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 82608 |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | cmg | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/25/2001 | 3604 | $<12.5$ | dimg | sw | 8260B |
| n-Propyibenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260 B |
| Naphthalene | $<5.0$ | ug/L | 09/25/2001 | 3604 | <5.0 | dmg | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 82608 |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | Sw | 8260B |
| Tetrachloraethene | 290 | ug/L | 09/25/2001 | 3604 | $<10$ | dmg | SW | 8260B |
| Toluene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/25/2001 | 3604 | < 5.0 | dmg | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Trichloroethene | 386 | ug/L | 09/25/2001 | 3604 | $<10$ | dmig | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | c1.0 | dmg | SW | 8260B |
| 1,2,3-Trichloropropane | < 5.0 | ug/L | 09/25/2001 | 3604 | < 5.0 | dmg | SW | 82608 |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | Sw | 82608 |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dimg | SW | B260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/25/2001 | 3604 | <5.0 | dmg | Sw | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 82608 |

## TestAmerica, Incorporated

PAGE 18 of 61

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


| Xylenes | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d4-1,2-Dichloroethane (surr) | 103 | $\%$ | 09/25/2001 | 3604 |  | dmg | SN | 8260B |
| Dibromofluoromethane (surr) | 100 | \% | 09/25/2001 | 3604 |  | dimg | SW | 8260B |
| d8-Toluene (surr) | 99 | 8 | 09/25/2001 | 3604 |  | dmg | SW | 8260B |
| Bromofluorobenzene (surr) | 108 | \% | 09/25/2001 | 3604 |  | dmg | SW | 82608 |

$\begin{array}{ll}\text { SAMPLE NO. } & \text { SAMPLE DESCRIPTION } \\ 708669 & \text { SBIOO2:MW13D:G091901:523 }\end{array}$

| ICPMS TOTAL METALS | Complete |  | 10/04/2001 |  | 2586 | Complete | ekh | Sw | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3715 | $<0.0050$ | kmb | SW | 6020 |
| Barium, ICPMS | 0.0752 | mg/L | 10/04/2001 | 1851 | 3927 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | mg/L | 10/03/2001 | 1851 | 3594 | $<0.0010$ | kmb | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3992 | $<0.0050$ | kmb | SW | 6020 |
| Lead, ICPMS | 0.0040 | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3672 | $<0.0010$ | kmb | Sw | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/26/2001 | 1417 | 1363 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 754 | 579 | $<0.0050$ | 1 nh | SW | 7740 |
| Silver, ICPMS | <0.0005 | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3929 | $<0.0005$ | kmb | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/27/2001 | 1851 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 754 |  | Complete | mut | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/25/2001 | 1417 |  | Complete | epk | SW | 7470A |

VOLATILE COMPOUNDS - 8260 (AQ)

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batch Reporting Analyst |  |
| Analy | Number | Number Limit | Initials Method Reference |

DATE/TIME TAKEN 09/19/2001 13:00

| 8260 - SW846 (AQ) | Comple |  | 09/25/2001 | 3604 | Complete | dmg |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | $<20.0$ | ug/L | 09/25/2001 | 3604 | <20.0 | dmg | SW | 8260B |
| Benzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dimg | SW | 82.60 B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| n-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260 B |
| Bromochloromethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dimg | SW | 8260B |
| Bromoform | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 8260 B |
| Bromobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 8260 B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/25/2001 | 3604 | $<12.5$ | dmg | SW | 8260B |
| Carbon disulfide | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 82608 |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260 B |
| Chlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | ding | SW | 8260B |
| Chloroethane | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dimg | SW | 82608 |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8250 B |
| Chloroform | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260日 |
| Chioromethane | $<5.0$ | ug/L | 09/25/2001 | 3604 | <5.0 | dmg | SF | 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Dichlorodifluoromethane | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 82608 |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 82608 |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 8260 B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dimg | SW | 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01. 17466
Client Project ID: South Bend Indiana SBI002


DATE/TIME TAKEN
09/19/2001 13:00

| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 82608 |
| cis-1,2-Dichloroethene | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| trans-1,2-Dichloroethene | <1.0 | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 82608 |
| 1,3-Dichloropropane | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| trans-1,3-Dichloropropene | <1.0 | ug/L | 09/25/2001 | 3604 | $\leqslant 1.0$ | dmg | SW | 82608 |
| Ethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Hexachlorobutadiene | <5.0 | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 8260b |
| n -Hexane | $<5.0$ | ug/L | 09/25/2001 | 3604 | <5.0 | ding | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/25/2001 | 3604 | $<12.5$ | dmg | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/25/2001 | 3604 | < 5.0 | dmg | SW | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 82608 |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/25/2001 | 3604 | <5.0 | dimg | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/25/2001 | 3604 | $<12.5$ | dmg | SW | 8260B |
| n-Propylbenzene | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260日 |
| Naphthalene | $<5.0$ | ug/L | 09/25/2001 | 3604 | < 5.0 | dmg | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2,2-Tetrachloroethane | <1.0 | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 8260B |

## TestAmerica，Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin） 6130 Wilcox Ra．
Dublin，OH 43016

Job Number： 01.17466
Client Project ID：South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO． | SAMPIE DE | CRI | TIO |  |  |  |  | DAT | ／TIME | TAKEN |
| 708669 |  | SBI002：MK | 3D： | G0919 | ： 523 |  |  |  | 09／ | 9／2001 | 1 13：00 |


| letrachloroethene | 143 | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Toluene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260日 |
| 1，2，4－Trichlorobenzene | $<5.0$ | ug／L | 09／25／2001 | 3604 | ＜5．0 | ding | SW 8260b |
| 1，1，1－Trichloroethane | $<1.0$ | ug／L | 09／25／2001 | 3604 | ＜1． 0 | dmg | SW 8260B |
| 1，1，2－Trichloroethane | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| Trichloroethene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| Trichlorofluoromethane | $<1.0$ | ug／L | 09／25／2001 | 3604 | ＜1．0 | ding | SW 8260B |
| 1，2，3－Trichloropropane | $<5.0$ | ug／L | 09／25／2001 | 3604 | $<5.0$ | dmg | SW 8260日 |
| 1，2，4－Trimethylbenzene | ＜1．0 | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| 1，3，5－Trimethylbenzene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| Vinyl Acetate | $<5.0$ | ug／L | 09／25／2001 | 3604 | $<5.0$ | dimg | S＊8260B |
| Vinyl Chloride | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dimg | SW 8260B |
| Xylenes | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | ding | SW 8260B |
| d4－1，2－Dichloroethane（surr） | 101 | $\%$ | 09／25／2001 | 3604 |  | dmg | SW 8260b |
| Dibromofluoromethane（surr） | 100 | \％ | 09／25／2001 | 3604 |  | dmg | SW 8260B |
| di－Toluene（surr） | 102 | 8 | 09／25／2001 | 3604 |  | dmg | SW 8260日 |
| Bromofluorobenzene（surr） | 99 | 8 | 09／25／2001 | 3604 |  | dmg | SW 8260日 |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


DATE/TIME TAKEN
09/19/2001 11:45

| Prep, Base Neutral | Compiete |  | 09/26/2001 | 1279 |  | Complete | rec | EPA 625 ; S | 3510C ; s |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prep, Acid Extractable | Complete |  | 09/26/2001 | 1279 |  | Complete | rec | EPA 625 ; S | 3510C ; SW 352 |
| Prep, PCBs Aqueous 8082 | Complete |  | 09/25/2001 | 69 |  | Complete | eap | SW 3510C; | 3520C |
| Prep, TPH - 418.1 aq | Complete |  | 09/28/2001 | 605 |  | Complete | 260 | EPA 418:1 |  |
| VOLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/25/2001 |  | 3604 | Complete | dmg |  |  |
| Acetone | $<20.0$ | ug/L | 09/25/2001 |  | 3604 | <20.0 | dmg | SW 8260B |  |
| Benzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW 8260B |  |
| tert-Butyibenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW 8260B |  |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | <1.0 | dmg | SW 8260B |  |
| n-Butylbenzene | <1.0 | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dimg | SW 8260B |  |
| Bromochloromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | <1.0 | dmg | SW 8260B |  |
| Bromodichloromethane | <1.0 | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW 8260B |  |
| Bromoform | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dimg | SW 8260B |  |
| Bromobenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW 8260B |  |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/25/2001 |  | 3604 | $<12.5$ | dmg | SW 8260B |  |
| Carbon disulfide | <1.0 | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW 8260B |  |
| Carbon tetrachloride | <1.0 | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW 8260B |  |
| Chlorobenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | <1.0 | dmg | SW 8260 B |  |
| Chloroethane | $<5.0$ | ug/L | 09/25/2001 |  | 3604 | $<5.0$ | dmg | SW 8260B |  |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | ding | SW 8260B |  |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW 8260日 |  |
| Chloroform | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $\leqslant 1.0$ | dmg | SW 8260B |  |
| Chloromethane | <5.0 | ug/L | 09/25/2001 |  | 3604 | $<5.0$ | dmg | SW 8260日 |  |
| Dibromochloromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dimg | SW 8260E |  |

# TestAmerica, Incorporated 

ANALYTICAL REPORT

## Kevin Wildman

 HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016Job Number: 01.17466

## Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CR | PTION |  |  |  |  | DAT | TIME | TAKEN |
| 708670 |  | SBIOO2:HM | 145 | : G091 | $1: 523$ |  |  |  | 09 | 9/2001 | 1 11:45 |


| Lsibromomethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | ding | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | < 5.0 | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | Sw | 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260日 |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260日 |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dimg | SW | 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 8260 B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | damg | SW | 82608 |
| cis-1,2-Dichloroethene | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | Sw | 8260B |
| trans-1,2-Dichloroethene | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 82608 |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 82608 |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dimg | SW | 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | sw | 8260 B |
| trans-1,3-Dichloropropene | $<2.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 8260B |
| Hexachlorobutadiene | <5.0 | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 82608 |
| n -Hexane | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 82608 |
| 2-Hexanone | $<12.5$ | ug/L | 09/25/2001 | 3604 | $<12.5$ | oimg | SW | 82608 |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/25/2001 | 3604 | <5.0 | dimg | SW | 82608 |
| Methylene Chloride | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 8260 B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/25/2001 | 3604 | <5.0 | dmg | SW | 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$10 / 12 / 2001$

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


SAMPLE DESCRIPTION
SBIO02:HMW14S:G091901:523

DATE/TIME TAKEN 09/19/2001 11:45

| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/25/2001 |  | 3604 | $<12.5$ | dmg | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $n$-Propylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | <1.0 | dmg | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/25/2001 |  | 3604 | < 5.0 | dmg | SW | 82608 |
| 1,1,1,2-Tetrachloroethane | <1.0 | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | <1.0 | dmg | SW | 8260B |
| Tetrachloroethene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | ding | SW | 8260B |
| Toluene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 82608 |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/25/2001 |  | 3604 | $<5.0$ | dmg | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2-Trichloroethane | <1.0 | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8250в |
| Trichloroethene | 2.5 | ug/L | 09/25/2001 |  | 3604 | <1.0 | dmg | SW | 82608 |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | Sw | 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/25/2001 |  | 3604 | $<5.0$ | dmg | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 82608 |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| Vinyl Acetate | <5.0 | ug/L | 09/25/2001 |  | 3604 | $<5.0$ | dmg | SW | 8250B |
| Vinyl Chioride | 4.1 | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| Xylenes | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | <1.0 | dimg | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 102 | $\%$ | 09/25/2001 |  | 3604 |  | dimg | SW | 8260B |
| Dibromofluoromethane (surr) | 99 | $\%$ | 09/25/2001 |  | 3604 |  | dmg | SW | 8260b |
| ds-Toluene (surr) | 100 | 8 | 09/25/2001 |  | 3604 |  | ding | SW | 8260B |
| Bromofluorobenzene (surr) | 100 | 8 | 09/25/2001 |  | 3604 |  | dmg | SW | 8260B |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>10/12/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 708670 | SBIOO2:HMW14S:G091901:523 | $09 / 19 / 2001$ 11:45 |


| -enaphthylene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | sw | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Anthracene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | Sw | 8270C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Benzo (k) fluoranthene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Benzo (a) pyrene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | Sw | 8270 C |
| Benzyl alcohol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| bis (2-Ethylhexyl) phthalate | <10 | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| 2,2'-oxybis (1-Chioropropane). | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | Sw | $8270{ }^{\text {c }}$ |
| 4-Chloroaniline | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2-Chloronaphthalene. | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |
| Chrysene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |
| Dibenzofuran | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | $8270 C^{\circ}$ |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/29/2001 | 1279 | 2710 | $<50$ | jcs | SW | 8270 C |
| Diethyl phthalate | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002

|  |  | Prep Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batch Reporting Analyst | Number Number | Limit | Initials Method Reference |

## SAMPLE NO. 708670

SAMPLE DESCRIPTION
SBI002:HMW14S:G091901:523

DATE/TIME TAKEN
09/19/2001 11:45

| Di-n-octylphthalate | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fluoranthene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Fluorene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | <10 | jes | SW | 8270 C |
| Hexachlorobenzene | <10 | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Hexachloro-1, 3-butadiene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/29/2001 | 1279 | 2710 | $<20$ | jes | SW | 8270 C |
| Hexachloroethane | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Indeno (1, 2,3-cd) pyrene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | <10 | jcs | SW | 8270C |
| Isophorone | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Naphthalene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Nitrobenzene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| N -Nitrosodi-n-propylamine | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | Sw | 8270 C |
| Phenanthrene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Pyrene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | <10 | jcs | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 92 | $t$ | 09/29/2001 | 1279 | 2710 |  | jcs | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 93 | $\%$ | 09/29/2001 | 1279 | 2710 |  | jes | SW | 8270 C |
| Surrogate: d14-Terphenyl | 60 | 8 | 09/29/2001 | 1279 | 2710 |  | jcs | SW | 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | <50 | ug/L | 09/29/2001 | 1279 | 2710 | $<50$ | jes | SW | 8270C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2-Chlorophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | <10 | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>10/12/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |

SAMPLE NO. SAMPLE DESCRIPTION 708670 SBIO02:HMWI4S:G091901:523

DATE/TIME TAKEN 09/19/2001 11:45

| .-Methylphenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 2-Nitrophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Pentachlorophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Phenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | <10 | jcs | SW 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/29/2001 | 1279 | 2710 | $<10$ | јся | SW 8270C |
| Surrogate: d6-Phenol | 74 | 4 | 09/29/2001 | 1279 | 2710 |  | jes | SW 8270C |
| Surrogate: 2-Fluorophenol | 69 | \% | 09/29/2001 | 1279 | 2710 |  | jcs | SW 8270C |
| Surrogate: Tribromophenol | 73 | \% | 09/29/2001 | 1279 | 2710 |  | jes | SW 8270C |
| PCB's M 8082: Aqueous |  |  |  |  |  |  |  |  |
| Aroclor 1016 | $<0.20$ | ug/L | 09/28/2001 | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| Aroclor 1221 | $<0.20$ | ug/L | 09/28/2001 | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| Aroclor 1232 | $<0.20$ | ug/L | 09/28/2001 | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| Arocior 1242 | $<0.20$ | ug/L | 09/28/2001 | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| Aroclor 1248 | $<0.20$ | ug/L | 09/28/2001 | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| Aroclor 1254 | $<0.20$ | ug/L | 09/28/2001 | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| Aroclor 1260 | $<0.20$ | ug/L | 09/28/2001 | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| Surrogate: DCB/TCX | 61/35 | \% | 09/28/2001 | 69 | 128 |  | mrb | SW 8082 |
| TPH - Method 418.1 (AQ) | $<0.2$ | mg/L | 09/28/2001 | 605 | 726 | <0.2 | 260 | EPA 418.1 |

# TestAmerica, Incorporated 

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
$10 / 12 / 2001$
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. | SAMPLE DESCRIPTION | DATE/TIME TAKEN |
| :--- | :--- | :--- |
| 708671 | SBIOO2:HMW14S:G091901D:523 | $09 / 19 / 2001$ I1:45 |


| Prep, PCBs Aqueous 8082 | Complete |  | 09/25/2001 | 69 |  | Complete | eap | SW 3510C; SW 3520C EPA 418.1 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prep, TPH - 418.1 aq | Complete |  | 09/28/2001 | 605 |  | Complete | 260 |  |  |  |
| VOLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/25/2001 |  | 3604 | Complete | dmg |  |  |  |
| Acetone | $<20.0$ | ug/L | 09/25/2001 |  | 3604 | <20.0 | dmg | Sw | 8260B |  |
| Benzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260 B |  |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | Sw | 8260B |  |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | Sw | 8260B |  |
| n-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | Sw | 8260B |  |
| Bromochloromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | <1.0 | ding | SW | 82608 |  |
| Bromodichloromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SV | 8260B |  |
| Bromoform | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | S | 82608 |  |
| Bromobenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260 B |  |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/25/2001 |  | 3604 | $<12.5$ | dimg | SW | 82608 |  |
| Carbon disulfide | <1.0 | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dimg | S | 8260B |  |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | amg | St | 82608 |  |
| Chlorobenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | 5 | 8260B |  |
| Chloroethane | $<5.0$ | ug/L | 09/25/2001 |  | 3604 | $<5.0$ | dmg | SW | 8260 B |  |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/25/2002 |  | 3604 | $<1.0$ | dmg | SW | 8260B |  |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dimg | SW | 8260B |  |
| Chloroform | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 82608 |  |
| Chloromethane | $<5.0$ | ug/L | 09/25/2001 |  | 3604 | $<5.0$ | ding | SW | 8260B |  |
| Dibromochloromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | S | 82608 |  |
| Dibromomethane | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | ding | S | 82608 |  |
| Dichlorodifluoromethane | <1.0 | ug/L | 09/25/2001 |  | 3604 | <1.0 | dmg | SW | 82608 |  |

# TestAmerica, Incorporated 

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag | Date | Batch | Batch | Reporting Analyst |  |
| Analyzed | Number | Number | Limit | Initials Method Reference |  |

SAMPLE NO. 708671

SAMPLE DESCRIPTION
SBIO02:HMW14S:G091901D:523

DATE/TIME TAKEN 09/19/2001 11:45

| ,.2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/25/2001 | 3604 | <5.0 | dimg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dimg | SW | 8260B |
| 1,3-Dichlorobenzene | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dimg | SW | 82608 |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | Sw | 8260日 |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | Sw | 8260 B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 82608 |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloropropane | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1،1-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dimg | SW | 8260 B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | Sw | 82608 |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260日 |
| Ethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dimg | SW | 82608 |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | ding | SW | 8260B |
| n -Hexane | $<5.0$ | ug/L | 09/25/2001 | 3604 | <5.0 | ding | SW | 82608 |
| 2-Hexanone | $<12.5$ | ug/L | 09/25/2001 | 3604 | $<12.5$ | dmg | SW | 82608 |
| Isopropylbenzene (Cumene) | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| p-Isopropyitoluene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260 B |
| Bromomethane | <5.0 | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 8260B |
| Methylene Chloride | . $<5.0$ | ug/L | 09/25/2001 | 3604 | < 5.0 | dmg | SW | 8260 B |
| Methyl t-butyl ether (MTBE) | <5.0 | ug/L | 09/25/2001 | 3604 | < 5.0 | dmg | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/25/2001 | 3604 | $<12.5$ | dmg | sw | 82608 |
| n-Propylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dimg | SW | 82608 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Anced | Number | Number | Limit | Initials Method Reference |

SAMPLE NO
708671
SAMPLE DESCRIPTION
SBI 002:HMW14S:G091901D:523

10/12/2001

Limit Initials Method Reference

DATE/TIME TAREN
09/19/2001 11:45


# TestAmerica, Incorporated 

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TION |  |  |  |  | DAT | /TIME | TAKEN |
| 708671 |  | SBIOO2: HM | 145 | G091 | 1D:523 |  |  |  | 09/ | 9/2001 | 1 11:45 |


| sroclor 1248 | $<0.20$ | ug/L | 09/28/2001 | 69 | 128 | $<0.20$ | mxb | SW 8082 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aroclor 1254 | $<0.20$ | ug/L | 09/28/2001 | 69 | 128 | $<0.20$ | mrb | Sw 8082 |  |
| Aroclor 1250 | $<0.20$ | ug/L | 09/28/2001 | 69 | 128 | <0.20 | mrb | Sw 8082 |  |
| Surrogate:DCB/TCX | 62/39 | $\%$ | 09/28/2001 | 69 | 128 |  | masb | SW 8082 |  |
| TPH - Method 418.1 (AQ) | <0.2 | mg/L | 05/28/2001 | 605 | 726 | $<0.2$ | 260 | EPA 418.1 |  |
| SAMPLE NO. | SAMPLE D | TIO |  |  |  |  |  | E/TIME | TAKEN |
| 708672 | SBI002: | G09 | 1:523 |  |  |  |  | 19/2001 | 10:40 |


| Prep, Base Neutral | Complete |  | 09/26/2001 | 1279 |  | Complete | rec | EPA 625 ; SW 3510C ; SW 352 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prep, Acid Extractable | Complete |  | 09/26/2001 | 1279 |  | Complete | rec | EPA 625 ; SW 3510C ; SW 352 |
| Prep, TPH - 418.1 aq | Complete |  | 09/28/2001 | 605 |  | Complete | 260 | EPA 418.1 |
| VOLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AO) | Complete |  | 09/25/2001 |  | 3604 | Complete | dmg |  |
| Acetone | $<20.0$ | ug/L | 09/25/2001 |  | 3604 | $<20.0$ | dmg | SW 8260B |
| Benzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | Sw 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW 8260B |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dimg | SW 8260B |
| n-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW 8260B |
| Bromochloromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | <1:0 | dmg | SW 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW 8260B |
| Bromoform | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


SAMPLE DESCRIPTION
SBI002:HMW15S:G091901:523

DATE/TIME TAKEN 09/19/2001 10:40

| Bromobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260 B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/25/2001 | 3604 | $<12.5$ | dimg | SW 8260日 |
| Carbon disulfide | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | 5W 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dimg | SW 8260b |
| Chloroethane | <5.0 | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW 8260b |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dimg | SW 8260b |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260 B |
| Chloroform | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dimg | SW 8260日 |
| Chloromethane | <5.0 | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dimg | SW 8260b |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260b |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260 B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260b |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260b |
| trans-1.2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dimg | SW 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| 1,1-Dichloropropene | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>10/12/2001<br>6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 708672

SAMPLE DESCRIPTION
SBIO02:HMW15S:G091901:523
DATE/TIME TAKEN
09/19/2001 10:40

| 3-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dimg | SW 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/25/2001 | 3604 | $\leqslant 5.0$ | dmg | SW 8260b |
| n -Hexane | <5.0 | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/25/2001 | 3604 | $<12.5$ | dmg | SW 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmig | SW 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/25/2001 | 3604 | $<12.5$ | dmg | SW 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| Styrene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/25/2001 | 3604 | <5.0 | dmg | SW 8260B |
| 1,1,1,2-Tetrachloroethane | <1.0 | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW 8260日 |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| Tetrachloroethene | $<1.0$ | ug/L | 09/25/2001 | 3604 | <i. 0 | dmg | SW 8260B |
| Toluene | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW 8260日 |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| Trichloroethene | 7.4 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| Trichiorofluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW 8260B |
| 1,2,4-Trimethylbenzene | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW 8260B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


SAMPLE DESCRIPTION
SBIO02:HMW15S:G091901:523

DATE/TIME TAKEN 09/19/2001 10:40

| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinyl Acetate | <5.0 | ug/L | 09/25/2001 |  | 3604 | <5.0 | dimg | SW | 82608 |
| Vinyl Chloride | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| XYlenes | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | $8260{ }^{\text {8 }}$ |
| d4-1,2-Dichloroethane (surr) | 102 | 4 | 09/25/2001 |  | 3604 |  | ding | SW | 8260B |
| Dibromofluoromethane (surr) | 102 | $\frac{8}{6}$ | 09/25/2001 |  | 3604 |  | dmg | SW | 8260B |
| ds-Toluene (surr) | 99 | 4 | 09/25/2001 |  | 3604 |  | dmg | SW | 8260B |
| Bromofluorobenzene (surr) | 103 | 8 | 09/25/2001 |  | 3604 |  | dmg | SW | 82608 |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Acenaphthylene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Benzo(b) fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Benzo(k) fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Benzo (a) pyrene | $<10$ | ug/L | . 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | sw | 8270C |
| bis (2-Ethylhexyl)phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 2-Chloronaphthalene | <10 | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jсs | SW | 8270C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman HUL工 \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 708672

SBI002:HMW15S:G091901:523

| -hrysene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibenzo ( $a, h$ ) anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jсв | SW | 8270 C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SN | 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/28/2001 | 1279 | 2710 | $<50$ | jes | Sw | 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Fluorene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Hexachlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Hexachloro-1, 3-butadiene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/28/2001 | 1279 | 2710 | $<20$ | jcs | SW | 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Indeno(1, 2,3-cd) pyrene | $<10$ | ug/r | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Isophorone | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Naphthalene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | sw | 82700 |
| Nitrobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 82700 |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Phenanthrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Pyrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION
SBIO02:HMW15S:G091901:523

DATE/TIME TAKEN 09/19/2001 10:40


# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


SAMPLE DESCRIPTION
SBIO02:HMW15D:G091901:523

DATE/TIME TAKEN 09/19/2001 10:48


# TestAmerica，Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin，OH 43016

10／12／2001

Job Number： 01.17466
Client Project ID：South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting Limit | Analyst <br> Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO． | SAMPLE D | CRI | TIO |  |  |  |  | DAT | ／TIME | TAKEN |
| 708673 |  | SBIO02：H1 | N15D | G09 | 1：523 |  |  |  | 09／ | 9／2001 | 10：48 |


| Dichlorodifluoromethane | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260］ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1，2－Dibromo－3－chloropropane | ＜5．0 | ug／L | 09／25／2001 | 3604 | ＜5．0 | dmg | SW 8260B |
| 1，2－Dichlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| 1，3－Dichlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3604 | ＜1．0 | dmg | SW 8260B |
| 1，4－Dichlorobenzene | ＜1．0 | $\mathrm{ug} / \mathrm{L}$ | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| 1，1－Dichloroethane | ＜1．0 | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | Sw 8260B |
| 1，2－Dichloroethane | ＜1．0 | ug／L | 09／25／2001 | 3504 | $<1.0$ | dimg | SW 8260B |
| 1，1－Dichloroethene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| cis－1，2－Dichloroethene | 2.7 | ug／L | 09／25／2001 | 3604 | ＜1．0 | dmg | SW 8260B |
| trans－1，2－Dichloroethene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dimg | SW 8260B |
| 1，2－Dichloropropane | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | ding | SW 8260B |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260日 |
| 1，1－Dichloropropene | $<1.0$ | ug／L | 09／25／2001 | 3604 | ＜1．0 | dmg | SW 8260日 |
| cis－1，3－Dichloropropene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| trans－1，3－Dichloropropene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dimg | SW 8260B |
| Ethylbenzene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| Hexachlorobutadiene | $<5.0$ | ug／L | 09／25／2001 | 3604 | $<5.0$ | dmg | SW 8260B |
| n －Hexane | $<5.0$ | ug／L | 09／25／2001 | 3604 | $<5.0$ | dmg | SW 8260 B |
| 2－Hexanone | $<12.5$ | ug／L | 09／25／2001 | 3604 | $<12.5$ | ding | SW 8260b |
| Isopropylbenzene（Cumene） | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| p－Isopropyltoluene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| Bromomethane | $<5.0$ | ug／L | 09／25／2001 | 3604 | $<5.0$ | dmg | SW 8260B |
| Methylene Chloride | $<5.0$ | ug／L | 09／25／2001 | 3604 | $<5.0$ | dmg | SW 8260B |
| Methyl t－butyl ether（MTBE） | $<5.0$ | ug／L | 09／25／2001 | 3604 | $<5.0$ | dmg | SW 8260B |
| 4－Methyl－2－pentanone（MIBK） | ＜12．5 | ug／L | 09／25／2001 | 3604 | ＜12．5 | dmg | SW 8260日 |

# TestAmerica, Incorporated 

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## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 708673 SBIO02:HMW15D:G091901:523


## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman

HULL \& ASSOC. (Dublin
6130 Wilcox Rd.
Dublin, OH 43016
10/12/2001

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analyzed | Number | Number Limit | Initials Method Reference |  |  |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 708673 | SBIOO2 $:$ HMW15D:G091901:523 | $09 / 19 / 2001$ 10:48 |


| Anthracene | <10 | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benzo (a) anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Benzo(k) tluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Benzo (a) pyrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |
| Benzyl alcohol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | јсs | SW | 8270 C |
| bis (2-Chloroethyl)ether | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | Sw | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | $8270{ }^{\text {c }}$ |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Chrysene | <10 | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jсв | SW | 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 1,3-Dichloroberzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/28/2001 | 1279 | 2710 | $<50$ | jes | SW | 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Dimethyl phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270c |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBIO02


SAMPLE NO. SAMPLE DESCRIPTION 708673

SBIO02:HMW15D:G091901:523

DATE/TIME TAKEN
09/19/2001 10:48

| rluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fluorene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 82700 |
| Hexachloro-1, 3-butadiene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | $8270{ }^{\text {c }}$ |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/28/2001 | 1279 | 2710 | $<20$ | jes | SW | 8270 C |
| Hexachloroethane | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Indeno (1, 2, 3-cd) pyrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Isophorone | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |
| Naphthalene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Nitrobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Phenanthrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Pyrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 82700 |
| Surrogate: d5-Nitrobenzene | 89 | \% | 09/28/2001 | 1279 | 2710 |  | jcs | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 89 | $\%$ | 09/28/2001 | 1279 | 2710 |  | jcs | SW | 82700 |
| Surrogate: di4-Terphenyl | 68 | 8 | 09/28/2001 | 1279 | 2710 |  | jcs | SW | $8270{ }^{\text {c }}$ |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/28/2001 | 1279 | 2710 | $<50$ | jcs | SW | 82700 |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | $8270 C^{\text {c }}$ |
| 2-Chlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| 2-Methylphenol | <10 | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting Analyat | Number Limit | Initials Method Reference |

## SAMPLE NO. 708673

SAMPLE DESCRIPTION
SBIO02:HMW15D:G091901:523

DATE/TIME TAKEN
09/19/2001 10:48

| meta \& para-Methylphenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Nitrophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Pentachlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Phenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| 2,4,5-Trichlorophenol | $<10$ | $\mathrm{ug} / \mathrm{L}$ | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270c |
| Surrogate: d6-Phenol | 64 | \% | 09/28/2001 | 1279 | 2710 |  | jes | SW 8270C |
| Surrogate: 2-Fluorophenol | 71 | \% | 09/28/2001 | 1279 | 2710 |  | jcs | SW 8270C |
| Surrogate: Tribromophenol | 80 | \% | 09/28/2001 | 1279 | 2710 |  | jcs | SW 8270C |
| TPH - Method 418.1 (AQ) | <0.2 | mg/L | 09/28/2001 | 605 | 726 | $<0.2$ | 260 | EPA 418.1 |

SAMPLE NO. SAMPLE DESCRIPTION
708674 SBIO02:HMW27S:G091901:523

## DATE/TIME TAKEN 09/19/2001 08:20

| ICPMS TOTAL METALS | Complete |  | 10/04/2001 |  | 2586 | Complete | ekh | sw | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | 0.144 | mg/L | 10/03/2001 | 1851 | 3715 | $<0.0050$ | kmb | SW | 6020 |
| Barium, ICPMS | 0.783 | $\mathrm{mg} / \mathrm{L}$ | 10/04/2001 | 1851 | 3927 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | 0.0033 | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3594 | $<0.0010$ | kmb | SW | 6020 |
| Chromium, ICPMS (0.005) | 0.0400 | mg/L | 10/03/2001 | 1851 | 3992 | $<0.0050$ | kmb | SW | 6020 |
| Lead, ICPMS | 0.240 | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3672 | $<0.0010$ | knb | SW | 5020 |
| Mercury, CVAA | 0.0003 | $\mathrm{mg} / \mathrm{L}$ | 09/26/2001 | 1417 | 1363 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 754 | 579 | $<0.0050$ | 1 nh | Sw | 7740 |
| Silver, ICPMS | $<0.0005$ | mg/L' | 10/03/2001 | 1851 | 3929 | <0.0005 | kmb | SW | 6020 |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyat <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TIO |  |  |  |  | DA? | /TIME | TAKEN |
| 708674 |  | SBIOO2:HM | V27S | G09 | $1: 523$ |  |  |  | 09/ | 9/2001 | 1 08:20 |



# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

Kevin Wildman HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBIO02

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting | Analyst |  |

SAMPLE NO. 708674

SAMPLE DESCRIPTION
SBI002:HMW27S:G091901:523

| Chloromethane | <5.0 | ug/L | 09/25/2001 | 3604 | < 5.0 | dmg | Sw | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dibromochloromethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | aimg | sw | 82608 |
| Dibromomethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 82608 |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 82608 |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 82608 |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dimg | SW | 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 82608 |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260 B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloroethene | $\leqslant 1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| trans-1,2-Dichloroethene | <1.0 | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 8260B |
| 1,2-Dichloropropane | <1.0 | ug/L | 09/25/2001 | 3604 | <1.0 | dimg | SW | 8260 B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 82608 |
| Ethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 82608 |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/25/2001 | 3604 | < 5.0 | dmg | SW | 8260B |
| $n$-Hexane | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/25/2001 | 3604 | $<12.5$ | dmg | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260 B |
| Bromomethane | <5.0 | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 8260B |

TestAmerica，Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin， OH 43016

Job Number：01．17466
Client Project ID：South Bend Indiana SBI002


SAMPLE NO．SAMPLE DESCRIPTION 708674

SBIO02：HMW27S：G091901：523
DATE／TIME TAKEN 09／19／2001 08：20

| thylene Chloride | $<5.0$ | ug／L | 09／25／2001 | 3604 | $<5.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Methyi t－butyl ether（MTBE） | $<5.0$ | ug／L | 09／25／2001 | 3604 | $<5.0$ | dmg | SW | 8260B |
| 4－Methyl－2－pentanone（MIBK） | ＜12．5 | ug／L | 09／25／2001 | 3604 | $<12.5$ | dmg | SW | 8260日 |
| n－Propylbenzene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Styrene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW | 8260日 |
| Naphthalene | $<5.0$ | ug／L | 09／25／2001 | 3604 | $<5.0$ | dmg | SW | 8260b |
| 1，1，1，2－Tetrachloroethane | $<1.0$ | ug／L | 09／25／2001 | 3604 | ＜1．0 | dmg | SW | 8260 B |
| 1，1，2，2－Tetrachloroethane | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dimg | SW | 8260B |
| Tetrachloroethene | 136 | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW | 8260 B |
| Toluene | $<1.0$ | ug／L | 09／25／2001 | 3604 | ＜1．0 | dmg | SW | 82608 |
| 1，2，4－Trichlorobenzene | $<5.0$ | ug／L | 09／25／2001 | 3604 | $<5.0$ | dmg | SW | 8260B |
| 1，1，1－Trichloroethane | 2.2 | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1，1，2－Trichloroethane | ＜1．0 | ug／L | 09／25／2001 | 3604 | $<1.0$ | ding | SW | 82608 |
| Trichloroethene | 3.2 | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW | 82608 |
| Trichlorofluoromethane | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW | 8260日 |
| 1，2，3－Trichloropropane | $<5.0$ | ug／L | 09／25／2001 | 3604 | ＜5．0 | dmg | SW | 8260B |
| 1，2，4－Trimethylbenzene | ＜1．0 | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW | 8260 B |
| 1，3，5－Trimethylbenzene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dimg | SW | 8260B |
| Vinyl Acetate | ＜5．0 | ug／L | 09／25／2001 | 3604 | $<5.0$ | dmg | SW | 8260B |
| Vinyl Chloride | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Xylenes | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| d4－1，2－Dichloroethane（surr） | 104 | \％ | 09／25／2001 | 3604 |  | dmg | SW | 8260b |
| Dibromofluoromethane（surr） | 102 | 8 | 09／25／2001 | 3604 | ． | dmg | SW | 8260B |
| ds－Toluene（surr） | 97 | \％ | 09／25／2001 | 3604 |  | dmg | SW | 82608 |
| Bromofluorobenzene（surr） | 100 | \％ | 09／25／2001 | 3604 |  | dmg | SW | 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION 708674 SBI002:HMW27S: G091901:523

DATE/TIME TAKEN

| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Acenaphthylene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | јсв | Sw 8270C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | <10 | jcs | SW 8270C |
| Benzo(b) fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Benzo(k)fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Benzo(a) pyrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| bis (2-Chloroethyl)ether | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | Sw 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | Sw 8270C |
| Chrysene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270 C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270 C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/28/2001 | 1279 | 2710 | $<50$ | jes | SW 8270C |
| Diethyl phthalate | <10 | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Dimethyl phthalate | <10 | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17466
Client Project ID: South Bend Indiana SBIO02

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |  |  |

## SAMPLE NO. 708674

SAMPLE DESCRIPTION
SBIO 02 : HMW27S:G091901:523

DATE/TIME TAKEN 09/19/2001 08:20

| l-Dinitrotoluene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ~,6-Dinitrotoluene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Fluorene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Hexachloro-1, 3-butadiene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/28/2001 | 1279 | 2710 | $<20$ | jcs | SW 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Indeno (1,2,3-cd) pyrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Isophorone | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Naphthalene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Nitrobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Phenanthrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Pyrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Surrogate: d5-Nitrobenzene | 67 | 4 | 09/28/2001 | 1279 | 2710 |  | jes | SW 8270C |
| Surrogate: 2-Fluorobiphenyl | 71 | \% | 09/28/2001 | 1279 | 2710 |  | jcs | SW 8270C |
| Surrogate: di4-Terphenyl | 41 | 8 | 09/28/2001 | 1279 | 2710 |  | jes | SW 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/28/2001 | 1279 | 2710 | $<50$ | jcs | SW 8270C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 2-Chlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016
$10 / 12 / 2001$

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |
|  | Analy | Number | Number | Limit | Initials Method Reference |  |

## SAMPLE NO. 708674

SAMPLE DESCRIPTION
SBI 002 : HMW27S:G091901:523

DATE/TIME TAKEN 09/19/2001 08:20
2,4-Dimethylphenol
2-Methyl-4,6-dinitrophenol
2-Methylphenol
meta \& para-Methylphenol
2-Nitrophenol
Fentachlorophenol
Phenol
2،4,5-Trichlorophenol
2،4,6-Trichlorophenol
Surrogate: d6-Phenol
Surrogate: 2-Fluorophenol
Surrogate: Tribromophenol
TPH - GRO (Aqueous)
TPH - Method 418.1 (AQ)

| $<10$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 28 / 2001$ | 1279 | 2710 |
| :--- | :--- | :--- | :--- | :--- |
| $<10$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 28 / 2001$ | 1279 | 2710 |
| $<10$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 28 / 2001$ | 1279 | 2710 |
| $<10$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 28 / 2001$ | 1279 | 2710 |
| $<10$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 28 / 2001$ | 1279 | 2710 |
| $<10$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 28 / 2001$ | 1279 | 2710 |
| $<10$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 28 / 2001$ | 1279 | 2710 |
| $<10$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 28 / 2001$ | 1279 | 2710 |
| $<10$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 28 / 2001$ | 1279 | 2710 |
| 30 | q | $09 / 28 / 2001$ | 1279 | 2710 |
| 29 | q | $09 / 28 / 2001$ | 1279 | 2710 |
| 25 | q | $09 / 28 / 2001$ | 1279 | 2710 |
| $<1$ | $\mathrm{mg} / \mathrm{L}$ | $10 / 03 / 2001$ |  | 88 |
| $<0.2$ | $\mathrm{mg} / \mathrm{L}$ | $09 / 28 / 2001$ | 605 | 726 |

SAMPLE NO 708675

SAMPLE DESCRIPTION
SBIO02:HMW18S:G091901:523

## DATE/TIME TAKEN

 09/19/2001 09:40| Prep, Base Neutral | Complete | $09 / 26 / 2001$ | 1279 | Complete. rec | EPA 625 ; SW 3510C ; SW 352 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Prep, Acid Extractable | Complete | $09 / 26 / 2001$ | 1279 | Complete | rec | ERA $625 ;$ SW 3510C ; SW 352 |
| Prep, TPH - 418.1 aq | Complete | $09 / 28 / 2001$ | 605 | Complete | 260 | EPA 418.1 |
| Prep, TPH DRO Aqueous | Complete | $09 / 25 / 2001$ | 125 | Complete |  |  |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| R |  | Number | Number | Limit | Initials Method Reference |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 708675 | SBIOO2:HMW18S:G091901:523 | $09 / 19 / 2001$ 09:40 |



Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.17466
Client Project ID: South Bend Indiana SBIO02

|  |  | Prep | Run |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Eatch Batch Reporting Analyst |  |
| Analyzed | Number | Number Limit | Initials Method Reference |

SAMPLE NO. SAMPLE DESCRIPTION 708675

DATE/TIME TAKEN 09/19/2001 09:40

| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 82608 |
| 1,2-Dichloroethane | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 82608 |
| 1,1-Dichloroethene | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Cis-1,2-Dichloroethene | 3.0 | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 8260B |
| trans-1,2-Dichloroethene | 1.9 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 82608 |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dimg | SW | 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | <1.0 | ding | SW | 82608 |
| Ethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Hexachlorobutadiene | <5.0 | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 8260B |
| n-Hexane | $<5.0$ | ug/L | 09/25/2001 | 3604 | <5.0 | dmg | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/25/2001 | 3604 | $<12.5$ | dimg | SW | 8260b |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | Sw | 8260 B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/25/2001 | 3604 | <5.0 | dmg | SW | 82608 |
| Methylene Chloride | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | Sw | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/25/2001 | 3604 | <5.0 | dimg | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/25/2001 | 3604 | $<12.5$ | dimg | SW | 8260] |
| n-Propylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dimg | Sw | 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 82608 |
| 1,1,1,2-Tetrachloroethane | <1.0 | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 8260B |

## TestAmerica, Incorporated

PAGE 51 of 61

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17466


SAMPLE NO. 708675

SAMPLE DESCRIPTION
SBIO02:HMWI8S:G091901:523

DATE/TIME TAKEN 09/19/2001 09:40

| ,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tetrachloroethene | 36.4 | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260日 |
| Toluene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/25/2001 |  | 3604 | <5.0 | dmg | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2-Trichloroethane | <1.0 | ug/L | 09/25/2001 |  | 3604 | <1.0 | dmg | SW | 82608 |
| Trichloroethene | 13.1 | ug/L | 09/25/2001 |  | 3604 | $<2.0$ | dimg | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260日 |
| 1,2,3-Trichloropropane | <5.0 | ug/L | 09/25/2001 |  | 3604 | $<5.0$ | dmg | Sw | 8260B |
| 1,2,4-Trimethylbenzene | <1.0 | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | B260B |
| Vinyl Acetate | < 5.0 | ug/L | 09/25/2001 |  | 3604 | $<5.0$ | dmg | SW | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| XYlenes | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 105 | $\%$ | 09/25/2001 |  | 3604 |  | dimg | SW | 8260B |
| Dibromofluoromethane (surr) | 101 | \% | 09/25/2001 |  | 3604 |  | dmg | SW | 82608 |
| ds-Toluene (surr) | 101 | \% | 09/25/2001 |  | 3604 |  | dmg | SW | 8260B |
| Bromofluorobenzene (surr) | 102 | $\%$ | 09/25/2001 |  | 3604 |  | dimg | SW | 8260B |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | .ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jся | SW | 8270C |
| Acenaphthylene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | sw | 8270 C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 82700 |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Benzo(k) Eluoranthene | <10 | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)<br>10/12/2001 6130 Wilcox Rd.<br>Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 708675 |  | SBIO 02 : HM | 18 S | G09 | : 523 |  |  |  | 09/ | 9/2001 | 09:40 |


| Benzo (a) pyrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benzyl alcohol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | <10 | jes | Sw | $8270{ }^{\text {c }}$ |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| bis (2-Chloroethyl)ether | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | $8270{ }^{\text {C }}$ |
| bis (2-Chloroethoxy) methane | $<10$ | $u g / L$ | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| 2,2'-oxybis(1-Chloropropane) | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |
| 4-Eromophenyl phenyl ether | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Chrysene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Dibenzo (a, h) anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | $8270{ }^{\text {c }}$ |
| Dibenzofuran | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | sw | 8270 C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270c |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/28/2001 | 1279 | 2710 | $<50$ | jes | SW | 82700 |
| Diethyl phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jca | SW | 8270C |
| Fluorene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | $8270{ }^{\text {c }}$ |
| Hexachlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |

# TestAmerica, Incorporated 

ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002

|  |  |  |  | Prep | Run |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Date | Eatch | Batch | Reporting | Analyst |  |
| Result | Flag | Units | Analyzed | Number | Number | Limit. | Initialy | Method Reference |


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 708675 | SBIOO2:HMW18S:G091901:523 |

DATE/TIME TAKEN 09/19/2001 09:40

| exachlorocyclopentadiene | $<20$ | ug/L | 09/28/2001 | 1279 | 2710 | <20 | jcs | SW | 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hexachloroethane | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Indeno (1, 2,3-cd) pyrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Isophorone | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Naphthalene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Nitrobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | Sw | $8270{ }^{\text {c }}$ |
| Phenanthrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Pyrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 83 | $\%$ | 09/28/2001 | 1279 | 2710 |  | jes | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 82 | $\%$ | 09/28/2001 | 1279 | 2710 |  | jcs | SW | 8270C |
| Surrogate: d14-Terphenyl | 49 | $\%$ | 09/28/2001 | 1279 | 2710 |  | jcs | SW | 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/28/2001 | 1279 | 2710 | $<50$ | jes | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 82700 |
| 2-Chlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | Sw | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| 2-Methylphenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| meta \& para-Methylphenol | <10 | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 2-Nitrophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Pentachlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| Phenol | <10 | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |

## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep. <br> Batch <br> Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE D | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 708675 |  | SBIOO2:H | 18 | G09 | $1: 523$ |  |  |  | 09/ | 9/2001 | 1 09:40 |

2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
Surrogate: d6-Phenol
Surrogate: 2-Fluorophenol
Surrogate: Tribromophenol
TPH - DRO AQUEOUS
TPH - Method 418.1 (AQ)

SAMPLE NO. SAMPLE DESCRIPTION
708676 SBI002:HMW34S:G091901:523

| Prep, Base Neutral | Complete |  | 09/26/2001 | 1279 |  | Complete | rec <br> rec | EPA 625 ; SW 3510C ; SW 352 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prep, Acid Extractable | Complete |  | 09/26/2001 | 1279 |  | Complete |  | EPA 625 ; |  | ; S |
| Prep, TPH - 418.1 aq | Complete |  | 09/28/2001 | 605 |  | Complete | 260 | EPA 418.1 |  |  |
| Prep, TPH DRO Aqueous | Complete |  | 09/25/2001 | 125 |  | Complete | mem |  |  |  |
| VOLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/25/2001 |  | 3604 | Complete | dmg |  |  |  |
| Acetone | <20.0 | ug/L | 09/25/2001 |  | 3604 | <20.0 | dmg | SW | 8260 B |  |
| Benzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 82608 |  |
| tert-Butylbenzene | <1.0 | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 82608 |  |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 8260B |  |
| n-Butylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | <1.0 | dmg |  | 82608 |  |

# TestAmerica，Incorporated 

ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin）10／12／2001
6130 Wilcox Rd．
Dublin，OH 43016

Job Number： 01.17466
Client Project ID：South Bend Indiana SBIO02


| SAMPLE NO． | SAMPLE DESCRIPTION | DATE／TIME TAKEN |
| :--- | :--- | :--- |
| 708676 | SBIOO2：HMW34S：G091901：523 | $09 / 19 / 2001$ 10：00 |


| omochloromethane | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dimg | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bromodichloromethane | $<1.0$ | ug／L | 09／25／2001 | 3604 | ＜1．0 | dmg | SW 8260B |
| Bromoform | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| Bromobenzene | ＜1．0 | ug／L | 09／25／2001 | 3604 | ＜1．0 | dmg | SW 8260B |
| 2－Butanone（MEK） | $<12.5$ | ug／L | 09／25／2001 | 3604 | $<12.5$ | dmg | SW 8260B |
| Carbon disulfide | $<1.0$ | ug／L | 09／25／2001 | 3604 | ＜1．0 | dmg | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| Chiorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3604 | ＜1．0 | dmg | SW 8260日 |
| Chloroethane | $<5.0$ | ug／L | 09／25／2001 | 3604 | $<5.0$ | dimg | SW 8260B |
| 2－Chlorotoluene | $<1.0$ | ug／L | 09／25／2001 | 3604 | ＜1．0 | dmg | SW 82608 |
| 4－Chlorotoluene | $<1.0$ | ug／L | 09／25／2001 | 3604 | ＜1．0 | dmg | SW 8260日 |
| Chloroform | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| Chloromethane | ＜5．0 | ug／L | 09／25／2001 | 3604 | $<5.0$ | dmg | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| Dibromomethane | $<1.0$ | ug／L | 09／25／2001 | 3604 | ＜1．0 | dmg | SW 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| 1，2－Dibromo－3－Chloropropane | $<5.0$ | ug／L | 09／25／2001 | 3604 | $<5.0$ | dmg | SW 8260］ |
| 1，2－Dichlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| 1，3－Dichlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| 1，4－Dichlorobenzene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| 1，1－Dichloroethane | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260日 |
| 1，1－Dichloroethene | $<1.0$ | ug／L | 09／25／2001 | 3604 | $<1.0$ | dimg | SW 8260b |
| cis－1，2－Dichloroethene | 1.1 | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260日 |
| trans－1，2－Dichloroethene | ＜1．0 | ug／L | 09／25／2001 | 3604 | $<1.0$ | dmg | SW 8260B |
| 1，2－Dichloropropane | $<1.0$ | ug／L | 09／25／2001 | 3604 | ＜1．0 | dmg | SW 8260B |

# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batch Reporting Analyst |  |  |  |
| Analy | Number | Number Limit | Initials Method Reference |  |  |


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 708676 | SBIOO2:HMW34S:G091901:523 |


| 1,3-Dichloropropane | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 8260B |
| 1,1-Dichloropropene | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 82608 |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 82608 |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dimg | SW | 8260B |
| n-Hexane | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dimg | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/25/2001 | 3604 | $<12.5$ | dmg | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Bromomethane | < 5.0 | ug/L | 09/25/2001 | 3604 | < 5.0 | ding | SW | 82608 |
| Methylene Chloride | $<5.0$ | ug/L | 09/25/2001 | 3604 | <5.0 | ding | SW | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/25/2001 | 3604 | < 5.0 | dmg | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/25/2001 | 3604 | $<12.5$ | ding | SW | 8260B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Naphthalene | <5.0 | ug/L | 09/25/2001 | 3604 | < 5.0 | dmg | SW | 8260B |
| 1,1,1,2-Tetrachioroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 8260B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Tetrachloroethene | $\leqslant 1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| Toluene | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | dmg | SW | 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/25/2001 | 3604 | $<5.0$ | dmg | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 82608 |
| 1,1,2-Trichloroethane | <1.0 | ug/L | 09/25/2001 | 3604 | $<1.0$ | ding | SW | 82608 |
| Trichloroethene | 4.5 | ug/L | 09/25/2001 | 3604 | <1.0 | dmg | SW | 82608 |

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$10 / 12 / 2001$

Job Number: 01.17466


| fichlorofluoromethane | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | ding | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/25/2001 |  | 3604 | $<5.0$ | ding | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SH | 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | us/L | 09/25/2001 |  | 3604 | <1.0 | dmg | SW | 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/25/2001 |  | 3604 | <5.0 | dmg | Sh | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | $<1.0$ | dmg | SW | 82608 |
| xylenes | $<1.0$ | ug/L | 09/25/2001 |  | 3604 | <1.0 | dmg | SW | 82508 |
| d4-1,2-Dichloroethane (surr) | 104 | \% | 09/25/2001 |  | 3604 |  | dmg | Sh | 8260日 |
| Dibromofluoromethane (surr) | 100 | \% | 09/25/2002 |  | 3604 |  | dmg | SW | 8260B |
| d8-Toluene (surr) | 101 | \% | 09/25/2001 |  | 3604 |  | dmg | SW | 8260B |
| Bromofluorobenzene (surr) | 100 | \% | 09/25/2001 |  | 3604 |  | dmg | SW | 8260B |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270 C |
| Acenaphthylene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Benzo(k) fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Benzo (a) pyrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270 C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |
| bis.(2-Chloroethyl) ether | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 82700 |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | S | 8270 C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW | 8270C |
| 2,2'-oxybis(1-Chloropropane) | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW | 8270C |

# TestAmerica, Incorporated 

# ANALYTICAL REPORT 

Kevin Wildman
HULL \& ASSOC. (Dublin)
10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW B270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Chloroaniline | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Chrysene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $\leq 10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 1,2-Dichlorobenzene. | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jce | SW 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 3.3'-Dichlorobenzidine | $<50$ | ug/L | 09/28/2001 | 1279 | 2710 | $<50$ | jcs | SW 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270 C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | Sw 8270C |
| Fluoranthene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | Sw 8270C |
| Fluorene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Hexachloro-1, 3-butadiene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jсs | SW 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/28/2001 | 1279 | 2710 | $<20$ | јся | SW 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Indeno(1,2,3-ca) pyrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Isophorone | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| Naphthalene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | Sw 8270c |
| Nitrobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$10 / 12 / 2001$

Job Number: 01.17466
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 708676

| henanthrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pyrene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | <10 | jes | SW 8270C |
| Surrogate: d5-Nitrobenzene | 75 | \% | 09/28/2001 | 1279 | 2710 |  | jcs | SW 8270C |
| Surrogate: 2-Fluorobiphenyl | 79 | \% | 09/28/2001 | 1279 | 2710 |  | jcs | SW 8270C |
| Surrogate: d14-Terphenyl | 36 | \% | 09/28/2001 | 1279 | 2710 |  | jcs | SW 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/28/2001 | 1279 | 2710 | $<50$ | jcs | SW 8270C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 2-Chiorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | Sw 8270C |
| 2.4-Dichlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | sw 8270 C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jca | SW 8270C |
| 2-Methylphenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jes | SW 8270C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 2-Nitrophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Pentachlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| Phenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jcs | SW 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/28/2001 | 1279 | 2710 | $<10$ | jca | Sw 8270C |
| Surrogate: d6-Phenol | 50 | $\%$ | 09/28/2001 | 1279 | 2710 |  | јся | SW 8270C |
| Surrogate: 2-Fluorophenol | 49 | \% | 09/28/2001 | 1279 | 2710 |  | jes | SW 8270C |
| Surrogate: Tribromophenol | 53 | \% | 09/28/2001 | 1279 | 2710 |  | jcs | SW 8270C |
| TPH - DRO AQUEOUS | $<1$ | $\mathrm{mg} / \mathrm{L}$ | 09/27/2001 | 125 | 214 | $<1$ | meb | SW 8015M |
| TPH - Method 418.1 (AQ) | $<0.2$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 605 | 726 | $<0.2$ | 260 | EPA 418.1 |

## QUALITY CONTROL FLAG DEFINITIONS

Job Number: 01.17466
(*) Indicates an out-of-control QC. The analytical data was reported based on other supporting quality control information.
(Note) Indicates to review the notes and comments section of the analytical report as there is additional information concerning this analytical result.
(MS) Indicates that the Matrix Spike (MS) was out of statistical advisory limits.
(MSD) Indicates that the Matrix Spike Duplicate (MSD) was out of statistical advisory limits.
(RPD) Indicates that the Relative Percent Difference (RPD) for the MS/MSD pair was outside of statistical advisory limits.
(SS) Indicates that the MS and MSD were out of statistical advisory limits.
(SSR) Indicates that the MS, MSD and RPD were out of statistical advisory limits.
(MSR) Indicates that the MS and RPD were out of statistical advisory limits.
(MSDR) Indicates that the MSD and RPD were out of statistical advisory limits.
(DL) Indicates that the MS and MSD were diluted out and the percent recoveries of the spikes could not be calculated.
(LS) Indicates that statistical accuracy and precision data is not available for spike concentrations which are $<1 / 4$ of the sample amount. Care should be used in interpreting this data.
(J) Indicates estimated concentration due to internal standard areas or surrogate recoveries outside of control limits. A sample matrix effect is usually indicated.
(DW) Indicates Dry Weight.
Analytical Reporting Limits
The reporting limits listed for non-aqueous samples in the analytical report section are Practical Quantitation Limits (PQLs). These PQLs are based upon a typical standard weight used for a non-aqueous sample. The reporting limit for a sample may be different from the $P Q L$ listed depending upon the actual weight of sample used, the samples moisture content and any dilutions used during the analysis.

## NOTES AND COMMENTS

## TestAmerica Job Number: 1.17466

Sample Number: 708665-708676 (Run batch 3604)
Analysis: 8260 Volatiles
An LCS/LCS Duplicate was analyzed in this run batch because inadequate sample was provided to perform an MS/MSD.

Sample Number: 708665
Analysis: 8270 BNA
The surrogate, 2,4,6-tribromophenol, was below the recommended \% recovery criteria.

Sample Number: 708675
Analysis: 8270 BNA
The acid-fraction surrogates were diluted below their reporting limits. Hold times for sample re-extraction had expired.
1.17466
CHAIN OF CUSTODY RECORD
$\int \begin{aligned} & \text { Hull \& } \\ & \text { Associates, } \\ & 2\end{aligned}$



## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001
Job Number: 01.17471

Enclosed is the analytical report for the following samples submitted to the Dayton Division of TestAmerica, Inc. for analysis:

Sample
Number
Sample Description
708698
708699
708700
708701
708702
708703
708704
708705
708706
708707
708708
SBI002:FB1:G091901:523
SBI002:HMW6S:G092001D:523
SBI002:HMW12S:G091901:523
SBI002:HMW33D:G091901:523
SBI002:HMW33S:G091901:523
SBIO02:HMW21D:G091901:523
SBI002:MW30D:G092001:523
SBIO02:TB1: G091901:523
SBI002:HMW9I:G091901:523
SBI002:HMW9S:G091901:523
SBIO02:HMW9D:G091901:523

## Date Taken

Date Received

09/19/2001. 09/21/2001
09/20/2001 09/21/2001
09/19/2001 09/21/2001
09/19/2001 09/21/2001
09/19/2001 09/21/2001
09/19/2001 09/21/2001
09/20/2001 09/21/2001
09/19/2001 09/21/2001
09/19/2001 09/21/2001
09/19/2001 09/21/2001
09/19/2001 09/21/2001

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted only in its entirety.

Enclosure


## TestAmerica, Incorporated

PAGE 2 of 50

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016
$10 / 12 / 2001$

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Datch | Batch | Reporting Analyst |  |
| Ralyzed | Number | Number Limit | Initials Method Reference |  |

SAMPLE NO. 708698

SAMPLE DESCRIPTION
SBI002:FB1:G091901:523

DATE/TIME TAKEN
09/19/2001 17:00


# TestAmerica, Incorporated 

PAGE 3 of 50

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analyed | Number | Number | Limit | Initials Method Reference |  |

## SAMPLE NO. 708698 <br> SAMPLE DESCRIPTION <br> SBIOO2:FB1:G091901:523

DATE/TIME TAKEN 09/19/2001 17:00

| sromodichloromethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bromoform | $<1.0$ | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW | 82608 |
| Bromobenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dimg | Sw | 8260B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 | 3605 | $<12.5$ | dmg | SW | 8260B |
| Carbon diaulfide | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 82608 |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 82608 |
| Chlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 82608 |
| Chloroethane | $<5.0$ | ug/L | 09/26/2001 | 3605 | < 5.0 | dmg | SW | 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Chloroform | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/26/2001 | 3605 | < 5.0 | dmg | SW | 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/26/2001 | 3605 | $<5.0$ | dmg | SW | 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 82608 |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | ding | SW | 82608 |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | <1.0 | dimg | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3505 | $<1.0$ | dmg | Sw | 82608 |
| Cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260 B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1,3-Dichloropropane | <1.0 | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 82608 |

# TestAmerica, Incorporated 

ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
10/12/2001

6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002

|  | Prep Run |
| :--- | :--- |
| Date Batch Batch Reporting Analyst |  |

## SAMPLE NO. 708698

SAMPLE DESCRIPTION
DATE/TIME TAKEN
SBIO02:FB1:G091901:523

| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW | 82608 |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW | 82608 |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 82608 |
| Ethylbenzene | $<1.0$ | $\underline{u g / L}$ | 09/26/2001 | 3605 | <1.0 | dmg | SW | 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/26/2001 | 3605 | $<5.0$ | dmg | SW | 8260B |
| n -Hexane | <5.0 | ug/L | 09/26/2001 | 3605 | $<5.0$ | dmg | SW | 8260 B |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3605 | $<12.5$ | ding | SW | 8260B |
| Isopropylbenzene (Cumene) | <1.0 | ug/L | 09/26/2001 | 3605 | $<1.0$ | ding | Sw | 82608 |
| p-Isopropyltoluene | <1.0 | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 82608 |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3605 | <5.0 | dmg | SW | 8260b |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3605 | <5.0 | ding | SW | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | $\underline{u g / L}$ | 09/26/2001 | 3605 | $<5.0$ | dimg | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | <12.5 | ug/L | 09/26/2001 | 3605 | $<12.5$ | dmg | SW | 8260B |
| $n$-Propylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | ding | SW | 8260 B |
| Styrene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | ding | SW | 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/26/2001 | 3605 | $<5.0$ | dmg | Sw | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | <1.0 | dimg | SW | 8260b |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW | 8260B |
| Tetrachioroethene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Toluene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 09/26/2001 | 3605 | $<5.0$ | ding | SW | 8260日 |
| 1,1,1-Trichloroethane | <1.0 | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | ding | SW | 8260B |
| Trichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Trichlorofluoromethane | <1.0 | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002


SAMPLE NO.
SAMPLE DESCRIPTION
SBIO02:FB1: G091901:523

DATE/TIME TAREN 09/19/2001 17:00

| 1,2,3-Trichloropropane | $<5.0$ | us/L | 09/26/2001 |  | 3605 | $<5.0$ | ding | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 82608 |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 |  | 3605 | < 5.0 | dmg | SW | 8260 B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 8260B |
| Xylenes | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | sw | 8260B |
| d4-1,2-Dichloroethane (surr) | 103 | \% | 09/26/2001 |  | 3605 |  | dmg | SW | 8260B |
| Dibromofluoromethane (surr) | 100 | \% | 09/26/2001 |  | 3605 |  | dmg | SW | 8260B |
| ds-Toluene (surr) | 99 | \% | 09/26/2001 |  | 3605 |  | dmg | SW | 8260B |
| Bromofluorobenzene (surr) | 100 | \% | 09/26/2001 |  | 3605 |  | ding | S | 8260B |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | Sw | 8270 C |
| Acenaphthylene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| Benzo (b) Eluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Benzo (k) fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Benzo(a) pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | S | 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | Sw | 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270C |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | Sw | 8270C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270C |
| 2,2'-oxybis (1-Chloropropane) | $<20$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 4-Bromophenyl phenyl ether | <10 | ug/L | 09/27/2001 | 1277 | 2705 | <10 | dmg | SW | 8270C |

# TestAmerica, Incorporated 

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## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 708698

SAMPLE DESCRIPTION
SBI002:FB1:G091901:523

DATE/TIME TAKEN 09/19/2001 17:00

| 4-Chloroaniline | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | <10 | dmg | SW | 8270C |
| Chrysene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270 C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | S | 8270 C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/27/2001 | 1277 | 2705 | <50 | dmg | Sw | 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | S | 8270 C |
| Dimethyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SH | 8270C |
| Fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270 C |
| Fluorene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | Sh | 8270 C |
| Hexachiorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | Sh | 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/27/2001 | 1277 | 2705 | $<20$ | dmg | SW | 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SN | 8270 C |
| Indeno(1,2,3-cd) pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Isophorone | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Naphthalene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| Nitrobenzene | <10 | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SH | 8270C |
| N-Nitrosodi-n-propylamine | <10 | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | $8270{ }^{\text {C }}$ |
| Phenanthrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | <10 | dmg | SW | 8270 C |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
$\begin{array}{lr}\text { HULLL \& ASSOC. (Dublin) } & \text { 10/12/2001 } \\ 6130 \text { Wilcox Rd. }\end{array}$ Dublin, OH 43016

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initiala | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 708698 |  | SBI002: FB | 1 : GO | 9190 | 523 |  |  |  | 09/ | 9/2001 | 1 17:00 |


| Prrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | <10 | dmg | SW 8270C |
| Surrogate: d5-Nitrobenzene | 81 | $t$ | 09/27/2001 | 1277 | 2705 |  | dmg | SW 8270C |
| Surrogate: 2-Fluorobiphenyl | 83 | \% | 09/27/2001 | 1277 | 2705 |  | dmg | SW 8270C |
| Surrogate: d14-Terphenyl | 82 | 8 | 09/27/2001 | 1277 | 2705 |  | dmg | SW 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/27/2001 | 1277 | 2705 | <50 | dmg | SW 8270C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 2-Chlorophenol | <10 | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | Sw 8270C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | SW 8270C |
| 2-Methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 2-Nitrophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Pentachlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Phenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277. | 2705 | $<10$ | dimg | SW 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW 8270C |
| Surrogate: d6-Phenol | 73 | $t$ | 09/27/2001 | 1277 | 2705 |  | dmg | SW 8270C |
| Surrogate: 2-Fluorophenol | 74 | \% | 09/27/2001 | 1277 | 2705 |  | dmg | SW 8270C |
| Surrogate: Tribromophenol | 64 | $t$ | 09/27/2001 | 1277 | 2705 |  | dmg | SW 8270C |
| PCB's M 8082. Aqueous |  |  |  |  |  |  |  |  |
| Aroclor 1016 | $<0.20$ | ug/L | 09/28/2001 | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| Aroclor 1221 | $<0.20$ | ug/L | 09/28/2001 | 69 | 128 | $<0.20$ | mrb | SW 8082 |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting | Analyst | Number |
| Limit | Initials Method Reference |  |  |  |  |  |  |

SAMPLE NO. 708698

Aroclor 1232
Aroclor 1242
Aroclor 1248
Aroclor 1254
Aroclor 1260
Surrogate: DCB/TCX
TPH - DRO AQUEOUS
TPH - GRO (Aqueous)
TPH - Method 418.1 (AQ)
SAMPLE NO. 708699

| $<0.20$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 28 / 2001$ | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $<0.20$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 28 / 2001$ | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| $<0.20$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 28 / 2001$ | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| $<0.20$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 28 / 2001$ | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| $<0.20$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 28 / 2001$ | 69 | 128 | $<0.20$ | mrb | SW 8082 |
| $76 / 55$ | f | $09 / 28 / 2001$ | 69 | 128 |  | mrb | SW 8082 |
| $<1$ | $\mathrm{mg} / \mathrm{L}$ | $09 / 27 / 2001$ | 125 | 214 | $<1$ | meb | SW 8015M |
| $<1$ | $\mathrm{mg} / \mathrm{L}$ | $10 / 03 / 2001$ |  | 88 | $<1$ | meb | SW 8015M |
| $<0.2$ | $\mathrm{mg} / \mathrm{L}$ | $09 / 28 / 2001$ | 604 | 725 | $<0.2$ | 260 | EPA 418.1 |


| ICPMS TOTAL METALS | Complete |  | 10/04/2001 |  | 2586 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | 0.0442 | mg/L | 10/03/2001 | 1851 | 3715 | $<0.0050$ | kmb | SW | 6020 |
| Barium, ICPMS | 0.192 | mg/L | 10/04/2001 | 1851 | 3927 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3594 | $<0.0010$ | kmb | SW | 6020 |
| Chromium, ICPMS (0.005) | 0.0399 | mg/L | 10/04/2001 | 1851 | 3997 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | 0.0718 | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3672 | $<0.0010$ | kmb | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/26/2001 | 1417 | 1363 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | mg/L | 09/28/2001 | 755 | 579 | <0.0050 | Inh | Sw | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3929 | $<0.0005$ | kemb | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/27/2001 | 1851 |  | Complete | clm | SW | 3010A |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |

SAMPLE NO. 708699

SAMPLE DESCRIPTION SBIO02:HMW6S:G092001D:523
$10 / 12 / 2001$


## TestAmerica, Incorporated

# ANALYTICAL REPORT 

Kevin Wildman HULL \& ASSOC. (Dublin)
6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units |  | Date | Batch | Batch | Reporting | Analyst |  |
| Rumber | Number | Limit | Initials Method Reference |  |  |  |  |

DATE/TIME TAKEN 09/20/2001 07:40

| Dibromomethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dichlorodifluoromethane | <1.0 | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/26/2001 | 3605 | < 5.0 | dmg | SW | 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW | 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dimg | SW | 8260B |
| 1,4-Dichlorobenzene | <1.0 | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW | 8260B |
| 1,1-Dichloroethere | <1.0 | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW | 8260B |
| cis-1,2-Dichloroethene | <1.0 | $\mathrm{ug} / \mathrm{L}$ | 09/26/2001 | 3605 | <1.0 | dmg | SW | 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW | 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | ding | SW | 8260 B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW | 8260 B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/26/2001. | 3605 | $<5.0$ | ding | SW | 8260 B |
| n -Hexane | $<5.0$ | ug/L | 09/26/2001 | 3605 | <5.0 | dmg | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3605 | $<12.5$ | dmg | SW | 82608 |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260b |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Bromomethane | <5.0 | ug/L | 09/26/2001 | 3605 | $<5.0$ | dmg | SW | 82608 |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3605 | $<5.0$ | dmg | SW | 82608 |
| Methyl t-butyl ether (MTBE) | <5.0 | ug/L | 09/26/2001 | 3605 | < 5.0 | dmg | SW | 82608 |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002


| Aethyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 |  | 3605 | $<12.5$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n-Propylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/26/2001 |  | 3605 | $<5.0$ | dmg | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dimg | SW | 82608 |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 8260B |
| Tetrachloroethene | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 82608 |
| Toluene | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | <1.0 | dmg | SW | 82608 |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 09/26/2001 |  | 3605 | <5.0 | dmg | SW | 8260日 |
| 1,1.1-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 82608 |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 8260B |
| Trichloroethene | 4.5 | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1,2,3-Trichloropropane | < 5.0 | ug/L | 09/26/2001 |  | 3605 | <5.0 | dmg | Sw | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 8260B |
| Vinyl Acetate | <5.0 | ug/L | 09/26/2001 |  | 3605 | $<5.0$ | dmg | SW | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 8260B |
| Xylenes | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | <1.0 | dmg | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 104 | \% | 09/26/2001 |  | 3605 |  | dmg | SW | 8260B |
| Dibromofluoromethane (surr) | 101 | \% | 09/26/2001 |  | 3605 |  | dmg | SW | 8260B |
| d8-Toluene (surr) | 99 | $\%$ | 09/26/2001 |  | 3605 |  | dmg | SW | 8260B |
| Bromofluorobenzene (surr) | 97 | 8 | 09/26/2001 |  | 3605 |  | dmg | SW | 8260B |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |

Kevin Wildman
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10/12/2001

Job Number: 01.17471
Client Project ID: South Bend Indiana SBIO02

|  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Analyzed | Batch | Batch | Reporting Analyst |  |
| Number | Number | Limit | Initials Method Reference |  |  |  |


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 708699 | SBIOO2:HMW6S:G092001D:523 |


| Acenaphthylene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Anthracene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Benzo (k) fluoranthene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Benzo(a) pyrene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| bis (2-Chloroethyl)ether | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 2,2'-oxybis(1-Chloropropane) | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | S\$ 8270C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 4-Chloroaniline | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Chrysene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jıw | SW 8270C |
| Dibenzofuran | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10^{\circ}$ | jrw | SW 8270C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jıw | SW 8270C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 3,3'-Dichlorobenzidine | $<50$ | ug/L | 09/28/2001 | 1277 | 2712 | $<50$ | jrw | SW 8270C |
| Diethyl phthalate | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Dimethyl phthalate | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman HULI \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION
708699
SBI002:HMW6S:G092001D:523

| -i-n-octylphthalate | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270c |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fluoranthene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Fluorene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Hexachlorobenzene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jıw | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/28/2001 | 1277 | 2712 | $<20$ | jrw | SW | 8270 C |
| Hexachloroethane | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Indeno (1, 2, 3-cd) pyrene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Isophorone | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Naphthalene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Nitrobenzene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | j5w | SW | 8270C |
| Phenanthrene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Pyrene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW | 82700 |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Surrogate: d5-Nitrobenzene | 103 | 8 | 09/28/2001 | 1277 | 2712 |  | jrw | SW | 8270 C |
| Surrogate: 2-Fluorobiphenyl | 60 | $\%$ | 09/28/2001 | 1277 | 2712 |  | jrw | SW | 8270C |
| Surrogate: d14-Terphenyi | 73 | \% | 09/28/2001 | 1277 | 2712 |  | juw | SW | 8270 C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/28/2001 | 1277 | 2712 | $<50$ | jrw | SW | 8270C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW | 82700 |
| 2-Chlorophenol | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW | 82700 |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW | 82700 |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
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6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 708699

SBI002:HMW6S:G092001D:523

DATE/TIME TAKEN 09/20/2001 07:40

| 2-Methylphenol | $<10$ |  | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| meta \& para-Methylphenol | $<10$ |  | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jIW | SW 8270C |
| 2-Nitrophenol | $<10$ |  | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Pentachlorophenol | <10 |  | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Phenol | $<10$ |  | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| 2,4,5-Trichlorophenol | $<10$ |  | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jxw | SW 8270C |
| 2,4,6-Trichlorophenol | $<10$ |  | ug/L | 09/28/2001 | 1277 | 2712 | $<10$ | jrw | SW 8270C |
| Surrogate: d6-Phenol | 86 |  | \% | 09/28/2001 | 1277 | 2712 |  | jrw | SW 8270C |
| Surrogate: 2-Fluorophenol | 79 |  | \% | 09/28/2001 | 1277 | 2712 |  | jrw | SW 8270C |
| Surrogate: Tribromophenol | 39 | note | \% | 09/28/2001 | 1277 | 2712 |  | jrw | SW 8270C |
| TPH - GRO (Aqueous) | <1 |  | mg/L | 10/03/2001 |  | 88 | $<1$ | meb | SW 8015M |

SAMPLE NO. SAMPLE DESCRIPTION 708700 SBIO02:HMW12S:G091901:523

## DATE/TIME TAKEN

 09/19/2001 13:30| ICPMS TOTAL METALS | Complete |  | 10/04/2001 |  | 2586 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | 0.0467 | mg/L | 10/03/2001 | 1851 | 3715 | $<0.0050$ | knob | SW | 6020 |
| Barium, ICPMS | 0.154 | $\mathrm{mg} / \mathrm{L}$ | 10/04/2001 | 1851 | 3927 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | mg/L | 10/03/2001 | 1851 | 3594 | $<0.0010$ | kmb | SW | 5020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | mg/L | 10/03/2001 | 1851 | 3992 | $<0.0050$ | kmb | SW | 6020 |
| Lead, ICPMS | 0.0195 | mg/L | 10/03/2001 | 1851 | 3672 | $<0.0010$ | kmb | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/26/2001 | 1417 | 1363 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | mg/L | 09/28/2001 | 755 | 579 | <0.0050 | lnh | SW | 7740 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 708700

SBIO02:HMW12S:G091901:523

DATE/TIME TAKEN 09/19/2001 13:30

| silver, ICPMS | $<0.0005$ | mg/L | 10/03/2001 | 1851 | 3929 | $<0.0005$ | kmb | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Metals Digestion, ICPMS | Complete |  | 09/27/2001 | 1851 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 755 |  | Complete | mrt | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/25/2001 | 1417 |  | Complete | epk | SW | 7470A |
| VOLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/26/2001 |  | 3605 | Complete | dimg |  |  |
| Acetone | $<20.0$ | ug/L | 09/26/2001 |  | 3605 | $<20.0$ | dmg | Sw | 8260B |
| Benzene | <1.0 | ug/L | 09/26/2001 |  | 3605 | <1.0 | dmg | SW | 8260 B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | <1.0 | ding | Sw | 8260B |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | sw | 8260B |
| n-Butylbenzene | $<1.0$ | $\underline{u g / L}$ | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 8260B |
| Bromochloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 8260B |
| Bromoform | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SN | 8260B |
| Bronobenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dimg | SW | 8260B |
| 2-Butanone (MEK) | <12.5 | ug/L | 09/26/2001 |  | 3605 | $<12.5$ | dmg | SW | 8260B |
| Carbon disulfide | <1.0 | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 8260B |
| Carbon tetrachloride | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 8260B |
| Chlorobenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 8260B |
| Chloroethane | < 5.0 | ug/L | 09/26/2001 |  | 3605 | <5.0 | dimg | SW | 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 8260B |
| Chloroform | 2.2 | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | ding | SW | 8260B |
| Chloromethane | $<5.0$ | ug/L | 09/26/2001 |  | 3605 | $<5.0$ | ding | SW | 8260B |
| Dibromochioromethane | <1.0 | ug/L | 09/26/2001 |  | 3605 | <1.0 | dimg | SW | 8260 B |

# ANALYTICAL REPORT 

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 708700

## SAMPLE DESCRIPTION

SBI002:HMW12S:G091901:523
DATE/TIME TAKEN 09/19/2001 13:30

| Dibromomethane | <1.0 | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/26/2001 | 3605 | < 5.0 | dmg | SW 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW 8260B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8250B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW 8260B |
| 1.1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| Cis-1,2-Dichloroethene | 2.4 | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| trans-1,2-Dichloroethene | 5.0 | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SN 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260日 |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW 8260B |
| Cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/26/2001 | 3605 | $<5.0$ | dmg | SW. 8260B |
| n -Hexane | $<5.0$ | ug/L | 09/26/2001 | 3605 | $<5.0$ | ding | SW 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3605 | <12.5 | dmg | SW 8260B |
| Isopropylbenzene (Cumene) | <1.0 | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | ding | SW 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3605 | $<5.0$ | ding | SW 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3605 | $<5.0$ | dmg | SW 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/26/2001 | 3605 | $<5.0$ | dmg | SW 8260B |

## TestAmerica, Incorporated

# ANALYTICAL REPORT 

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17471

## Client Project ID: South Bend Indiana SBIOO2

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 708700 | SBIOO2:HMW12S:G091901:523 | $09 / 19 / 2001$ 13:30 |


| - Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 | 3605 | $<12.5$ | dmg |  | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n-Propylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | <1.0 | dmg |  | 8260B |
| Styrene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Naphthalene | <5.0 | ug/L | 09/26/2001 | 3605 | <5.0 | dmg | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | ding | SW | 8260B |
| 1,1,2,2-Tetrachloroethane | <1.0 | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW | 8260 B |
| Tetrachloroethene | 52.1 | ug/L | 09/26/2001 | 3608 | $<10$ | dmg | SW | 8260B |
| Toluene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 82608 |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/26/2001 | 3605 | <5.0 | dmg | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260 B |
| Trichloroethene | 29.6 | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | Sw | 82608 |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | <1.0 | dimg | SW | 82608 |
| 1,2,3-Trichloropropane | $<5.0$ | ug/L | 09/26/2001 | 3605 | $<5.0$ | dmg | SW | 82608 |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260日 |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 | 3605 | $<5.0$ | dmg | SW | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Xylenes | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260日 |
| d4-1,2-Dichloroethane (surr) | 103 | $\%$ | 09/26/2001 | 3605 |  | dmg | SW | 82608 |
| Dibromofluoromethane(surr) | 100 | \% | 09/26/2001 | 3605 |  | dmg | SW | 8260B |
| ds-Toluene (surr) | 100 | 8 | 09/26/2001 | 3605 |  | dmg | SW | 8260B |
| Bromofluorobenzene (surr) | 100 | 8 | 09/26/2001 | 3605 |  | dmg | sw | 8260B |
| TPH - GRO (Aqueous) | $<1$ | mg/L | 10/03/2001 | 88 | $<1$ | meb | SW | 8015M |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17471

Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |

SAMPLE NO. SAMPLE DESCRIPTION 708701
SBIOO2:HMW33D:G091901:523

DATE/TIME TAKEN 09/19/2001 13:50

| ICPMS TOTAL METALS | Complete |  | 10/04/2001 |  | 2586 | Complete | ekh | SW | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Areenic, ICPMS | 0.0111 | mg/L | 10/03/2001 | 1851 | 3715 | $<0.0050$ | kemb | SW | 6020 |
| Barium, ICPMS | 0.116 | mg/L | 10/04/2001 | 1851 | 3927 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3594 | $<0.0010$ | kmb | SW | 6020 |
| Chromium, ICPMS (0.005) | 0.0088 | $\mathrm{mg} / \mathrm{L}$ | 10/04/2001 | 1851 | 3997 | $<0.0050$ | ekh | SW | 6020 |
| Lead, ICPMS | 0.0129 | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3672 | $<0.0010$ | kmb | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | mg/L | 09/26/2001 | 1417 | 1363 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | mg/L | 09/28/2001 | 755 | 579 | $<0.0050$ | Inh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3929 | $<0.0005$ | knb | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/27/2001 | 1851 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 755 |  | Complete | mrt | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/25/2001 | 1417 |  | Complete | epk | SW | 7470A |
| VOLATILE COMPOUNDS - 8260 (AQ) |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/26/2001 |  | 3608 | Complete | dmg |  |  |
| Acetone | <20.0 | ug/L | 09/26/2001 |  | 3608 | <20.0 | dmg | SW | 8260 B |
| Benzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | ding | SW | 8260B |
| tert-Butylbenzene | $<1.0$ | ug/L | 09/26/2002 |  | 3608 | $<1.0$ | dimg | SW | 8260B |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dimg | SW | 8260B |
| n-Butylbenzene | <1.0 | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| Bromochloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 82608 |
| Bramotorm | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260日 |
| Bromobenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 |  | 3608 | $<12.5$ | dmg | SW | 8260B |
| Carbon disulfide | <1.0 | ug/L | 09/26/2001 |  | 3608 | <1.0 | ding | SW | 8260B |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Eatch | Batch | Reporting Analyst |

SAMPLE DESCRIPTION
SBI002:HMW33D:G091901:523
DATE/TIME TAKEN
09/19/2001 13:50

| Carbon tetrachloride | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Chloroethane | <5.0 | ug/L | 09/26/2001 | 3608 | < 5.0 | dmg | SW | 82608 |
| 2-Chlorotoluene | $<1.0$ | $\underline{u g / L}$ | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 8260B |
| Chloroform | $<1.0$ | ug/L | 09/26/2002 | 3608 | $<1.0$ | dmg | SW | 8260日 |
| Chloromethane | $<5.0$ | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 8260B |
| Dibromochloromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | Sw | 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/26/2001. | 3608 | $<1.0$ | dmg | SW | 82608 |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 1,2-Dibromo-3-chloropropane | <5.0 | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260B |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |
| 1,3-Dichlorobenzene | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260日 |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | Sw | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | Ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 8260B |
| 1,2-Dichloropropane | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 8260 B |
| 2,2-Dichloropropane | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | ding | SW | 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 8260B |
| cis-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 82608 |
| trans-1, 3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 82608 |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 8260B |

# TestAmerica, Incorporated 

PAGE 20 of 50
ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002

|  |  | Prep Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch Reporting Analyst |  |
| Analyzed | Number | Number Limit | Initials Method Reference |  |


| SAMPLE NO. SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 708701 | SBIOO2:HMW33D:G091901:523 |

DATE/TIME TAKEN 09/19/2001 13:50

| Hexachlorobutadiene | $<5.0$ | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n -Hexane | <5.0 | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | dmg | SW | 82608 |
| Isopropylbenzene (Cumene) | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| p -Isopropyltoluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3608 | <5.0 | ding | SW | 82608 |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dimg | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | dmg | SW | 8260в |
| n-Propylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | sw | 8260B |
| Styrene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260 B |
| 1,1,1,2-Tetrachloroethane | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260b |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260 B |
| Tetrachloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Toluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 82608 |
| 1,1,1-Trichloroethane | 4.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Trichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260 B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,2,3-Trichloropropane | <5.0 | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 82608 |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | Sw | 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 8260b |
| Vinyl Chloride | <1.0 | ug/L | 09/26/2001 | 3608 | <1.0 | dimg | SW | 8260 B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17471
Client Project ID: South Bend Indiana SBIOO2

|  |  | Result | Flag | Unitg | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPLE DE | CRI | PTIO1 |  |  |  |  | DAT | /TIME | TAKEN |
| 708701 |  | SBI002: HI | W3 | : G091 | 1:523 |  |  |  | 09/1 | 9/2001 | 1 13:50 |


| ..ylenes | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW 8260日 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d4-1,2-Dichloroethane (surr) | 105 | \% | 09/26/2001 | 3608 |  | ding | SW 8260B |
| Dibromofluoromethane (surr) | 102 | $\%$ | 09/26/2001 | 3608 |  | dming | SW 8260B |
| d8-Toluene (surr) | 98 | \% | 09/26/2001 | 3608 |  | dmg | SW 8260B |
| Bromofluorobenzene (surr) | 102 | \% | 09/26/2001 | 3608 |  | dmg | SW 8260B |

## SAMPLE NO. SAMPLE DESCRIPTION

708702
SBI002: HMW33S: G091901:523
DATE/TIME TAKEN 09/19/2001 13:45

| ICPMS TOTAL METALS | Complete |  | 10/04/2001 |  | 2586 | Complete | ekh | Sw | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | 0.0053 | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3715 | $<0.0050$ | kmb | SW | 6020 |
| Barium, ICPMS | 0.100 | $\mathrm{mg} / \mathrm{L}$ | 10/04/2001 | 1851 | 3927 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | $<0.0010$ | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3594 | $<0.0010$ | kmb | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3992 | $<0.0050$ | kmb | Sw | 6020 |
| Lead, ICPMS | 0.132 | mg/L | 10/03/2001 | 1851 | 3672 | $<0.0010$ | kmb | SW | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/26/2001 | 1417 | 1363 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 755 | 579 | $\leqslant 0.0050$ | 1nh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3929 | <0.0005 | kmb | SW | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/27/2001 | 1851 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 755 |  | Complete | mrt | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/25/2001 | 1417 |  | Complete | epk | SW | 7470A |

VOLATILE COMPOUNDS - 8260 (AQ)

# TestAmerica，Incorporated 

# ANALYTICAL REPORT 

Kevin Wildman

HULL \＆ASSOC．（Dublin）<br>10／12／2001<br>6130 Wilcox Rd．

Dublin， OH 43016

Job Number： 01.17471
Client Project ID：South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO． | SAMPLE DE | CRI | PTIOI |  |  |  |  | DAT | ／TIME | TAKEN |
| 708702 |  | SBIO02：HM | N33S | ：G091 | 1：523 |  |  |  | 09／ | 9／2001 | 13：45 |


| 8260－SW846（AQ） | Complete |  | 09／26／2001 | 3608 | Complete | dmg |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | ＜20．0 | ug／L | 09／26／2001 | 3608 | $<20.0$ | dmg | SW 8260B |
| Benzene | $<1.0$ | $\underline{u g / L}$ | 09／26／2001 | 3608 | ＜1．0 | dmg | SW 8260日 |
| tert－Eutylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| sec－Butylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| $n$－Butylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | ding | SW 8260B |
| Bromochloromethane | $<1.0$ | ug／L | 09／26／2001 | 3608 | ＜1．0 | dmg | SW 8260日 |
| Bromodichloromethane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | ding | SW 8260B |
| Bromoform | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Bromobenzene | $<1.0$ | ug／L | 09／26／2001 | 3608 | ＜1．0 | dmg | SW 8260b |
| 2－Butanone（MEK） | $<12.5$ | ug／L | 09／26／2001 | 3608 | $<12.5$ | dmg | SW 8260B |
| Carbon disulfide | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | ding | SW 8260B |
| Carbon tetrachloride | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Chlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | ding | SW 8260B |
| Chloroethane | $<5.0$ | ug／L | 09／26／2001 | 3608 | ＜5．0 | dimg | SW 8260B |
| 2－Chlorotoluene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 4－Chlorotoluene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Chloroform | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Chloromethane | $<5.0$ | ug／L | 09／26／2001 | 3608 | ＜5．0 | dmg | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Dibromomethane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260b |
| Dichlorodifluoromethane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 1，2－Dibromo－3－chloropropane | $<5.0$ | ug／L | 09／26／2001 | 3608 | ＜5．0 | dmg | SW 8260B |
| 1，2－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dimg | SW 8260B |
| 1，3－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260日 |
| 1，4－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |

## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
10/12/2001
6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01. 17471
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |

SAMPIE NO. SAMPLE DESCRIPTION 708702

DATE/TIME TAKEN 09/19/2001 13:45

| ;1-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $\leqslant 1.0$ | dmg | SW | 82608 |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 82608 |
| Cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | Sh | 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260日 |
| 1,1-Dichloroprópene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |
| Cis-1,3-Dichloropropene | <1.0 | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 8260B |
| trans-1.3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SH | 8260B |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260B |
| n -Hexane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | ding | SW | 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | ding | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dmg | SW | 82608 |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | S | 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | ding | SW | 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | dmg | SW | 8260B |
| n-Propylbenzene | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | amg | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |

## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run Batch Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO. | SAMPIE DE | CRI | TIO |  |  |  |  | DAT | /TIME | TAKEN |
| 708702 |  | SBI002:HM | N33S | G09 | 1:523 |  |  |  | 09/ | 9/2001 | 1 13:45 |


| Tetrachloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | Sw | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Toluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | Sw | 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | ding | SW | 8260B |
| 1,1,1-Txichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | ding | SW | 8260B |
| Trichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | <1.0 | dimg | SW | 82608 |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 1,2,3-Trichloropropane | <5.0 | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dimg | SW | 8260B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Xylenea | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 108 | \% | 09/26/2001 | 3608 |  | dmg | SW | 8260 B |
| Dibromofluoromethane (surr) | 103 | \% | 09/26/2001 | 3608 |  | dmg | SW | 8260 B |
| d8-Toluene (surr) | 98 | \% | 09/26/2001 | 3608 |  | dmg | SW | 8260B |
| Bromofluorobenzene (surr) | 104 | \% | 09/26/2001 | 3608 |  | ding | SW | 82608 |

# TestAmerica，Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin，OH 43016

Job Number：01．17471
Client Project ID：South Bend Indiana SBI002

|  |  | Result | Flag | Units | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting Limit | Analyst Initials | Method Re | ference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO． | SAMPLE DE | CRI | TIO |  |  |  |  | DA＇ | TIME | TAKEN |
| 708703 |  | SBIOO2：HM | N21D | G09 | $1: 523$ |  |  |  | 09／ | 9／2001 | 14：00 |


| 2p，TPH－ 418.1 aq | Complete |  | 09／27／2001 | 604 |  | Complete | 260 | EPA 418.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VOLATILE COMPOUNDS－ 8260 （AQ） |  |  |  |  |  |  |  |  |
| 8260 －SW846（AQ） | Complete |  | 09／26／2001 |  | 3605 | Complete | dmg |  |
| Acetone | $<20.0$ | ug／L | 09／26／2001 |  | 3605 | ＜20．0 | dimg | SW 8260B |
| Benzene | $<1.0$ | ug／L | 09／26／2001 |  | 3605 | ＜1．0 | dmg | SW 8260B |
| tert－Butylbenzene | $<1.0$ | ug／L | 09／26／2001 |  | 3605 | $<1.0$ | dmg | SW 8260日 |
| sec－Butylbenzene | ＜1．0 | ug／L | 09／26／2001 |  | 3605 | ＜1．0 | dmg | SW 8260B |
| n－Butylbenzene | ＜1．0 | ug／L | 09／26／2001 |  | 3605 | ＜1．0 | dmg | SW 8260 B |
| Bromochloromethane | $<1.0$ | ug／L | 09／26／2001 |  | 3605 | ＜1．0 | dmg | SW 8260B |
| Bromodichloromethane | $<1.0$ | ug／L | 09／26／2001 |  | 3605 | $<1.0$ | dmg | SW 8260B |
| Bromoform | $<1.0$ | ug／L | 09／26／2001 |  | 3605 | $<1.0$ | dmg | SW 8260B |
| Bromobenzene | $<1.0$ | ug／L | 09／26／2001 |  | 3605 | ＜1．0 | dmg | SW 8260B |
| 2－Butanone（MEK） | $<12.5$ | ug／L | 09／26／2001 |  | 3605 | $<12.5$ | dmg | SW 8260B |
| Carbon disulfide | ＜1．0 | ug／L | 09／26／2001 |  | 3605 | $<1.0$ | dmg | SW 8260B |
| Carbon tetrachloride | ＜1．0 | ug／L | 09／26／2001 |  | 3605 | $<1.0$ | dmg | SW 8260B |
| Chlorobenzene | $<1.0$ | ug／L | 09／26／2001 |  | 3605 | $<1.0$ | dmg | SW 8260B |
| Chloroethane | ＜5．0 | ug／L | 09／26／2001 |  | 3605 | ＜5．0 | dmg | SW 8260B |
| 2－Chlorotoluene | ＜1．0 | ug／L | 09／26／2001 |  | 3605 | $<1.0$ | dmg | SW 8260B |
| 4－Chlorotoluene | ＜1．0 | ug／L | 09／26／2001 |  | 3605 | $<1.0$ | ding | SW 8260B |
| Chloroform | $<1.0$ | ug／L | 09／26／2001 |  | 3605 | $<1.0$ | dmg | SW 8260B |
| Chloromethane | $<5.0$ | ug／L | 09／26／2001 |  | 3605 | ＜5．0 | dmg | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug／L | 09／26／2001 |  | 3605 | $<1.0$ | dmg | SW 8260B |
| Dibromomethane | $<1.0$ | ug／L | 09／26／2001 |  | 3605 | $<1.0$ | dmg | SW 8260日 |
| Dichlorodifluoromethane | ＜1．0 | ug／L | 09／26／2001 |  | 3605 | $<1.0$ | dmg | SW 8260日 |
| 1，2－Dibromo－3－chloropropane | ＜5．0 | ug／L | 09／26／2001 |  | 3605 | ＜ 5.0 | dmg | SW่ 8260B |

# TestAmerica，Incorporated 

PAGE 26 of 50
ANALYTICAL REPORT

Kevin Wildman
HULL \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin，OH 43016

Job Number： 01.17471
Client Project ID：South Bend Indiana SBI002

|  |  | Result | Flag | Unitg | Date <br> Analyzed | Prep Batch Number | Run <br> Batch <br> Number | Reporting <br> Limit | Analyst <br> Initials | Method Re | eference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE | NO． | SAMPLE DE | SCRI | TIO |  |  |  |  | DAT | ／TIME | TAKEN |
| 708703 |  | SBI002：HM | N21D | G091 | 1：523 |  |  |  | 09／ | 9／2001 | 1 14：00 |


| 1，2－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260b |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1，3－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3605 | ＜1．0 | dmg | SW 8260B |
| 1，4－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| 1，1－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3605 | ＜1．0 | dimg | SW 8260B |
| 1，2－Dichloroethane | ＜1．0 | ug／L | 09／26／2001 | 3605 | ＜1．0 | dmg | SW 8260B |
| 1，1－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3605 | ＜1．0 | dmg | SW 8260B |
| Cis－1，2－Dichloroethene | ＜1．0 | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| trans－1，2－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260日 |
| 1，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dimg | SW 8260b |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3605 | ＜1．0 | dmg | SW 82608 |
| 1，1－Dichloropropene | ＜1．0 | ug／L | 09／26／2001 | 3605 | ＜1．0 | dmg | SW 8260B |
| cis－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| trans－1，3－Dichloropropene | ＜1．0 | ug／L | 09／26／2001 | 3605 | $<1.0$ | dimg | SW 8260B |
| Ethylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dimg | SW 8260B |
| Hexachiorobutadiene | $<5.0$ | ug／L | 09／26／2001 | 3605 | $<5.0$ | dmg | SW 8260B |
| n －Hexane | $<5.0$ | ug／L | 09／26／2001 | 3605 | $<5.0$ | dmg | SW 8260 B |
| 2 －Hexanone | $<12.5$ | ug／L | 09／26／2001 | 3605 | $<12.5$ | dmg | SW 8260B |
| Isopropylbenzene（Cumene） | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| p－Isopropyltoluene | ＜1．0 | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| Bromomethane | $<5.0$ | ug／L | 09／26／2001 | 3605 | ＜5．0 | dimg | SW 8260B |
| Methylene Chloride | $<5.0$ | ug／L | 09／26／2001 | 3605 | ＜5．0 | dng | SW 8260B |
| Methyl t－butyl ether（MTBE） | ＜5．0 | ug／L | 09／26／2001 | 3605 | ＜5．0 | dmg | SW 8260日 |
| 4－Methyl－2－pentanone（MIBK） | $<12.5$ | ug／L | 09／26／2001 | 3605 | $<12.5$ | dmg | SW 8260B |
| n－Propylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dimg | SW 8260B |
| Styrene | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8250日 |

## TestAmerica，Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULIL \＆ASSOC．（Dublin）10／12／2001
6130 Wilcox Rd．
Dublin，OH 43016

Job Number： 01.17471
Client Project ID：South Bend Indiana SBI002


SAMPLE NO．SAMPLE DESCRIPTION 708703

SBI002：HMW2 1D：G091901：523

DATE／TIME TAKEN
09／19／2001 14：00

| Naphthalene | $<5.0$ | ug／L | 09／26／2001 |  | 3605 | $<5.0$ | dmg | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1，1，1，2－Tetrachloroethane | $<1.0$ | ug／L | 09／26／2001 |  | 3605 | $<1.0$ | ding | SW 8260日 |
| 1，1，2，2－Tetrachloroethane | $<1.0$ | ug／L | 09／26／2001 |  | 3605 | ＜1．0 | dmg | SW 8260B |
| Tetrachloroethene | $<1.0$ | ug／L | 09／26／2001 |  | 3605 | $<1.0$ | dmg | SW 8260B |
| Toluene | $<1.0$ | ug／L | 09／26／2001 |  | 3605 | ＜1．0 | dimg | SW 8260B |
| 1，2，4－Trichlorobenzene | $<5.0$ | ug／L | 09／26／2001 |  | 3605 | $<5.0$ | dimg | SW $\mathrm{W}^{\text {d }}$ 260B |
| 1，1，1－Trichloroethane | 4.4 | ug／L | 09／26／2001 |  | 3605 | $<1.0$ | dmg | SW 8260B |
| 1，1，2－Trichloroethane | $<1.0$ | ug／L | 09／26／2001 |  | 3605 | $<1.0$ | dmg | SW 8260B |
| Trichloroethene | $<1.0$ | ug／L | 09／26／2001 |  | 3605 | $<1.0$ | dmg | SW 8260B |
| Trichlorofluoromethane | $<1.0$ | ug／L | 09／26／2001 |  | 3605 | $<1.0$ | dmg | SW 8260日 |
| 1，2，3－Trichloropropane | $<5.0$ | ug／L | 09／26／2001 |  | 3605 | $<5.0$ | dmg | SW 8260日 |
| 1，2，4－Trimethylbenzene | $<1.0$ | ug／L | 09／26／2001 |  | 3605 | $<1.0$ | dmg | SW 8260B |
| 1，3，5－Trimethylbenzene | $<1.0$ | ug／L | 09／26／2001 |  | 3605 | $<1.0$ | dmg | SW 8260B |
| Vinyl Acetate | $<5.0$ | ug／L | 09／26／2001 |  | 3605 | $<5.0$ | dmg | SW 8260B |
| Vinyl Chloride | $<1.0$ | ug／L | 09／26／2001 |  | 3605 | $<1.0$ | dmg | SW 8260B |
| Xylenes | $<1.0$ | ug／L | 09／26／2001 |  | 3605 | $<1.0$ | dmg | SW 8250B |
| d4－1，2－Dichloroethane（surr） | 104 | $\%$ | 09／26／2001 |  | 3605 |  | dmg | SW 8260B |
| Dibromofluoromethane（surr） | 103 | $\%$ | 09／26／2001 |  | 3605 |  | dmg | SW 8260B |
| d8－Toluene（surr） | 97 | 8 | 09／26／2001 |  | 3605 |  | dmg | SW 8260B |
| Bromofluorobenzene（surr） | 101 | $\%$ | 09／26／2001 |  | 3605 |  | dmg | SW 8260b |
| TPH－Method 418.1 （AQ） | $<0.2$ | mg／L | 09／28／2001 | 604 | 725 | $<0.2$ | 260 | EPA 418.1 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULI \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting | Analyst |  |
|  | Analy | Number | Number | Limit | Initials Method Reference |  |


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 708704 | SBIOO2:MW30D:G092001:523 | $09 / 20 / 200112: 30$ |



# TestAmerica，Incorporated 

## ANALYTICAL REPORT

## Kevin Wildman

HULI \＆ASSOC．（Dublin）
6130 Wilcox Rd．
Dublin，OH 43016

10／12／2001

Job Number： 01.17471
Client Project ID：South Bend Indiana SBI002


SAMPLE DESCRIPTION
SBI002：MW30D：G092001：523

DATE／TIME TAKEN
09／20／2001 12：30

| 1，4－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1，1－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260b |
| 1，1－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| cis－1．2－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | － 3605 | $<1.0$ | dmg | SN 8260日 |
| trans－1，2－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260E |
| 1，2－Dichloropropane | ＜1．0 | ug／L | 09／26／2001 | 3605 | ＜1．0 | dmg | SW 8260B |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | ding | SW 8260B |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| 1，1－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dimg | SW 8260B |
| cis－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| trans－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| Ethylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| Hexachlorobutadiene | ＜5．0 | ug／L | 09／26／2001 | 3605 | $<5.0$ | ding | SW 8260B |
| n －Hexane | ＜5．0 | ug／L | 09／26／2001 | 3605 | $<5.0$ | dmg | SW 8260B |
| 2－Hexanone | $<12.5$ | ug／L | 09／26／2001 | 3605 | $<12.5$ | dmg | SW 8260B |
| Isopropylbenzene（Cumene） | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| p－Isopropyltoluene | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| Bromomethane | $<5.0$ | ug／L | 09／26／2001 | 3605 | $<5.0$ | dmg | SW 8260B |
| Methylene Chloride | $<5.0$ | ug／L | 09／26／2001 | 3605 | $<5.0$ | dmg | SW 8260B |
| Methyl t－butyl ether（MTBE） | ＜5．0 | ug／L | 09／26／2001 | 3605 | ＜5．0 | dmg | SW 8260日 |
| 4－Methyl－2－pentanone（MIBK） | $<12.5$ | ug／L | 09／26／2001 | 3605 | $<12.5$ | dmg | SW 8260B |
| n－Propylbenzene | ＜1．0 | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| Styrene | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| Naphthalene | $<5.0$ | ug／L | 09／26／2001 | 3605 | ＜ 5.0 | dmg | SW 8260日 |
| 1，1，1，2－Tetrachloroethane | ＜1．0 | ug／L | 09／26／2001 | 3605 | ＜1．0 | dmg | SW 8260日 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |  |
| Analyzed | Number | Number | Limit | Initials Method Reference |  |  |

SAMPLE NO. SAMPLE DESCRIPTION 708704

| 1,1,2,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tetrachloroethene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260日 |
| Toluene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dimg | SW | 8260B |
| 1,2,4-Trichlorobenzene | $<5.0$ | ug/L | 09/26/2001 | 3605 | $<5.0$ | dmg | Sw | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Trichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW | 8260 B |
| 1,2,3-Trichloropropane | <5.0 | ug/L | 09/26/2001 | 3605 | <5.0 | dmg | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260 B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 | 3605 | $<5.0$ | dmg | SW | 82608 |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 82608 |
| xylenes | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| d4-1,2-Dichloroethane(surr) | 107 | 8 | 09/26/2001 | 3605 |  | dmg | SW | 8260B |
| Dibromofluoromethane (surr) | 101 | \% | 09/26/2001 | 3605 |  | dmg | SW | 8260 B |
| ds-Toluene (surr) | 97 | '\% | 09/26/2001 | 3605 |  | dmg | SW | 8260B |
| Bromofluorobenzene (surr) | . 103 | $\%$ | 09/26/2001 | 3605 |  | dmg | SW | 8260 B |

## TestAmerica，Incorporated

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \＆ASSOC．（Dublin）<br>6130 Wilcox Rd．<br>Dublin，OH 43016<br>Job Number： 01.17471<br>Client Project ID：South Bend Indiana SBI002

10／12／2001


[^48]SAMPLE DESCRIPTION
DATE／TIME TAKEN
SBIO 02 ：TB1：G091901：523

| 8260 －SW846（AQ） | Complete |  |  | 09／26／2001 | 3605 | Complete | dmg |  | － |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | ＜20．0 |  | ug／L | 09／26／2001 | 3605 | ＜20．0 | dimg | SW | 8260b |
| Benzene | $<1.0$ | SSR | ug／L | 09／26／2001 | 3605 | ＜1．0 | dmg | SW | 8260B |
| tert－Butylbenzene | $<1.0$ |  | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| sec－Butylbenzene | $<1.0$ |  | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| n－Butylbenzene | $<1.0$ |  | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Bromochloromethane | $<1.0$ |  | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Bromodichloromethane | $<1.0$ |  | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Bromoform | $<1.0$ |  | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Bromobenzene | $<1.0$ |  | ug／L | 09／26／2001 | 3605 | ＜1．0 | dmg | SW | 8260B |
| 2－Eutanone（MEK） | $<12.5$ |  | ug／L | 09／26／2001 | 3605 | $<12.5$ | dmg | SW | 8260B |
| Carbon disulfide | $<1.0$ |  | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Carbon tetrachloride | $<1.0$ |  | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Chlorobenzene | $<1.0$ | MSR | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Chloroethane | $<5.0$ |  | ug／L | 09／26／2001 | 3605 | $<5.0$ | dmg | SW | 8260B |
| 2－Chlorotoluene | $<1.0$ |  | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 4－Chlorotoluene | ＜1．0 |  | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW | 8250日 |
| Chloroform | $<1.0$ |  | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Chloromethane | $<5.0$ |  | ug／L | 09／26／2001 | 3605 | $<5.0$ | dmg | SW | 8260B |
| Dibromochloromethane | $<1.0$ |  | ug／L | 09／26／2001 | 3605 | $<1.0$ | ding | SW | 8260B |
| Dibromomethane | ＜1．0 |  | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW | 82608 |
| Dichlorodifluoromethane | $<1.0$ |  | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1，2－Dibromo－3－chloropropane | ＜5．0 |  | ug／L | 09／26／2001 | 3605 | $<5.0$ | dmg | SW | 8260 B |
| 1，2－Dichlorobenzene | $<1.0$ |  | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW | 8260日 |
| 1，3－Dichlorobenzene | $<1.0$ |  | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW | 8260日 |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002


| 1,4-Dichlorobenzene | $<1.0$ |  | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW | 8260 B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1-Dichloroethane | $<1.0$ |  | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloroethane | $<1.0$ |  | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW | 8260B |
| 1,1-Dichioroethene | $<1.0$ | MSR | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Cis-1.2-Dichloroethene | $<1.0$ |  | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| trans-1.2-Dichloroethene | $<1.0$ |  | ug/L | 09/26/2001 | 3605 | <1.0 | ding | SW | 82608 |
| 1,2-Dichloropropane | $<1.0$ |  | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | Sw | 8260B |
| 1,3-Dichloropropane | $<1.0$ |  | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW | 8260B |
| 2.2-Dichloropropane | $<1.0$ |  | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1,1-Dichloropropene | $<1.0$ |  | ug/L | 09/26/2001 | 3605 | $<1.0$ | ding | SW | 82608 |
| Cis-1,3-Dichloropropene | $<1.0$ |  | ug/L | 09/26/2001 | 3605 | <1.0 | ding | SW | 8260B |
| trans-1,3-Dichioropropene | $<1.0$ |  | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 82608 |
| Ethylbenzene | $<1.0$ | MSR | ug/L | 09/26/2001 | 3605 | $<1.0$ | ding | SW | 8260 B |
| Hexachlorobutadiene | $<5.0$ |  | ug/L | 09/26/2001 | 3605 | <5.0 | dmg | SW | 8260 B |
| $n$-Hexane | $<5.0$ |  | ug/L | 09/26/2001 | 3605 | $<5.0$ | dmg | SW | 8260B |
| 2-Hexanone | $<12.5$ |  | ug/L | 09/26/2001 | 3605 | $<12.5$ | dmg | SW | 8260B |
| Isopropylbenzene (Cumene) | $\leqslant 1.0$ |  | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| p-Isopropyltoiuene | $<1.0$ |  | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW | 8260B |
| Bromomethane | $<5.0$ |  | ug/L | 09/26/2001 | 3605 | < 5.0 | dmg | SW | 8260] |
| Methylene Chloride | $<5.0$ |  | ug/L | 09/26/2001 | 3605 | <5.0 | dmg | SW | 8260B |
| Methyl t-butyl ether (MTBE) | <5.0 |  | ug/L | 09/26/2001 | 3605 | $<5.0$ | dmg | SW | 8260B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ |  | ug/L | 09/26/2001 | 3605 | $<12.5$ | dmg | Sw | 8260B |
| n-Propylbenzene | $<1.0$ |  | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Styrene | $<1.0$ |  | ug/L | 09/26/2001 | 3605 | $<1.0$ | ding | SW | 8260B |
| Naphthalene | $<5.0$ |  | ug/L | 09/26/2001 | 3605 | $<5.0$ | ding | SW | 8260B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ |  | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 82608 |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. 708705

SAMPLE DESCRIPTION
SBIO 02 :TB1: G091901:523

DATE/TIME TAKEN 09/19/2001


# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. SAMPLE DESCRIPTION 708706 <br> SBIO 02:HMW9I:G091901:523

DATE/TIME TAKEN 09/19/2001 15:40


# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016
$10 / 12 / 2001$

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002

|  |  |  | Prep | Run |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analygt |  |  |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |  |  |

SAMPLE DESCRIPTION
SBIO 2 :HMW9I: G091901:523

DATE/TIME TAKEN
09/19/2001 15:40

| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/25/2001 | 3605 | <5.0 | dmg | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW 8260B |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260日 |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260 B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW 8260b |
| trans-1,2-Dichloroethene | <1.0 | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| 1,2-Dichloropropane | <1.0 | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW 8260B |
| 1,3-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| 2,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| 1,1-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3605 | <1.0 | dimg | SW 8260 B |
| cis-1,3-Dichloropropene | <1.0 | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| trans-1,3-Dichloropropene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260 B |
| Ethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260 B |
| Hexachlorobutadiene | $<5.0$ | ug/L | 09/26/2001 | 3605 | $<5.0$ | dmg | SW 8260日 |
| n -Hexane | $<5.0$ | ug/L | 09/26/2001 | 3605 | $<5.0$ | dmg | SW 8260B |
| 2-Hexanone | $<12.5$ | ug/L | 09/26/2001 | 3605 | $<12.5$ | dmg | SW 8260 B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| p-Isopropyltoluene | <1.0 | ug/L | 09/26/2001 | 3605 | $<1.0$ | ding | SW 8260b |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3605 | <5.0 | dmg | SW 8260B |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3605 | $<5.0$ | dmg | SW 8260B |
| Methyl t-butyl ether (MTBE) | $<5.0$ | ug/L | 09/26/2001 | 3605 | <5.0 | dmg | SW 8260 B |
| 4-Methyl-2-pentanone (MISK) | $<12.5$ | ug/L | 09/26/2001 | 3605 | $<12.5$ | dmg | SW 8260B |
| $n$-Propylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW 8260 B |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17471


## SAMPLE NO. 708706

SAMPLE DESCRIPTION
SBIOO2:HMW9I:G091901:523
DATE/TIME TAKEN 09/19/2001 15:40


## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002


| SAMPLE NO. SAMPLE DESCRIPTION | DATE/TIME TAKEN |  |
| :--- | :--- | :--- |
| 708706 | SBIO02:HMW9I:G091901:523 | $09 / 19 / 2001$ 15:40 |


| Benzo (a)anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | Sw | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benzo (b) fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Benzo(k) fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | - 2712 | <10 | jTw | SW | 8270 C |
| Benzo(a) pyrene | <10 | ug/L | 09/27/2001 | 1277 | 2712 | <10 | jrw | SW | 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| bis (2-Ethylhexyl) phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2,2'-oxybis (1-Chloropropane) | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 4-Bromophenyl phenyl ether | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jxw | SW | 8270 C |
| 4-Chloroaniline | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Chrysene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Dibenzo (a, h ) anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Dibenzofuran | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270c |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 3,3'-Dichlorobenzidine | < 50 | ug/L | 09/27/2001. | 1277 | 2712 | $<50$ | jrw | SW | 8270 C |
| Diethyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Dimethyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2,4-Dinitrotoluene | $<10$ | ug/t | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Di-n-octylphthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| Fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman<br>HULL \& ASSOC. (Dublin)<br>6130 Wilcox Rd.<br>Dublin, OH 43016<br>Job Number: 01.17471<br>Client Project ID: South Bend Indiana SBI002

10/12/2001

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |
| Analyzed | Number | Number | Limit | Initials Method Reference |  |


| SAMPLE NO. $\quad$ SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 708706 | SBIO02:HMW9I:GO91901:523 |

DATE/TIME TAKEN 09/19/2001 15:40

| Fluorene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hexachlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/27/2001 | 1277 | 2712 | $<20$ | jrw | SW | 8270C |
| Hexachloroethane | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Indeno (1,2,3-cd) pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Isophorone | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Naphthalene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Nitrobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Phenanthrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 89 | 8 | 09/27/2001 | 1277 | 2712 |  | jrw | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 79 | \% | 09/27/2001 | 1277 | 2712 |  | jrw | SW | 8270C |
| Surrogate: dl4-Terphenyl | 55 | $\%$ | 09/27/2001 | 1277 | 2712 |  | jrw | SW | 8270C |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/27/2001 | 1277 | 2712 | <50 | jrw | SW | 8270C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 2-Chlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |
| 2,4-Dichlorophenol | <10 | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| 2-Methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270C |
| meta \& para-Methylphenol | <10 | ug/L | 09/27/2001 | 1277 | 2712 | $<10$ | jrw | SW | 8270 C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 10/12/2001
6130 Wilcox Rd.
Dublin, OH 43016

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units Analyzed | Batch Batch Reporting Analyst | Number Number Limit | Initials Method Reference |  |  |

## SAMPLE NO. SAMPLE DESCRIPTION

 708706SBI002:HMW9I:G091901:523

DATE/TIME TAKEN 09/19/2001 15:40
C-Nitrophenol
Pentachlorophenol
Fhenol
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
Surrogate: d6-Phenol
Surrogate: 2-Fluorophenol
Surrogate: Tribromophenol
TPH - GRO (Aqueous)

| $<10$ | $u g / L$ | $09 / 27 / 2001$ | 1277 | 2712 | $<10$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $<10$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 27 / 2001$ | 1277 | 2712 | $<10$ |
| $<10$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 27 / 2001$ | 1277 | 2712 | $<10$ |
| $<10$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 27 / 2001$ | 1277 | 2712 | $<10$ |
| $<10$ | $\mathrm{ug} / \mathrm{L}$ | $09 / 27 / 2001$ | 1277 | 2712 | $<10$ |
| 46 | $\%$ | $09 / 27 / 2001$ | 1277 | 2712 |  |
| 35 | note | $\%$ | $09 / 27 / 2001$ | 1277 | 2712 |
| 18 | $\mathrm{mg} / \mathrm{L}$ | $09 / 27 / 2001$ | 1277 | 2712 |  |
| $<1$ |  | $10 / 03 / 2001$ |  | 88 | $<1$ |

SAMPLE NO
708707
SAMPLE DESCRIPTION
SBI002:HMW9S:G091901:523
DATE/TIME TAKEN 09/19/2001 15:30


## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch Batch | Reporting Analyst |  |  |
| Analy | Number | Number | Limit | Initials Method Reference |  |

SAMPLE DESCRIPTION
SBI002:HMW9S:G091901:523

DATE/TIME TAKEN 09/19/2001 15:30

| Bromochloromethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | ding | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bromodichloromethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Bromoform | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dimg | SW | 8260B |
| Bromobenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 82608 |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 | 3605 | $<12.5$ | dmg | SW | 8260B |
| Carbon disulfide | <1.0 | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 82608 |
| Carbon tetrachloride | 1.3 | ug/L | 09/26/2001 | 3605 | $<1.0$ | ding | SW | 82608 |
| Chlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260b |
| Chloroethane | <5.0 | ug/L | 09/26/2001 | 3605 | < 5.0 | dmg | SW | 8260B |
| 2-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3605 | <1.0 | dmg | SW | 8260B |
| 4-Chlorotoluene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260 B |
| Chloroform | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | ding | SW | 82608 |
| Chloromethane | $<5.0$ | ug/L | 09/26/2001 | 3605 | $<5.0$ | dmg | SW | 82608 |
| Dibromochloromethane | <1.0 | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Dibromomethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dibromo-3-chloropropane | $<5.0$ | ug/L | 09/26/2001 | 3605 | <5.0 | dimg | SW | 8260B |
| 1,2-Dichlorobenzene | <1.0 | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 82608 |
| 1,3-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dimg | SW | 8260B |
| 1,4-Dichlorobenzene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dimg | SW | 8260 B |
| 1,1-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |
| 1,2-Dichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260 B |
| 1,1-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 82608 |
| cis-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | ding | SW | 82608 |
| trans-1,2-Dichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dimg | Sw | 8260B |
| 1,2-Dichloropropane | $<1.0$ | ug/L | 09/26/2001 | 3605 | $<1.0$ | dmg | SW | 8260B |

## TestAmerica，Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULI \＆ASSOC．（Dublin）
6130 Wilcox Rd． Dublin，OH 43016

Job Number：01．17471
Client Project ID：South Bend Indiana SBI002

|  |  | Prep | Run |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Result Flag Units | Date | Batch | Batch | Reporting Analyst |  |

SAMPLE NO．SAMPLE DESCRIPTION 708707
SBI002: HMW9S:G091901:523

DATE／TIME TAKEN 09／19／2001 15：30

| ，3－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260日 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| 1．1－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3605 | ＜1．0 | dmg | sW 8260B |
| cis－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| trans－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| Ethylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260b |
| Hexachlorobutadiene | $<5.0$ | ug／L | 09／26／2001 | 3605 | $<5.0$ | dmg | SW 8260B |
| n －Hexane | $<5.0$ | ug／L | 09／26／2001 | 3605 | ＜5．0 | dmg | SW 8260B |
| 2－Hexanone | $<12.5$ | ug／L | 09／26／2001 | 3605 | $<12.5$ | dmg | SW 8260B |
| Ysopropylbenzene（Cumene） | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dimg | SW 8260B |
| p －Isopropyltoluene | $<1.0$ | $\mathrm{ug} / \mathrm{L}$ | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260日 |
| Bromomethane | $<5.0$ | ug／L | 09／26／2001 | 3605 | $<5.0$ | dmg | SW 8260B |
| Methylene Chloride | $<5.0$ | ug／L | 09／26／2001 | 3605 | ＜ 5.0 | dmg | SW 8260B |
| Methyl t－butyl ether（MTBE） | $<5.0$ | ug／L | 09／26／2001 | 3605 | $<5.0$ | dmg | SW 8260B |
| 4－Methyl－2－pentanone（MIBK） | $<12.5$ | ug／L | 09／26／2001 | 3605 | $<12.5$ | dmg | SW 8260日 |
| $n$－Propylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| Styrene | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| Naphthalene | ＜5．0 | ug／L | 09／26／2001 | 3605 | ＜ 5.0 | dmg | SW 8260 B |
| 1，1，1，2－Tetrachloroethane | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| 1，1，2，2－Tetrachloroethane | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| Tetrachloroethene | 749 | ug／L | 09／26／2001 | 3608 | $<10$ | dmg | SW 8260B |
| Toluene | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| 1，2，4－Trichlorobenzene | $<5.0$ | ug／L | 09／26／2001 | 3605 | $<5.0$ | dmg | SW 8260］ |
| 1，1，1－Trichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dng | SW 8260B |
| 1，1，2－Trichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3605 | $<1.0$ | dmg | SW 8260B |
| Trichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3605 | ＜1．0 | drng | SW 8260B |

## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman
HULL \&'ASSOC. (Dublin)
6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17471
Client Project ID: South Bend Indiana SBIOO2


| SAMPLE NO. $\quad$ SAMPLE DESCRIPTION |  |
| :--- | :--- |
| 708707 | SBIO02:HMW9S:G091901:523 |

DATE/TIME TAKEN 09/19/2001 15:30

| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 82608 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2,3-Trichloropropane | <5.0 | ug/L | 09/26/2001 |  | 3605 | $<5.0$ | dmg | SW | 8260B |
| 1,2,4-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | <1.0 | dmg | SW | 8260B |
| 1,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 8260] |
| Vinyl Acetate | <5.0 | ug/L | 09/26/2001 |  | 3605 | <5.0 | dimg | SW | 82608 |
| Vinyl Chloride | <1.0 | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dimg | SW | 8260B |
| Xylenes | <1.0 | ug/L | 09/26/2001 |  | 3605 | $<1.0$ | dmg | SW | 8260B |
| d4-1,2-Dichloroethane (surr) | 106 | 8 | 09/26/2001 |  | 3605 |  | dmg | SW | 8260B |
| Dibromofluoromethane (surr) | 103 | $\%$ | 09/25/2001 |  | 3605 |  | dmg | SW | 8260B |
| d8-Toluene (surr) | 98 | 8 | 09/26/2001 |  | 3605 |  | ding | SW | 8260B |
| Bromofluorobenzene (surr) | 101 | \% | 09/26/2001 |  | 3605 |  | dmg | SW | 8260B |
| BASE NEUTRAL COMP. (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Acenaphthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Acenaphthylene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Anthracene | $\leqslant 10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | Sw | 8270 C |
| Benzo (a) anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | Sw | 8270C |
| Benzo(b) fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Benzo (k) fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270C |
| Benzo (a) pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Benzyl alcohol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Benzyl butyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| bis (2-Chloroethyl) ether | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270 C |
| bis (2-Chloroethoxy) methane | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270 C |
| bis (2-Ethylhexyl)phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2,2'-oxybis(1-Chloropropane) | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |

## TestAmerica, Incorporated

## ANALYTICAL REPORT

Kevin Wildman

HULL \& ASSOC. (Dublin)<br>10/12/2001<br>6130 Wilcox Rd.

Dublin, OH 43016

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 708707

SAMPLE DESCRIPTION
SBI002:HMW9S:G091901:523
DATE/TIME TAKEN 09/19/2001 15:30

| -Bromophenyl phenyl ether | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Chloroaniline | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2-Chloronaphthalene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Chrysene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Dibenzo ( $\mathrm{a}, \mathrm{h}$ ) anthracene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | <10 | dmg | SW | 8270 C |
| Dibenzofuran | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 1,2-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 1,3-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| 1,4-Dichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 3.3'-Dichlorobenzidine | $<50$ | ug/L | 09/27/2001 | 1277 | 2705 | $<50$ | dmg | SW | 8270 C |
| Diethyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | SW | 82700 |
| Dimethyl phthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2,4-Dinitrotoluene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2,6-Dinitrotoluene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | $8270{ }^{\circ}$ |
| Di-n-octylphthalate | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | <10 | dmg | SW | 8270C |
| Fluoranthene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Fluorene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | $8270{ }^{\text {c }}$ |
| Hexachlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Hexachloro-1,3-butadiene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | sw | 8270 C |
| Hexachlorocyclopentadiene | $<20$ | ug/L | 09/27/2001 | 1277 | 2705 | <20 | dmg | SW | $8270{ }^{\circ}$ |
| Hexachloroethane | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| Indeno (1,2,3-cd) pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Isophorone | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Naphthalene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| Nitrobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| N-Nitrosodi-n-propylamine | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | sw | 82700 |

# TestAmerica, Incorporated 

PAGE 44 of 50

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin)
6130 Wilcox Rd.
Dublin, OH 43016

10/12/2001

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 708707

SAMPLE DESCRIPIION
SBI002: HMW9S:G091901:523

DATE/TIME TAKEN 09/19/2001 15:30

| Phenanthrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | <10 | dmg | SW | 82700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pyrene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 1,2,4-Trichlorobenzene | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dimg | SW | 8270C |
| Surrogate: d5-Nitrobenzene | 82 | \% | 09/27/2001 | 1277 | 2705 |  | dmg | SW | 8270C |
| Surrogate: 2-Fluorobiphenyl | 86 | 8 | 09/27/2001 | 1277 | 2705 |  | dmg | SW | 8270 C |
| Surrogate: d14-Terphenyl | 66 | 8 | 09/27/2001 | 1277 | 2705 |  | ding | SW | 82700 |
| ACID COMPOUNDS (AQ) 8270 |  |  |  |  |  |  |  |  |  |
| Benzoic acid | $<50$ | ug/L | 09/27/2001 | 1277 | 2705 | $<50$ | dmg | SW | 8270 C |
| 4-Chloro-3-methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 82700 |
| 2-Chlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2,4-Dichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2,4-Dimethylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270 C |
| 2-Methyl-4,6-dinitrophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 82700 |
| 2-Methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270c |
| meta \& para-Methylphenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2-Nitrophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | ding | SW | 8270 C |
| Pentachlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| Phenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270 C |
| 2,4,5-Trichlorophenol | $<10$ | ug/L | 09/27/2001. | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| 2,4,6-Trichlorophenol | $<10$ | ug/L | 09/27/2001 | 1277 | 2705 | $<10$ | dmg | SW | 8270C |
| Surrogate: d6-Phenol | 62 | 8 | 09/27/2001 | 1277 | 2705 |  | dmg | Sw | 8270 C |
| Surrogate: 2-Fluorophenol | 70 | \% | 09/27/2001 | 1277 | 2705 |  | dmg | SW | 8270 C |
| Surrogate: Tribromophenol | 55 | 8 | 09/27/2001 | 1277 | 2705 |  | dmg | SW | 8270 C |
| TPH - GRO (Aqueous) | $<1$ | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 |  | 88 | $<1$ | meb | SW | 8015M |

# TestAmerica, Incorporated 

## ANALYTICAL REPORT

Kevin Wildman
HULL \& ASSOC. (Dublin) 6130 Wilcox Rd. Dublin, OH 43016

10/12/2001

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002


## SAMPLE NO. 708708 <br> SAMPLE DESCRIPTION <br> SBIOO2:HMW9D: G091901:523

| [CPMS TOTAL METALS | Complete |  | 10/04/2001 |  | 2586 | Complete | ekh |  | 6020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic, ICPMS | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3715 | $<0.0050$ | kmb | SW | 6020 |
| Barium, ICPMS | 0.0823 | $\mathrm{mg} / \mathrm{L}$ | 10/04/2001 | 1851 | 3927 | $<0.0050$ | ekh | SW | 6020 |
| Cadmium, ICPMS | 0.0016 | mg/L | 10/03/2001 | 1851 | 3594 | $<0.0010$ | kmb | SW | 6020 |
| Chromium, ICPMS (0.005) | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3992 | $<0.0050$ | kmb | Sw | 6020 |
| Lead, ICPMS | 0.0142 | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3672 | $<0.0010$ | knb | Sw | 6020 |
| Mercury, CVAA | $<0.0002$ | $\mathrm{mg} / \mathrm{L}$ | 09/26/2001 | 1417 | 1363 | $<0.0002$ | epk | SW | 7470A |
| Selenium, GFAA | $<0.0050$ | $\mathrm{mg} / \mathrm{L}$ | 09/28/2001 | 755 | 579 | $<0.0050$ | Inh | SW | 7740 |
| Silver, ICPMS | $<0.0005$ | $\mathrm{mg} / \mathrm{L}$ | 10/03/2001 | 1851 | 3929 | $<0.0005$ | kmb | sw | 6020 |
| Metals Digestion, ICPMS | Complete |  | 09/27/2001 | 1851 |  | Complete | clm | SW | 3010A |
| Metals Digestion, GFAA | Complete |  | 09/26/2001 | 755 |  | Complete | mrt | SW | 3020A |
| Manual Mercury Digestion | Complete |  | 09/25/2001 | 1417 |  | Complete | epk | Sw | 7470A |
| VOLATILE COMPOUNDS - 8260 |  |  |  |  |  |  |  |  |  |
| 8260 - SW846 (AQ) | Complete |  | 09/26/2001 |  | 3608 | Complete | dmg |  |  |
| Acetone | <20.0 | ug/L | 09/26/2001 |  | 3608 | <20.0 | dmg | SW | 82608 |
| Benzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dimg | SW | 8260 B |
| tert-Butyibenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| sec-Butylbenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | <1.0 | dmg | SW | 8260日 |
| n-Butylbenzene | $<1.0$ | $\underline{u g / L}$ | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| Bromochloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| Bromodichloromethane | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| Bromoform | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| Bromobenzene | $<1.0$ | ug/L | 09/26/2001 |  | 3608 | $<1.0$ | dmg | SW | 8260B |
| 2-Butanone (MEK) | $<12.5$ | ug/L | 09/26/2001 |  | 3608 | $<12.5$ | dmg | SW | 8260B |
| Carbon disulfide | <1.0 | ug/L | 09/26/2001 |  | 3608 | <1.0 | ding | SW | 8260 B |

# TestAmerica，Incorporated 

## ANALYTICAL REPORT

Kevin Wildman HULL \＆ASSOC．（Dublin）

10／12／2001

Job Number：01．17471
Client Project ID：South Bend Indiana SBI002

|  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

SAMPLE NO． 708708

SAMPLE DESCRIPTION
SBI 002 ：HMW9D：G091901：523

DATE／TIME TAKEN 09／19／2001 16：20

| Carbon tetrachloride | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | ding | SW 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3608 | ＜1．0 | dmg | SW 8260 B |
| Chloroethane | ＜5．0 | ug／L | 09／26／2001 | 3608 | ＜ 5.0 | dmg | SW 8260 B |
| 2－Chlorotoluene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260b |
| 4－Chlorotoluene | $<1.0$ | ug／L | 09／26／2001 | 3608 | ＜1．0 | ding | SW 8260B |
| Chloroform | $<1.0$ | ug／L | 09／25／2001 | 3608 | $<1.0$ | dmg | SW 8260 B |
| Chloromethane | $<5.0$ | ug／L | 09／26／2001 | 3608 | ＜5．0 | dmg | SW 8260B |
| Dibromochloromethane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Dibromomethane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| Dichlorodifluoromethane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 1，2－Dibromo－3－chloropropane | $<5.0$ | ug／L | 09／26／2001 | 3608 | $<5.0$ | dmg | SW 8260B |
| 1，2－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 1，3－Dichlorobenzene | ＜1．0 | ug／L | 09／26／2001 | 3608 | $<1.0$ | amg | SW 8260B |
| 1，4－Dichlorobenzene | $<1.0$ | ug／L | 09／26／2001 | 3608 | ＜1．0 | ding | SW 8260日 |
| 1，1－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260日 |
| 1，2－Dichloroethane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 1，1－Dichloroethene | ＜1．0 | ug／L | 09／26／2001 | 3608 | $<1.0$ | dimg | SW 8260b |
| Cis－1．2－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| trans－1，2－Dichloroethene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | amg | SW 8260B |
| 1，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 1，3－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260b |
| 2，2－Dichloropropane | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| 1，1－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| cis－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260B |
| trans－1，3－Dichloropropene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | ding | SW 8260B |
| Ethylbenzene | $<1.0$ | ug／L | 09／26／2001 | 3608 | $<1.0$ | dmg | SW 8260日 |

## TestAmerica, Incorporated

ANALYTICAL REPORT

Kevin Wildman

HULL \& ASSOC. (Dublin)<br>10/12/2001<br>6130 Wilcox Rd. Dublin, OH 43016

Job Number: 01.17471
Client Project ID: South Bend Indiana SBI002


SAMPLE NO. SAMPLE DESCRIPTION 708708

SBIO 02 :HMW9D:G091901:523

DATE/TIME TAKEN 09/19/2001 16:20

| nexachlorobutadiene | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n -Hexane | $<5.0$ | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | Sw | 8260 B |
| 2-Hexanone | $<1.2 .5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | ding | SW | 8260B |
| Isopropylbenzene (Cumene) | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260 B |
| p-Isopropyltoluene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260 B |
| Bromomethane | $<5.0$ | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 82608 |
| Methylene Chloride | $<5.0$ | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 8260B |
| Methyl t-butyl ether (MTHE) | $<5.0$ | ug/L | 09/26/2001 | 3608 | <5.0 | dmg | SW | 8260 B |
| 4-Methyl-2-pentanone (MIBK) | $<12.5$ | ug/L | 09/26/2001 | 3608 | $<12.5$ | dmg | SW | 8260 B |
| n-Propylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Styrene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dimg | SW | 8260B |
| Naphthalene | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 8260 B |
| 1,1,1,2-Tetrachloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260日 |
| 1,1,2,2-Tetrachloroethane | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Tetrachloroethene | 2.5 | ug/L | 09/26/2001 | 3608 | <1.0 | dimg | SW | 82608 |
| Tolvene | $<1.0$ | ug/L | 09/26/2001 | 3508 | $<1.0$ | ding | SW | 8260 B |
| 1,2,4-Trichlorobenzene | <5.0 | ug/L | 09/26/2001 | 3608 | < 5.0 | dimg | SW | 8260B |
| 1,1,1-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| 1,1,2-Trichloroethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260 B |
| Trichloroethene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260B |
| Trichlorofluoromethane | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| 1.2,3-Trichloropropane | $<5.0$ | ug/L | 09/26/2001 | 3608 | $<5.0$ | dmg | SW | 82608 |
| 1,2,4-Trimethylbenzene | <1.0 | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |
| i,3,5-Trimethylbenzene | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 8260 B |
| Vinyl Acetate | $<5.0$ | ug/L | 09/26/2001 | 3608 | < 5.0 | dmg | SW | 8260 B |
| Vinyl Chloride | $<1.0$ | ug/L | 09/26/2001 | 3608 | $<1.0$ | dmg | SW | 82608 |

## TestAmerica, Incorporated

ANALYTICAL REPORT


## QUALITY CONTROL FLAG DEFINITIONS

Job Number: 01. 17471
(*) Indicates an out-of-control QC. The analytical data was reported based on other supporting quality control information.
(Note) Indicates to review the notes and comments section of the analytical report as there is additional information concerning this analytical result.
(MS) Indicates that the Matrix Spike (MS) was out of statistical advisory limits.
(MSD) Indicates that the Matrix Spike Duplicate (MSD) was out of statistical advisory limits.
(RPD) Indicates that the Relative Percent Difference (RPD) for the MS/MSD pair was outside of statistical advisory limits.
(SS) Indicates that the MS and MSD were out of statistical advisory limits.
(SSR) Indicates that the MS, MSD and RPD were out of statistical advisory limits.
(MSR) Indicates that the MS and RPD were out of statistical advisory limits.
(MSDR) Indicates that the MSD and RPD were out of statistical advisory limits.
(DL) Indicates that the MS and MSD were diluted out and the percent recoveries of the spikes could not be calculated.
(LS) Indicates that statistical accuracy and precision data is not available for spike concentrations which are < 1/4 of the sample amount. Care should be used in interpreting this data.
(J) Indicates estimated concentration due to internal standard areas or surrogate recoveries outside of control limits. A sample matrix effect is usually indicated.
(DW) Indicates Dry Weight.
Analytical Reporting Limits
The reporting limits listed for non-aqueous samples in the analytical report section are Practical Quantitation Limits (PQLs). These PQLs are based upon a typical standard weight used for a non-aqueous sample. The reporting limit for a sample may be different from the PQL listed depending upon the actual weight of sample used, the samples moisture content and any dilutions used during the analysis.

## TestAmerica, Incorporated

PAGE 50 Of ..... 50
NOTES AND COMMENTS
TestAmerica Job Number: 1.17471
Sample Number: 708699
Analysis: 8270 BNA
Response for internal standards d12-chrysene and d12-perylene was below the recommended level.
Sample Number: 708706
Analysis: 8270 BNA
Recovery of surrogate 2,4,6-tribromophenol was below therecommended level.
CHAIN OF CUSTODY RECORD

## - Associates, Inc.

 $\begin{array}{lll}\text { Sublin, Ohio } 43016 & \text { SUITE } 300 \\ \text { Pho Avenue } & \text { Mason, Ohio 45040 } \\ \text { Phone: (614) } 385-8777 & \text { Toledo, Ohio } 43614 & \text { Phone: (513)459-9677 }\end{array}$ report to: Kevin Wiidman



## APPENDIX F

## Grain-size Distribution Curves



Project No. SBI-002 Client: SOUTH BEND
Project: AREA A

O Location: 01-406 HMW-23S DEPTH: 14.0-15.0'

Remarks:
OTESTED BY: MG CHECKED BY: JL
MOISTURE CONTENT: 4.7\%

USCS Particle Size Distribution Report
HULL \& ASSOCIATES, INC.








Project No. SBI-002 Client: SOUTH BEND
Project: AREA A

Location: 01-409 HMW-12D DEPTH: 12.0-14.0'

Remarks:
o TESTED BY: MG CHECKED BY: JL
MOISTURE CONTENT: 4.2\%

USCS Particle Size Distribution Report
HULL \& ASSOCIATES, INC.



## USCS Particle Size Distribution Report



Project No. SBI-002
Client: SOUTH BEND
Project: AREA A
||O Location: 01-396 HMW-2ID DEPTH: 4.0-6.0'

Remarks:
OTESTED BY: MG CHECKED BY: JL
MOISTURE CONTENT: 18.5\%

## APPENDIX G

Institutional Controls Guidance from IDEM's RISC Resource Guide

## A5.0 Introduction

## Overview of Appendix 5

\& Introduction
$\checkmark$ Environmental Notice Criterià
$\checkmark$ Minimum
Environmental Notice Requirements and Language
$\checkmark$ Environmental Notice Alternative for Ground Water Contamination
$\checkmark$ Environmental Notice Generic Form

Institutional controls are non-engineered, administratively and legally enforceable measures that limit human exposure to environmental chemicals of concern (COCs). Institutional controls can serve several purposes, inclúding:

- Notifying current and future owners about the environmental conditions of the property
- Limiting use of the land to prevent activities that could result in unacceptable exposures to receptors

Institutional controls are used when a cleanup leaves COC concentrations that exceed residential closure levels, and exposure to the remaining contamination must be prevented. Whenever institutional controls are used, a control requirement (or environmental notice) is recorded where a reasonably diligent inquiry into a property should uncover the existence of such a notice. Examples of institutional controls are land-use restrictions, deed restrictions, deed notices, and declarations of environmental restrictions.

A common method of recording an institutional control is the deed notice, or, for Risk Integrated System of Closure (RISC) purposes, an environmental notice. Under certain circumstances, a local ordinance can substitute for an environmental notice. The primary criteria for an institutional control are that it (1) provide legal notice to current and potential future property owners of the nature and extent of the restrictions, (2) be permanent, and (3) be legally valid.

An institutional control is required for the following situations:

- A commercial or industrial land-use designation
- An activity restriction used as part of a remedy
- An engineering control used as part of a remedy

The environmental notice notifies future owners or lessees of contamination present at a site and ensures that the restrictions and controls included in the approved remedy are legally recorded. A generic environmental notice form is provided at the end of this appendix.

The Indiana Department of Environmental Management (IDEM) does not have the statutory authority to enforce an environmental notice. However, if a current or subsequent property owner subject to an environmental notice creates or exposes a pathway protected by the environmental notice, IDEM has the authority to bring an enforcement action against that owner for causing a release into the environment.

An environméntal notice can also be used when contamination has migrated to an off-site property if the off-site property owner agrees to accept the restrictions incorporated in the environmental notice. The environmental notice can be recorded using the generic form at the end of this appendix or using another customized format. Use of another format is acceptable as long as the information provided meets the criteria discussed below.

## A5.1 Environmental Notice Criteria

Environmental notices must meet the criteria listed below.

1. Environmental notices must be recorded on the deed of the affected property by filing the environmental notice with the county recorder in the county in which the property is located.
2. Environmental notices must run with the land, meaning that conditions still apply after property ownership has transferred.
3. Environmental notices must identify the COCs where concentrations exceed closure levels, the media affected by the COCs, and the conditions or restrictions imposed on the property.
4. Environmental notices must state that performing restricted activities could result in unsafe exposure. Chapter 6 of the Technical Guide discuss closure requirements.
5. Environmental notices must be legally valid documents. They can be recorded on a form provided by IDEM or in an appropriate document drafted by the user and approved by IDEM. If the user drafts the environmental notice, it must meet the minimum requirements specified either in the rule (if one is published) or in the "Minimum Environmental Notice Requirements and Language" specified below.
6. Environmental notices must satisfy IDEM's concerns regarding permanence, legal validity, and informed consent.
7. Environmental notices must describe terms and procedures for modifying or removing the restrictions. This must include, at a minimum, a statement that the site must be reassessed and IDEM's approval must be granted before the restriction identified in the environmental notice can be modified. Such provision for compliance shall be evidenced by providing a true copy of the recorded environmental notice to IDEM.

## A5.2 Minimum Environmental Notice Requirements and Language

An environmental notice must satisfy the minimum requirements below.

1. A legal description of the real estate must be provided accompanied by scaled maps showing the following:

- Horizontal extent of contamination exceeding applicable remediation objectives
- Legal boundaries of all properties where contamination exceeds applicable remediation objectives and that are subject to the restrictive covenant

2. The location where the public may review the approved remedial plan must be specified.
3. The environmental notice should list COCs in the remedial plan that will be left on the property at concentrations exceeding residential closure levels and the media (surface soil, subsurface soil, or ground water) impacted by the COCs.
4. A description must be provided of any limitations on the landuse designation (for example, commercial/industrial or residential).
5. A clear description in simple terms must be provided of each activity restriction within the proximity of the contaminated portion of the property. This description must identify any limitations on activities including, but not limited to, the following:

- Ground water usage
- Soil exposure through gardening
- Digging into soil

6. A description must be provided of all actions necessary to maintain any engineered control measures established under the corrective action plan that render any potential exposure pathway incomplete. The description should include a demonstration of financial assurance mechanisms (if required under Resource Conservation and Recovery Act [RCRA]) for maintenance of the selected remedy and reporting requiréments.
7. The environmental notice should include a statement that the environmental notice runs with the land.
8. The environmental notice should include a statement that any amendment, modification, or termination of the restrictions can be made only with IDEM's approval.

## A5.3 Environmental Notice Alternative for Ground Water Contamination

An environmental notice to prevent exposure to contaminated ground water may not be necessary if an ordinance adopted by a unit of local government effectively prohibits exposure to ground water. An example of such an ordinance would require all residents to utilize the municipal water supply and would prohibit the installation of new drinking water supply wells in the county or municipality where the contaminated area is located.

The information below is required to support a request to replace the requirement for an environmental notice for ground water contamination:

1. The request must include the name and address of the local unit of government and a copy of the most current version of the ordinance restricting ground water use. An authorized official of the local unit of government must certify that the ordinance is complete, accurate, and in effect. The ordinance must demonstrate that exposure to ground water is prohibited.
2. A scaled map should delineate the areal extent of ground water (either measured or modeled) containing contamination that exceeds applicable closure levels. Information should be provided regarding COC concentrations in ground water that exceed applicable closure levels.
3. A scaled map should delineate the boundaries of all properties where COC concentrations in ground water exceed applicable closure levels.
4. The current owners and leaseholders of each property should be identified on the map that shows the ground water contamination.

The information above should also be provided in a notification to the local unit of government with authority over the ordinance and to each property owner and leaseholder identified in the scaled map. The notification must provide the following information:

- The site name, address, and IDEM site number
- Notification that IDEM is reviewing a request to use the ordinance restricting ground water use to substitute for an environmental notice
- A statement about the nature of the release and response actions taken
- A statement about where more information can be obtained about the ordinance

Copies of the notification submitted to the local unit of government, property owners, and leaseholders must also be provided to IDEM before the ordinance can be considered a substitute for an environmental notice.

Any approval by IDEM to replace the environmental notice with an ordinance will not become effective until it is recorded in the Office of the Recorder or Registrar of Titles of the county where the site is located. The person receiving the approval must obtain and submit to IDEM information demonstrating that the replacement was recorded.

The current owner, leaseholder, or successor of a site who receives approval to use an ordinance to replace the environmental notice must conduct the following activities:

1. Monitor activities of the unit of local government related to variance requests or changes in the ordinance regulating ground water use
2. Notify IDEM of any approved variance requests for ordinance changes within 30 days after the date such action was approved
3. Establish adequate controls when any approved variance requests or ordinance changes result in the diminishment or elimination of effective prohibition of exposure to ground water previously provided by the ordinance

If any of the following should occur, closure may be voided:

1. Repeal or other modification of the ordinance by the local unit of government
2. Approval of a site-specific request, such as a variance, that allows exposure to ground water
3. Violation of the terms of a recorded institutional control

## Environmental Notice Generic Form

THIS COVENANT engineered this $\qquad$ day of $\qquad$ 20 $\qquad$ , made by [name and address of current property owners] (together with his/her/its/their successors and assigns, collectively "Owner").

WHEREAS: $\qquad$ owns real estate in the County of $\qquad$ Indiana, which is more particularly described in the attached Exhibit "A" and made a part hereof ("real estate");

WHEREAS: A corrective action plan was prepared and implemented in accordance with Indiana law as a result of a release of regulated or hazardous substances upon said real estate. The corrective action plan, as approved by the Indiana Department of Environmental Management ("the Department"), provides that the regulated or hazardous substances shall remain on or beneath the surface of the real estate and provides for institutional controls that shall ensure the protection of public health, safety, or welfare, and the environment. The corrective plan, a survey of the areas on said real estate affected, and a list of the chemicals of concern may be examined at the offices of the Department.
(If the restriction is placed on a third party's property, the above paragraph should be modified to read as follows:

WHEREAS: A corrective action plan was prepared and implemented in accordance with Indiana Law as a result of a release of regulated or hazardous substances upon the property described in the corrective action plan ("property"). The corrective action plan, as approved by the Indiana Department of Environmental Management ("the Department"), provides that the regulated or hazardous substances shall remain on or beneath the surface of the property and provides the Environmental Notice that shall ensure the protection of public health, safety, or welfare, and the environment. The corrective action plan, a survey of the areas of said property affected, and a list of the chemicals of concern left on the property may be examined at the offices of the Department.)
(NOTE: The words "corrective action plan" can be deleted and replaced with the correct title of any plan that contains a Risk Integrated System of Closure (RISC) approach (for example, "closure plan").

NOW THEREFORE, $\qquad$ (hereinafter referred to as "Owner"), hereby, in consideration for the promises herein contained and other good and valuable consideration, imposes restrictions on the Real Estate and covenants and agrees that:

1. The Owner shall prevent a conveyance of title, an easement, or any other interest in the real estate from being consummated without adequate and complete provision for compliance with the corrective action plan and prevention of exposure to regulated or hazardous substances as described in item 3 below.
2. The Owner shall grant to the Department and its designated representatives the right to enter the real estate at reasonable times for the purpose of determining and monitoring
compliance with the corrective action plan, including, but not limited to, the right to take samples, inspect the operation of the corrective action measures, and inspect records.
3. Specific restrictions that may apply shall be listed here (for example, no off-site placement of excavated subsurface soil, no wells installed, maintenance of asphalt cover, description of financial assurance mechanism, etc.)
4. The restrictions and other requirements described in this Environmental Notice shall run with the land and be binding on the owners successors, assignees, and lessees or their authorized agents, employees, or persons acting under their direction or control.
5. The restrictions shall apply until the Department determines that regulated or hazardous substances no longer present an unacceptable risk to the public health, safety, or welfare, or to the environment. This Environmental Notice shall not be amended, modified, or terminated except by written instrument executed between the Owner and the Department ; at the time of the proposed amendment, modification, or termination. Within five (5) days of executing an amendment, modification, or termination of the Environmental Notice, the Owner shall record such amendment, modification, or termination with
$\qquad$ County Registrar of Deeds and within five (5) days thereafter, the Owner shall provide a true copy of the recorded amendment, modification, or termination to the Department.
6. If any provision of the Environmental Notice is also the subject of any laws or regulations established by any federal, state, or local government, the stricter of the two standards shall prevail.
7. In the event that the Risk Integrated System of Closure (RISC) is adopted by rule in Indiana, this Environmental Notice shall be modified, if necessary, to conform with the Indiana RISC regulations for the scope or specificity of the Environmental Notice. In no event shall this Environmental Notice be rendered null and void if Indiana's RISC guidelines for an Environmental Notice differ in form or content.
8. The undersigned persons executing the Environmental Notice on behalf of the Owner represent and certify that they are duly authorized and have been fully empowered to execute and deliver this Environmental Notice.

I hereby attest to the accuracy of the statements in this document and all attachments.
IN WITNESS WHEREOF, the said Owner of the real estate described above has caused the Environmental Notice to be executed on this $\qquad$ day of $\qquad$ 20 $\qquad$ _.
(If Owner is an individual:)

## STATE OF INDIANA

## COUNTY OF (county where document is executed) \}SS:

BEFORE ME, the undersigned, a Notary Public in an for said County and State, personally appeared $\qquad$ and $\qquad$ , the $\qquad$ and
$\qquad$ respectively, of $\qquad$ the Corporation that executed the foregoing instrument, who acknowledged and affirmed that they did sign said instrument as such officers, respectively, for and on behalf of said Corporation and by authority granted in its Articles of Incorporation and by it governing body, that the same is their free act and deed as said officers, and the free and corporate act and deed of said Corporation.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my official seal this day of $\qquad$ , 20 $\qquad$ _.

My county of residence is:
$\qquad$ County, Indiana

> Signature of Notary Public

My commission expires:
Printed Name of Notary
(If Owner is a partnership:)

## STATE OF INDIANA

COUNTY OF (county where document is executed) SS:

BEFORE ME, the undersigned, a Notary Public in and for said County and State, personally appeared (name of person executing document on behalf of partnership), who acknowledged and affirmed that he/she is a general partner of (name of partnership). The partnership named in this document, that he/she did sign said instrument in his/her capacity as a general partner of (name of partnership), and that the same is the free act and deed as said persons and of said partnership.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my official seal this
$\qquad$ day of $\qquad$ 20 $\qquad$ .

My county of residence is:
$\qquad$
Signature of Notary Public
My commission expires:
Printed Name of Notary
The owner of the property should use whatever notary jurat is applicable to the situation.
(If Owner is a corporation:)
STATE OF INDIANA
COUNTY OF (county where document is executed) SS:

BEFORE ME, the undersigned, a Notary Public in and for said County and State, personally appeared (Owner's name), who acknowledged and affirmed the execution of the foregoing instrument.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my official seal this
$\qquad$ day of $\qquad$ 20 $\qquad$
My county of residence is: i
$\qquad$
County, Indiana

> Signature of Notary Public

My commission expires:

> Printed Name of Notary


[^0]:    ${ }^{1}$ Note that the LUST program developed under RISC does not include a default closure level for TPH.
    ${ }^{2}$ These concentrations also exceed RISC Commercial /Industrial default closure levels for soil.
    ${ }^{3}$ See footnote \#1.

[^1]:    ${ }^{4}$ These concentrations also exceed RISC Commercial/Industrial default closure levels for groundwater.

[^2]:    ${ }^{5}$ Soil concentrations were compared with single-chemical default closure levels derived for direct contact, construction worker and migration to groundwater (leaching) pathway values. For pH -dependent COCs, the soil pH was assumed to be within default ranges. Concentrations were also compared with soil saturation and soil attenuation capacity values, where applicable. Cumulative values for metals and organics fell below soil attenuation capacity ceilings (i.e., $10,000 \mathrm{mg} / \mathrm{kg}$ for metals, $6,000 \mathrm{mg} / \mathrm{kg}$ for organics in surface ( $0.0-0.5 \mathrm{ft}$. bgs) soils and $2,000 \mathrm{mg} / \mathrm{kg}$ in subsurface ( $>0.5 \mathrm{ft}$. bgs) soils).
    ${ }^{6}$ Samples in the above borings were collected from the upper two ft. bgs, consistent with original VRP protocol for surface sample analyses. While several of these samples include soils below 0.5 ft . bgs (i.e., the depth above which materials are considered surface soil pursuant to RISC guidance), Hull has conservatively compared COC concentrations against default direct contact closure levels for surface soils.

[^3]:    ${ }^{8}$ Municipal water supply wells are sufficiently removed from the Site such that they are unlikely to be impacted by COCs originating at the Site.

[^4]:    ${ }^{9}$ Although cleanups may be led by the U.S. EPA, detailed discussions on the options are outside the scope of this report.

[^5]:    ${ }^{10}$ A Memorandum of Agreement between IDEM and the U.S. EPA is in place that extends a release of liability to actions by the U.S. EPA when a Covenant not to Sue is obtained.

[^6]:    Table Continues

[^7]:    IMHOFF CONE TEST
    Start Time:______
    a. Top of casing.
    b. NAPL - nonaqueous phase liquid. c. Gallons per minute.

[^8]:    IMHOFF CONE TEST

[^9]:    IMHOFF CONE TEST Start Time:
    a. Top of casing.
    . NAPL - nonaqueous phase liquid. c. Gallons per minute.

[^10]:    IMHOFF CONE TEST

[^11]:    IMHOFF CONE TEST
    a. Top of casing.

[^12]:    IMHOFF CONE TEST
    Start Time:
    a. Top of casing.
    b. NAPI - nonaqueous phase liquid.
    c. Gailons per minute.

[^13]:    IMHOFF CONE TEST
    Start Time:
    a. Top of casing.

[^14]:    IMHOFF CONE TEST
    Start Time:
    b. NAPL - nonaqueous phase liquid.
    c. Gallons per minute.

[^15]:    IMHOFF CONE TEST
    Start Time:

[^16]:    IMHOFF CONE TEST

[^17]:    IMHOFF CONE TEST

[^18]:    Volume Water:_______
    

[^19]:    IMHOFF CONE TEST

[^20]:    IMHOFF CONE TEST

[^21]:    IMHOFF CONE TEST Start Time:

[^22]:    IMHOFE CONE TEST
    Start Time:

[^23]:    IMHOFF CONE TEST
    Start Ime
    Lart
    a. Top of casing.
    b. NAPL - nonaqueous phase liquid.
    c. Gallons per minute.

[^24]:    Start Time:
    a. Top of casing.
    b. NAPL - nonaqueous phase liquid.
    c. Gallons per minute.

[^25]:    IMHOFF CONE TEST
    Start Time:
    a. Top of casing.
    b. NAPL - nonaqueous phase liquid.

[^26]:    IMHOFF CONE TEST
    Start Time:
    a. Top of casing.
    b. NAPL - nonaqueous phase liquid. c. Gallons per minute.

[^27]:    IMHOFF CONE TEST
    Start Time:

[^28]:    IMHOFF CONE TEST

[^29]:    IMHOFF CONE TEST
    Start Time:
    a. Top of casing.
    b. NAPL - nonaqueous phase liquid. c. Gallons per minute.

[^30]:    IMHOFF CONE TEST Start Time:______
    a. Top of casing
    b. NAPL - nonaqueous phase liquid.
    c. Gallons per minute.

[^31]:    IMHOFF CONE TEST
    Start Time:
    a. Top of casing.
    b. NAPL - nonaqueous phase liquid.
    c. Gallons per minute.

[^32]:    IMHOFF CONE TEST

[^33]:    IMHOFF CONE TEST
    Start Time:

[^34]:    IMHOFF CONE TEST
    Start Time:________
    a. Top of casing
    b. NAPL - nonaqueous phase liquid.
    c. Gallons per minute.

[^35]:    IMHOFF CONE TEST
    Start Time:______

[^36]:    IMHOFF CONE TEST
    Start Time:___
    a. Top of casing.
    b. NAPL - nonsqueous phase liquid.
    c. Gallons per minute. c. Gallons per minute.

[^37]:    IMHOFF CONE TEST
    Start Time:______

[^38]:    IMHOFF CONE TEST
    Start Time:

[^39]:    One Well Volume Equals
    6.69

    Gallons

[^40]:    One Well Volume Equals
    .83 Gallons

[^41]:    VOLATILE COMPOUNDS-8260 NON-Aq

[^42]:    3601 South Dixie/Dayton, OH 45439/937-294-6856/FAX:937-294-7816

[^43]:    3601 South Dixie/Dayton, OH 45439/937-294-6856/FAX:937-294-7816

[^44]:    3601 South Dixie/Dayton, OH 45439/937-294-6856/FAX:937-294-7816

[^45]:    3601 South Dixie/Dayton, OH 45439/937-294-6856/FAX:937-294-7816

[^46]:    VOLATILE COMPOUNDS - 8260 (AQ)

[^47]:    3601 South Dixie/Dayton, OH 45439/937-294-6856/FAX:937-294-7816

[^48]:    SAMPLE NO． 708705

