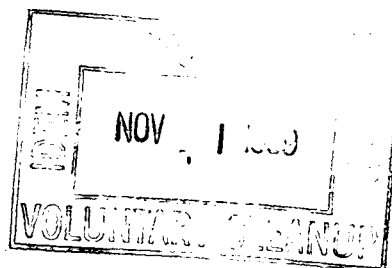


**TIER II CRITERIA COMPARISON
VOLUNTARY SITE INVESTIGATION
ALLIEDSIGNAL INDUSTRIAL COMPLEX
SOUTH BEND, INDIANA**



PREPARED FOR:



PROJECT NUMBER 9822-13

OCTOBER 1999

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VRP#: <u>6980601</u>	File Code: <u>300</u>
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TIER II CRITERIA COMPARISON
VOLUNTARY SITE INVESTIGATION
ALLIEDSIGNAL INDUSTRIAL COMPLEX
SOUTH BEND, INDIANA

IDEM SITE NO. 6980601

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PROJECT NUMBER 9822-13

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EXECUTIVE SUMMARY

In 1995, AlliedSignal, Inc. (AlliedSignal) began a comprehensive site-wide Voluntary Site Investigation (VSI) to characterize the nature and extent of soil and groundwater impacts resulting from historical manufacturing operations. The VSI incorporated historical environmental investigations and remedial actions that had conducted proactively and voluntarily since 1978. In January of 1999, after completing the VSI, AlliedSignal and the Indiana Department of Environmental Management (IDEM) entered into a Voluntary Agreement under Indiana's Voluntary Remediation Program (VRP). The agreement formalized the regulatory framework under which future environmental actions at the site would be addressed. As one of the first step in the VRP process, this report presents a comparison of soil and groundwater analytical data collected during the VSI to the IDEM Tier II Cleanup Goals published for the VRP.

Based upon the comparison to the Tier II Cleanup Goals, the following Areas of Concern (AOCs) had constituents *in unsaturated soil* at concentrations that exceed the Tier II Cleanup Goals:

- **Area 3/11 - Former Disposal Area/Carbon Brake Expansion** (VOCs, PCBs and TPH in soil exceed the cleanup goals)
- **Area 4/16 - Former I-Beam Building** (TPH in soil exceeds the cleanup goal)
- **Area 5, Plant 6/16 - Former USTs** (VOCs and TPH in soil exceed the cleanup goal)
- **Area 8 - Former I-Beam Building Stormwater Drainage System** (TPH in soil adjacent to one dry well exceeds the cleanup goal)
- **Area 13, Plant 10 - Former Electroplating Operations** (lead in soil exceeds the cleanup goal)
- **Area 14, Plant 1 - Former Painting and Degreasing Operations** (TCE in soil at one area, and lead and cadmium in soils at a second area exceed the cleanup goals)
- **Area 15 - Former Metal Stamping Operations** (TCE in one soil sample and TPH in one soil sample exceed the cleanup goals)

EXECUTIVE SUMMARY

For on-site groundwater in the shallow flow system, VOCs exceed the Tier II Cleanup Goals, primarily at sampling locations near soil source areas. Also, cyanide in one Geoprobe groundwater sample collected at the Plant 10 Electroplating Area exceeds the Tier II Cleanup Goal. Metals and phenols are below the Tier II Cleanup Goal. For on-site groundwater in the deep flow system, VOCs are below the Tier II Cleanup Goals, excluding vinyl chloride at well D4. Phenols, metals, and cyanide are below the Tier II Cleanup Goals.

For off-site groundwater in the shallow flow system, TCE in groundwater at wells S21, S23, S24, and S27 exceed the Tier II Cleanup Goals, as well as cis-1,2-DCE at S24 and 1,2-DCA at S9. Phenols, metals, and cyanide are below the Tier II Cleanup Goals. For off-site groundwater in the deep flow system, VOCs, phenols, metals, and cyanide are all below the Tier II Cleanup Goals.

1. INTRODUCTION

Since 1978, the AlliedSignal, Inc. (AlliedSignal) Industrial Complex in South Bend, Indiana (IDEM Site No. 6980601), has been proactively conducting environmental investigations and remedial actions, all performed on a voluntary basis. In 1995, AlliedSignal began a comprehensive site-wide Voluntary Site Investigation (VSI) to characterize the nature and extent of soil and groundwater impacts resulting from historical manufacturing operations (ABB, 1998). In January of 1999, AlliedSignal and the Indiana Department of Environmental Management (IDEM) entered into a Voluntary Remediation Agreement under Indiana's Voluntary Remediation Program (VRP).

The VRP establishes the terms and conditions for preparing and implementing a Remediation Work Plan. As one of the first step in the Remediation Work Plan process, this report presents a comparison of soil and groundwater analytical data collected during the VSI to the IDEM Tier II Cleanup Goals (IDEM, 1996).

The criteria comparison is organized as follows:

- Section 2 – Site Background
- Section 3 – Cleanup Criteria Selection
- Section 4 – Results and Discussion

2. SITE BACKGROUND

This section provides background information on a site as necessary to support the criteria comparison. A detailed discussion of the site's manufacturing processes, previous environmental activities, hydrogeologic setting, and the nature and extent of constituents in soil and groundwater is presented in the VSI.

2.1 SITE LOCATION AND DESCRIPTION

The AlliedSignal Industrial Complex is located at 717 North Bendix Drive, South Bend, Indiana (Figure 1). The facility includes 26 primary buildings on 110 acres. The properties around the Complex include mixed residential, commercial and industrial areas.

Throughout its history, the AlliedSignal Industrial Complex has focused on manufacturing automotive and aircraft components. Manufacturing processes at the facility which are of potential environmental importance include metal stamping, grinding, drilling and machining; metal cleaning and degreasing; heat treating; electroplating; coating and painting; and raw material and waste storage. Through the years, the fundamental manufacturing processes have remained unchanged, although products have been manufactured at different locations throughout the Complex.

2.2 PREVIOUS ENVIRONMENTAL ACTIONS

In 1995, AlliedSignal began a comprehensive site-wide VSI (ABB, April 1998). Upon initiation of the VSI, AlliedSignal completed a preliminary site assessment of the Complex. This involved a review of all site investigations and remedial actions conducted to date, an evaluation of current and historical groundwater monitoring data, a review of AlliedSignal's files and records, and a study of past and present manufacturing operations. As a result of the assessment, 19 AOCs were identified for investigation. Area 1 focuses on groundwater at the Complex. Areas 2 through 19 are locations where current or historical manufacturing operations, or materials handling, could have potentially impacted soil or groundwater.

The VSI involved characterization of the nature and extent of soil and groundwater impacts at the 19 areas. Investigative techniques included hand-augering, Geoprobe soil and groundwater sampling, passive soil gas sampling, cone penetrometer testing, monitoring well installation and groundwater

sampling. As part of the VSI, a Human Health Risk Evaluation and Baseline Ecological Assessment was performed to assess whether soil or groundwater at the facility pose unacceptable health risks under current and foreseeable future land use conditions.

The following conclusions were made based upon the VSI:

- Confirmed no current unacceptable risks to plant workers and off-site downgradient drinking water wells.
- Identified no unacceptable ecological risks.
- Confirmed effective recovery of a free product plume.
- Determined that volatile organic compounds (VOCs) are the primary constituents of concern in soil and groundwater.
- Identified an area of soils south of the Carbon Brake Building that contained polychlorinated biphenyls (PCBs);
- Demonstrated that dissolved metals are not a significant concern in groundwater.
- Confirmed the presence of an intermediate clay unit between upper and lower sand and gravel groundwater-bearing zones (termed the Shallow and Deep Flow Systems).
- Demonstrated no off-site migration of VOC-impacted groundwater on the west side of the site.
- Identified five soil source areas that may pose future potential risks.

2.3 SITE CLOSURE STRATEGY

The overall goal of the remedial action is to protect against unacceptable risk to human health, safety, public welfare, and the environment. The following objectives have been established to met this goal:

- Continue containment of impacted groundwater to minimize potential future off-site migration of chemicals in groundwater.
- Remove the remaining areas of free product where practical and technically feasible.
- Address soil source areas where constituent concentrations pose unacceptable risks for industrial site use, potential future construction or excavation worker exposure, and off-site residential use of groundwater.

Exposure prevention remedies at this site will include a land-use restriction, an activity restriction, and an engineering control. First, an industrial land-use restriction will be recorded on the property deed. Second, if necessary, an Environmental Notice prohibiting the use of groundwater on-site and on those properties between the downgradient property boundary and a point of compliance will be record on the appropriate property deeds. Alternatively, a groundwater use restriction may be accomplished through an existing St. Joseph County Well Drilling and Water Supply Ordinance. Third, a Soil Management Plan will be recorded on the facility's property deed requiring that pavement or capped areas remain in-place and be properly maintained unless a Soil Management Plan is followed. The plan will establish policies and procedures to protect health, safety, and environmental exposure during excavation projects, and to ensure that any excavated soils are properly managed and disposed.

*too weak
thru restrictive
covenant to
them (via T. BAKER)*

T. BAKER

3. CLEANUP CRITERIA SELECTION

Region XI
p. 9

This section describes the cleanup criteria that have been established for the Tier II comparison. Cleanup criteria for sites under the Indiana VRP (IDEM, 1996) are a combination of performance standards and quantitative standards. The appropriate performance standards and the site's ability to meet these standards will be presented in the Remediation Work Plan. This document focuses on a comparison to the quantitative standards.

Table 3-1 presents the Tier II Cleanup Goals for soil and groundwater at the site. The Tier II Cleanup Goals provide a criteria for initial comparison of analytical data to assess whether further action is warranted at a particular AOC. Further action could involve development of a site-specific Tier III criteria, implementation of an activity-restriction or engineering control, or, if appropriate, remediation.

Cleanup goals were not published for several of the compounds of concern at this site. Prior to conducting the comparison, HLA calculated these cleanup goals using the algorithms, exposure durations, exposure frequencies, and chemical properties published in the 1996 VRP Resource Guide. The calculations are provided in Appendix A and the results incorporated into Table 3-1.

The Tier II Cleanup Goals were selected as follows:

Off-Site Groundwater Criteria

The off-site groundwater criteria are the 1996 VRP Tier II Cleanup Goals for the residential scenario (i.e., groundwater ingestion and inhalation of volatiles in a residential setting). As discussed in Section 2.3, the closure strategy for the site may involve establishing a compliance point at the downgradient boundary of the plume and restricting groundwater use within the plume. The off-site groundwater criteria would be then applied at the ^{upto}compliance point. For purposes of this initial comparison, off-site groundwater is defined as "groundwater downgradient of the property line". The results of the comparison can then be used to assess whether a compliance point should be established beyond the property line.

On-Site Groundwater Criteria

The on-site groundwater criteria are the 1996 VRP Tier II Cleanup Goals for the nonresidential scenario (i.e., groundwater ingestion in the industrial scenario). The on-site groundwater criteria are applied to

groundwater upgradient of the compliance point (i.e., groundwater upgradient of the property line for this initial comparison).

As discussed in Section 2.3, the closure strategy for the site will involve restricting on-site groundwater use. As a result, the actual site-specific criteria (i.e., the Tier III criteria) for site closure may be concentrations that are protective of groundwater at a downgradient compliance point and vapor migration to indoor air. Based upon modeling conducted during the VSI, the criteria developed considering a downgradient compliance point and vapor migration will be higher than the non-residential Tier II Cleanup Goals. Considering this, the nonresidential Tier II Cleanup Goals provide a conservative screening of the analytical data to identify areas warranting further evaluation.

On-Site Soils Criteria

On-site soil criteria are the 1996 VRP Tier II Cleanup Goals for the nonresidential scenario (i.e., construction or excavation worker incidental ingestion and inhalation of volatiles and fugitive dusts). The closure strategy for the site may involve using a Tier III modeling approach to determine soil concentrations protective of groundwater at the off-site compliance point. Based upon modeling conducted during the VSI, soil criteria developed to be protective of off-site groundwater compliance are higher than the non-residential Tier II Cleanup Goals¹. Considering this, the nonresidential Tier II Cleanup Goals provide a conservative screening of the analytical data to identify areas warranting further consideration.

TPH Soil Criteria

The criterion for total petroleum hydrocarbons (TPH) in soils where jet fuel is of concern is the risk-based cleanup goal of 6,000 mg/kg calculated by HLA (see Appendix B). For areas where lube oils are of concern, the TPH criterion is the 1996 VRP maximum upper limit for total semivolatile compounds of 10,000 mg/kg. Based upon experience at other industrial sites, a risk-based TPH criteria for lube oil would exceed the IDEM VRP maximum upper limit; therefore, the maximum upper limit was used. In

¹ Excluding trichloroethene (TCE) in Plant 1, where modeling suggested a lower cleanup goal to be protective of the off-site, downgradient groundwater compliance point (see Appendix O-2 in the VSI).

areas where the type of petroleum released was unknown or is potentially a commingling of both volatile and semi-volatile petroleum compounds, the lower of the two criteria (i.e., 6,000 mg/kg) was used.

At the South Bend Complex, petroleum hydrocarbons of primary concern are Stoddard/naphtha, jet fuels (JP-4, JP-5, and JP-8), and cutting/lubricating oils. Stoddard/naphtha is a petroleum mixture containing hydrocarbons from C₁ to C₁₁. The primary compounds of concern in Stoddard/naphtha are: benzene, n-propylbenzene, 1,2,4-trimethylbenzene, naphthalene, and acenaphthalenes. For the VSI, the USEPA Method 8260 VOC analysis was modified to include these constituents. VOC analysis was specified when Stoddard/naphtha was of concern. Considering this, the comparison of the VOC analytical results to the Tier II Cleanup Goals addresses Stoddard/naphtha.

Jet fuels are made by blending naphtha, gasoline, and/or kerosene to meet specific military or commercial specification. Jet fuels have a broader range in hydrocarbons (C₁ to C₁₈). Jet fuels contain the compounds described above plus potentially benzene, toluene, ethylbenzene, and xylenes found in gasoline and the heavier-chained C₈ to C₁₈ hydrocarbons. During the VSI, a VOC analysis was conducted when jet fuels were of concern. As a result, comparison of the VOC analysis to the Tier II Cleanup Goals addresses the volatile fraction of jet fuel.

When jet fuel was of concern, TPH analysis by gas chromatograph was also performed due to the larger hydrocarbon chain range. The TPH analysis covered hydrocarbon chain ranges C₈ to C₃₀. The TPH analysis addresses the less volatile fraction of jet fuel (i.e., hydrocarbon chain ranges C₈ to C₁₈). Considering this, comparison of the TPH result to the maximum upper limit of 1,000 mg/kg for VOCs is not appropriate (since the criteria is for the volatile fraction). The risk-based criteria presented in Appendix B is appropriate (i.e., a cleanup goal of 6,000 mg/kg).

Saturated Soil Samples

Of note, some saturated soil samples were collected during the VSI. The analytical results from these saturated soil samples were excluded from the Tier II cleanup goals comparison. These samples were collected to evaluate the vertical extent of impacts to groundwater and whether dense non-aqueous phase liquids (DNAPLs) might be present in the aquifer. The samples are representative of neither soil nor groundwater, and therefore are not directly comparable to either cleanup goal.

4. RESULTS AND DISCUSSION

The comparison of analytical results to the Tier II cleanup criteria is provided on the tables in Appendix C. Also, Figures 2 through 24 illustrate sampling locations where soil and/or groundwater exceeded the Tier II Cleanup Goals. Table 4-1 provides a summary of the criteria comparison by AOC. The results are discussed below.

4.1 SOILS

The following AOCs had constituents in soils at concentrations that exceed the Tier II Cleanup Goals:

- **Area 3/11 - Former Disposal Area/Carbon Brake Expansion** - VOCs and PCBs in soils exceed the Tier II Cleanup Goals. TPH slightly exceeds the risk-based criteria of 6,000 mg/kg in three samples.
- **Area 4/16 - Former I-Beam Building**- TPH in soil exceeds the risk-based criteria of 6,000 mg/kg at two locations.
- **Area 5, Plant 6/16 - Former USTs** - VOCs in soil exceed the Tier II Cleanup Goal. One soil sample exceeds the risk-based TPH criteria of 6,000 mg/kg.
- **Area 8 - Former I-Beam Building Stormwater Drainage System** - TPH in soil exceeds the risk-based criteria of 6,000 mg/kg in soil adjacent to one dry well.
- **Area 9 - Plant 3/3A, Former Plating and Anodizing Operations** - VOCs were detected in soils outside the south wall adjacent to Dock 10 at concentrations exceeding the Tier II Cleanup Goals. This area will be incorporated into Area 5 - Plant 6/16, Former USTs.
- **Area 13, Plant 10 - Former Electroplating Operations** - Lead in soil exceeds the Tier II Cleanup Goal in one sample (13GP006).
- **Area 14, Plant 1 - Former Painting and Degreasing Operations** - TCE exceeds the Tier II Cleanup Goal in one soil sample. Lead and cadmium in soil at the western most Painting/Degreasing Area exceeds the Tier II Cleanup Goals.
- **Area 15 - Former Metal Stamping Operations** - TCE exceeds the Tier II Cleanup Goal in one soil sample. TPH in soil exceeds the risk-based criteria of 6,000 mg/kg in one sample.

4.2 ON-SITE GROUNDWATER

When evaluating on-site groundwater, consideration must be given for the shallow and deep flow systems. Each flow system is discussed below.

On-Site Groundwater - Shallow Flow System

In on-site groundwater (i.e., groundwater inside the property boundary), VOCs were detected above the Tier II Cleanup Goals, primarily at sampling locations near soil source areas (see Figure 23). VOCs that exceeded the Tier II Cleanup Goals were: 1,1-DCE, 1,2-DCA, 1,2-DCP, TCE, vinyl chloride, and benzene.

Cyanide was detected in one Geoprobe groundwater sample collected at the Plant 10 Electroplating Area above the Tier II Cleanup Goal. Metals and phenols are below the Tier II Cleanup Goal.

On-Site Groundwater - Deep Flow System

For on-site groundwater in the deep flow system, VOCs are below the Tier II Cleanup Goals, excluding vinyl chloride at well D4. Phenols, metals, and cyanide are below the Tier II Cleanup Goals.

4.3 OFF-SITE GROUNDWATER

As was the case with on-site groundwater, when evaluating off-site groundwater, consideration must be given for the shallow and deep flow. Each flow system is discussed below.

Off-Site Groundwater - Shallow Flow System

For off-site groundwater in the shallow flow system, TCE in groundwater at wells S21, S23, S24, and S27 exceed the Tier II Cleanup Goals, as well as cis-1,2-DCE at S24 and 1,2-DCA at S9 (see Figure 24). Phenols, metals, and cyanide are below the Tier II Cleanup Goals.

Off-Site Groundwater - Deep Flow System

For off-site groundwater in the deep flow system, VOCs, phenols, metals, and cyanide are all below the Tier II Cleanup Goals.

5. REFERENCES

ABB, 1998a. Voluntary Site Investigation Report. Prepared by ABB Environmental Services, Inc., April, 1998.

IDEM, 1996. Voluntary Remediation Program: Resource Guide. Indiana Department of Environmental Management, Office of Environmental Response.

**TABLE 3-1
TIER II CLEANUP GOALS
ALLIEDSIGNAL INDUSTRIAL COMPLEX, SOUTH BEND, INDIANA**

Constituent		Soil	On-Site Groundwater	Off-Site Groundwater	
		1996 Tier II Non-Residential	1996 Tier II Non-Residential	1996 Tier II Residential	
VOLATILE ORGANIC COMPOUNDS (VOC)		(mg/kg)	(mg/L)	(mg/L)	
<i>Gasoline/ Painting Solvents</i>	Benzene	4.77	0.0986	0.005	
	Ethylbenzene	1,000	10.22	0.7	
	Toluene	1,000	20.44	1	
	Xylene	1,000	204.4	10	
	Methyl-tert-butyl ether	NA	6.95E+00	NA	
	Acetone	136.29	10.22	3.04	
<i>Stoddard/ Naphthas</i>	Isopropylbenzene	1.00E+03	1.02E+01	6.89E+01	
	2-Methylnaphthalene	NA	2.04E+00	6.08E+01	
	Naphthalene	10,000	4.088	1.216	
	n-Propylbenzene	1.00E+03	1.02E+01	NA	
	1,2,4-Trimethylbenzene	NA	5.11E+00	1.37E+02	
	1,3,5-Trimethylbenzene	1.00E+03	5.11E+00	1.37E+02	
<i>Chlorinated Solvents</i>	Chlorobenzene	3.16E+02	2.04E+00	4.29E+02	
	1,1-Dichloroethane	1,000	10.22	0.64	
	1,1-Dichloroethene	0.08	0.007	0.007	
	1,2-Dichloroethane	0.37	0.0314	0.005	
	cis-1,2-Dichloroethene	102.49	1.022	0.07	
	trans-1,2-Dichloroethene	NA	NA	6.08E+01	
	1,2-Dichloropropane	NA	4.21E-02	NA	
	Methylene Chloride	9.08E+00	3.81E-01	1.00E-01	
	Methyl Ethyl Ketone	146.24	5.11	0.91772	
	Tetrachloroethene	8.01	0.0561	0.005	
	Trichloroethene	25.73	0.26	0.005	
	1,1,1-Trichloroethane	1,000	9.198	0.2	
	Vinyl Chloride	0.13	0.01	0.002	
	Chloroethane	1,000	9.86E-01	23.16075	
	TOTAL PETROLEUM HYDROCARBONS (TPH)				
		JP-4	1,000	Analyze for	Analyze for
	JP-5 or Jet A	1,000	individual	individual	
	Lube oil or Waste Oil	10,000	constituents	constituents	
SEMI-VOLATILE ORGANIC COMPOUNDS/POLYCHLORINATED BIPHENYLS (SVOC)					
<i>Polynuclear Aromatic Hydrocarbons</i>	Acenaphthene	10,000	6.13	1.824	
	Anthracene	10,000	30.10	9.12	
	Carbazole	10,000	0.15	NA	
	Chrysene	10,000	0.39	0.0002	
	Di-n-butylphthalate	10,000	10.20	0.608	
	Bis(2-ethylhexyl)phthalate	16.43	0.2043	0.006	
	Fluorene	10,000	4.09	1.216	
	Benzo (a) Anthracene	103.88	0.01	0.0001	
	Benzo (b) Fluoranthene	354.98	0.01	0.0002	
	Benzo (k) Fluoranthene	3,759.12	0.0392	0.0002	
	Benzo (a) Pyrene	69.85	0.01	0.0002	
	Benzo (g,h,i) perylene	NA	3.07	0.912	
	Fluoranthene	10,000	0.8176	0.2432	
	Naphthalene	10,000	4.088	1.216	
	Phenanthrene	10,000	3.07	NA	
	Pyrene	10,000	3.066	0.912	
	<i>Phenols</i>	2-Methylphenol	375.93	5.11	1.52
		2,4-Dimethylphenol	170.00	2.04	60.8
		4-Methylphenol	427.24	5.11	1.52
		Total Phenols	658.78	12.264	3.648
<i>PCBs</i>	PCBs, total	4.23	0.0007	0.0005	
INORGANICS					
<i>Metals</i>	Arsenic	438	0.05	0.05	
	Cadmium	730	0.0511	0.005	
	Chromium VI	7,300	0.511	0.1	
	Chromium III	10,000	102.2	0.1	
	Total Chromium	NA	NA	NA	
	Cyanide	10,000	2.044	0.2	
	Lead	400(e)	1.50E+02	1.50E+02	
	Mercury	87.6	0.0061	0.002	
	Nickel	10,000	2.044	0.1	
	Selenium	7,300	0.511	0.05	
	Zinc	10,000	30.66	9.12	

Note: NA = Not applicable; constituent not detected in this media.

TABLE 4-1
Summary of Comparison to Tier II Cleanup Goals
Voluntary Site Investigation
AlliedSignal Industrial Complex - South Bend, Indiana

Area No.	Description	Summary of VSI Findings	Results of Tier II Comparison
Area 2	Plant 2 Basement	<ul style="list-style-type: none"> • Geoprobe borings advanced in this area indicate that a large area of free-phase oil was not present behind the wall, but may have existed in the past (as evidenced by oil-stained soils). • A comparison of the groundwater elevation to the estimated bottom of footing elevations indicated that the oil may have been able to migrate beyond the wall when the groundwater elevation was seasonally lower. 	<ul style="list-style-type: none"> • No soil samples collected. • Groundwater samples analyzed for VOCs. Results were below the Tier II Cleanup Goal.
Area 3/11	Alleged Former Disposal Area/ Carbon Brake Expansion	<ul style="list-style-type: none"> • VOCs associated with fuels and chlorinated solvents, PNAs, phenols; heavier fractions of fuels and oils (as TPH); and PCBs were detected in the soils south of the existing Carbon Brake building. • Chlorinated solvents were detected in groundwater at and downgradient of the impacted soils. • PCBs were detected in groundwater samples collected at one location using a bailer. PCBs were non-detect when "low-flow" groundwater samples were collected. • Inorganics in soils and groundwater are not of concern. 	<ul style="list-style-type: none"> • VOCs in soil (i.e., 1,1-DCE, PCE, TCE, and vinyl chloride) exceed Tier II Cleanup Goals. • At one location (03GP014), total VOCs exceeded the maximum upper limit of 1,000 mg/kg. • TPH in soil slightly exceeded the risk-based criteria of 6,000 mg/kg in three samples. • PCBs in soil exceeded the Tier II Cleanup Goal. • Phenols, phthalates, PNAs, and inorganics in soil are below the Tier II Cleanup Goals. • Cis-1,2-DCE and vinyl chloride in groundwater north of this area exceeded the Tier II Cleanup Goals. • Inorganics in groundwater are below the Tier II Cleanup Goals.
Area 4/16	I-Beam Building	<ul style="list-style-type: none"> • VOCs were detected in borings located along the eastern side of the I-Beam building. • TPH was detected in across the I-Beam building area. • Inorganics impacts to soils or groundwater do not appear to be of concern in this area. • Downgradient groundwater is impacted with naphtha- and fuel-related constituents and chlorinated solvents. Although a soil source was not located during VSI activities, former dry wells located near the southwest corner of the building may be the source of observed groundwater impacts. 	<ul style="list-style-type: none"> • VOCs in soil are below the Tier II Cleanup Goals. • TPH in soil exceeds the risk-based criteria of 6,000 mg/kg at two locations. • Inorganics in soil are below the Tier II Cleanup Goals. • Vinyl chloride was detected in groundwater downgradient of this area above the Tier II Cleanup Goal. • Inorganics in groundwater are below the Tier II Cleanup Goals.

TABLE 4-1
Summary of Comparison to Tier II Cleanup Goals
Voluntary Site Investigation
AlliedSignal Industrial Complex - South Bend, Indiana

Area No.	Description	Summary of VSI Findings	Results of Tier II Comparison
Area 5 Former USTs	Plant 1/9 UST	<ul style="list-style-type: none"> 1,1,1-TCA and TCE were detected in soil samples. These detections are believed to be associated with historical operations rather than the USTs. An elevated level of TPH (9,300 mg/kg) was detected adjacent to a former quench oil tank. Samples collected above and below this interval were non detect for TPH. 	<ul style="list-style-type: none"> VOCs in soil are below the Tier II Cleanup Goals. TPH in soil is below the risk-based criteria. Vinyl chloride in one groundwater sample exceeded the Tier II Cleanup Goal. The vinyl chloride detection is believed to be associated with historical operations rather than the USTs.
	Plant 6/16 USTs	<ul style="list-style-type: none"> Soils were impacted, to varying degrees, with VOCs. Elevated levels of TPH was also detected in soil at many locations. Inorganics impacts to soils or groundwater do not appear to be of concern in this area. <p>Groundwater is impacted with VOCs.</p>	<ul style="list-style-type: none"> VOCs in soil (i.e., 1,1-DCE, cis-1,2-DCE, benzene, toluene, and xylenes) exceed the Tier II Cleanup Goals. PNAs in soil are below the Tier II Cleanup Goals. TPH in one soil sample exceeds the risk-based criteria of 6,000 mg/kg. Inorganics in soil are below the Tier II Cleanup Goals. VOCs in groundwater (i.e., 1,2-DCA, cis-1,2-DCE, 1,2-DCP, TCE, vinyl chloride, and benzene) in the northeast corner of this area exceeded the Tier II Cleanup Goal.
	Plant 14 USTs	<ul style="list-style-type: none"> VOCs and TPH were detected in soils. Metals in soils were consistent with expected background ranges. <p>Chlorinated VOCs were detected in groundwater samples collected adjacent to and downgradient from the Plant 14 area. The source of these constituents is not known, but is not believed to be associated with the former UST systems.</p>	<ul style="list-style-type: none"> VOCs in soil are below the Tier II Cleanup Goals. PNAs were detected in one soil sample. The detected concentrations are below the Tier II Cleanup Goals. TPH in soil are below the risk-based criteria of 6,000 mg/kg. Metals in soil are below the Tier II Cleanup Goals. VOCs in groundwater are below the Tier II Cleanup Goals.
	Plant 19 USTs	<ul style="list-style-type: none"> VOCs and TPH were detected in soil. Metals in soils were consistent with expected background ranges. VOCs were detected in groundwater samples collected both upgradient and downgradient of this area. The detections may be associated with an upgradient source and not with the former UST systems in the area. 	<ul style="list-style-type: none"> VOCs in soil are below the Tier II Cleanup Goals. TPH in soils is below the risk-based criteria. Inorganics in soil are below the Tier II Cleanup Goals. VOCs in groundwater are below the Tier II Cleanup Goals.
	Transportation Area USTs	<ul style="list-style-type: none"> TPH was detected in soil at very low levels (≤ 18 mg/kg). Phenanthrene, a PNA, was detected in groundwater at low levels (≤ 7.4 ug/L). 	<ul style="list-style-type: none"> TPH in soils is below the risk-based criteria. PNAs in groundwater are below the Tier II Cleanup Goals.

TABLE 4-1

**Summary of Comparison to Tier II Cleanup Goals
Voluntary Site Investigation
AlliedSignal Industrial Complex - South Bend, Indiana**

Area No.	Description	Summary of VSI Findings	Results of Tier II Comparison
Area 5 Former USTs (cont'd)	Transportation Area - General Conditions	<ul style="list-style-type: none"> VOCs were detected in soils at scattered locations. Inorganics were detected in soils at concentrations consistent with typical background levels. VOCs were detected in groundwater at various locations. 	<ul style="list-style-type: none"> VOCs in soil are below the Tier II Cleanup Goals. Inorganics in soil are below the Tier II Cleanup Goals. VOCs in groundwater (1,1-DCE, cis-1,2-DCE, TCE, and vinyl chloride) are above the Tier II Cleanup Goals.
	Plant 11 - Heat Treating Area	<ul style="list-style-type: none"> Low levels of VOCs and PNAs detected in soil. TPH was detected in one soil sample at 38 mg/kg. 	<ul style="list-style-type: none"> VOCs and PNAs in soil are below Tier II Cleanup Goals. TPH in soil is below the risk-based criteria.
Area 6 Potential Spills and Releases	Plant 12 - Machinery Sumps	<ul style="list-style-type: none"> TPH detected in soil at 5 of 15 locations. VOCs detected in groundwater. The impacts to groundwater appear to be related to an upgradient source. 	<ul style="list-style-type: none"> TPH in soil is below the risk-based criteria. VOCs in groundwater are below the Tier II Cleanup Goals.
	SWMU 5 BASD Outdoor Waste Storage	<ul style="list-style-type: none"> No VOCs were detected in soil. PNAs were detected at low levels in soil. Inorganics were detected in soil at typical background levels. TPH was detected in one soil sample at 100 mg/kg. 	<ul style="list-style-type: none"> No VOCs detected. PNAs in soil are below the Tier II Cleanup Goals. Inorganics in soil are below the Tier II Cleanup Goals. TPH in soil is below the risk-based criteria.
Area 7 Solid Waste Management Units	SWMU 13 Wastewater Treatment Plant	<ul style="list-style-type: none"> Inorganics in soil were consistent with typical background levels. 	<ul style="list-style-type: none"> Inorganics in soil are below Tier II Cleanup Goals.
	SWMU 15 Oil Ultrafiltration System	<ul style="list-style-type: none"> Neither VOCs nor TPH were detected in soils. Inorganics in soil consistent with typical background levels. VOCs were detected in groundwater. The impacts to groundwater appear to be related to an upgradient source. 	<ul style="list-style-type: none"> VOCs and TPH were non-detectable in soils. Inorganics in soil are below Tier II Cleanup Goals. VOCs in groundwater are below Tier II Cleanup Goals.
	SWMU 16 10,000-Gallon Lovejoy Tank	<ul style="list-style-type: none"> PCE was detected in one soil sample. TPH was detected in one soil sample at 420 mg/kg. PNAs were not detected in the soil samples. Inorganics in soil were consistent with typical background levels. 	<ul style="list-style-type: none"> PCE detection in soil is below the Tier II Cleanup Goal. The TPH detection in soil is below the risk-based criteria. PNAs were non-detectable in soils. Inorganics in soil are below the Tier II Cleanup Goals.
	SWMU 17 Oil Waste and Scrap Metal Room	<ul style="list-style-type: none"> Sampling was not completed because the area could not be located. The area is likely addressed under Area 6. 	Not applicable

TABLE 4-1

Summary of Comparison to Tier II Cleanup Goals
 Voluntary Site Investigation
 AlliedSignal Industrial Complex - South Bend, Indiana

Area No.	Description	Summary of VSI Findings	Results of Tier II Comparison
Area 7 Solid Waste Management Units (cont'd)	SWMU 18 Department 200 Temporary Drum Storage Area	<ul style="list-style-type: none"> • VOCs and PNAs in soils were non-detectable. • TPH was detected in two soil samples at 12 mg/kg. • Inorganics in soil were consistent with typical background levels. • VOCs were not detected in groundwater. 	<ul style="list-style-type: none"> • VOCs and PNAs were non-detectable in soils. • TPH in soil were below the risk-based criteria. • Inorganics in soil were below Tier II Cleanup Goals. • VOCs were not detected in groundwater.
	SWMU 19 Plant 7- Former Drum Storage Area	<ul style="list-style-type: none"> • PCE was detected in soil samples from two borings located in the central and eastern portions of Plant 7. • PNAs were detected in soil at one location. • TPH was detected in soil at concentrations ≤ 560 mg/kg. • Inorganics in soil were consistent with typical background levels. • Vinyl chloride was detected in a downgradient groundwater sample. 	<ul style="list-style-type: none"> • PCE detection in soil is below the Tier II Cleanup Goal. • PNAs in soil are below the Tier II Cleanup Goal. • TPH in soil is below the risk-based criteria. • Inorganics in soil are below the Tier II Cleanup Goal. • Vinyl chloride in groundwater is above the Tier II Cleanup Goal.
	SWMU 22 Former PCB Storage Area	<ul style="list-style-type: none"> • VOCs and PNAs not detected in soils. • TPH was detected in one soil sample collected just above the water table at 3,300 mg/kg. The overlying soils were non-detectable for TPH indicating that the TPH was associated with groundwater impacts. • PCBs were not detected in soil. • Inorganics in soil were consistent with typical background levels. 	<ul style="list-style-type: none"> • VOCs and PNAs not detected in soils. • TPH in soil is below the risk-based criteria. • Inorganics in soil are below the Tier II Cleanup Goals. • PCBs were not detected in soil.
Area 8	I-Beam Building Stormwater Drainage System	<ul style="list-style-type: none"> • VOCs were detected in soils near several of the former dry wells. • Naphthalene, which is included in both the VOC and PNA analyses, was detected in soil. • TPH was detected in soil at several locations. • Inorganics were detected in soils at concentrations consistent with typical background levels. • VOCs were detected in groundwater at the dry wells. 	<ul style="list-style-type: none"> • VOCs in soil are below the Tier II Cleanup Goals. • Naphthalene in soil is below the Tier II Cleanup Goals. • TPH in soil exceeds the risk-based criteria of 6,000 mg/kg adjacent to one dry well. • Vinyl chloride in one groundwater sample adjacent to the retention pond exceeds the Tier II Cleanup Goal. This exceedance is likely related to Area 3/11.

TABLE 4-1

**Summary of Comparison to Tier II Cleanup Goals
Voluntary Site Investigation
AlliedSignal Industrial Complex - South Bend, Indiana**

Area No.	Description	Summary of VSI Findings	Results of Tier II Comparison
Area 9	Plant 3/3A Former Plating and Anodizing Operation	<ul style="list-style-type: none"> • VOCs were detected in some soil samples beneath the Plant 3 floor. Higher levels of VOCs and TPH were detected in soils outside the south wall adjacent to Dock 10. • Inorganics in soil were consistent with typical background levels. • VOCs were detected in groundwater and the source appears to be northwest of the former plating operation. • Inorganics in groundwater do not appear to be of concern. 	<ul style="list-style-type: none"> • VOCs in soils beneath the Plant 3 floor are below the Tier II Cleanup Goals. • VOCs in soils outside the south wall exceed the Tier II Cleanup Goals. • TPH in soil is below the risk-based criteria. • VOCs in groundwater (cis-1,2-DCE, TCE, vinyl chloride, and benzene) exceed the Tier II Cleanup Goals. • Inorganics in soil and groundwater are below the Tier II Cleanup Goals.
Area 10	Barrel Storage Building	<ul style="list-style-type: none"> • PNAs detected in soils just east of the building, adjacent to a former UST. • TPH detected in soils at concentrations ≤ 16 mg/kg. • VOCs were detected in a groundwater sample collected along the upgradient side of the building. The detection is likely associated with an upgradient source. 	<ul style="list-style-type: none"> • PNAs in soil are the Tier II Cleanup Goals. • TPH in soil is below the risk-based criteria. • VOCs in groundwater are below the Tier II Cleanup Goals.
Area 12	Plant 12 Former Chromium Anodizing Operations	<ul style="list-style-type: none"> • VOCs detected in two soil samples collected near the water table. • Inorganics detected in soil and groundwater are not of concern. • VOCs were detected in groundwater, but may be related to upgradient sources. 	<ul style="list-style-type: none"> • VOCs in soil are below the Tier II Cleanup Goals. • TPH in soil is below the risk-based criteria. • VOCs in groundwater are below the Tier II Cleanup Goals. • Inorganics in soil and groundwater are below the Tier II Cleanup Goals.
Area 13	Plant 10 Former Electroplating Operations	<ul style="list-style-type: none"> • VOCs were detected in soils (1,1,1-TCA, TCE and vinyl chloride) • Saturated soils samples indicate that the VOC impacts are present as deep as 20 feet below the water table. • VOCs were detected in groundwater at this area. • Inorganics in soil and groundwater at some locations were elevated above typical background levels. 	<ul style="list-style-type: none"> • VOCs in soil are below the Tier II Cleanup Goals. • Lead in soil exceeds the Tier II Cleanup Goal in one sample (13GP006). • VOCs in groundwater (1,1-DCE, TCE, and vinyl chloride) exceed the Tier II Cleanup Goals. • Metals in groundwater are below the Tier II Cleanup Goals. • Cyanide in one groundwater sample (13GP006) exceeded the Tier II Cleanup Goal.

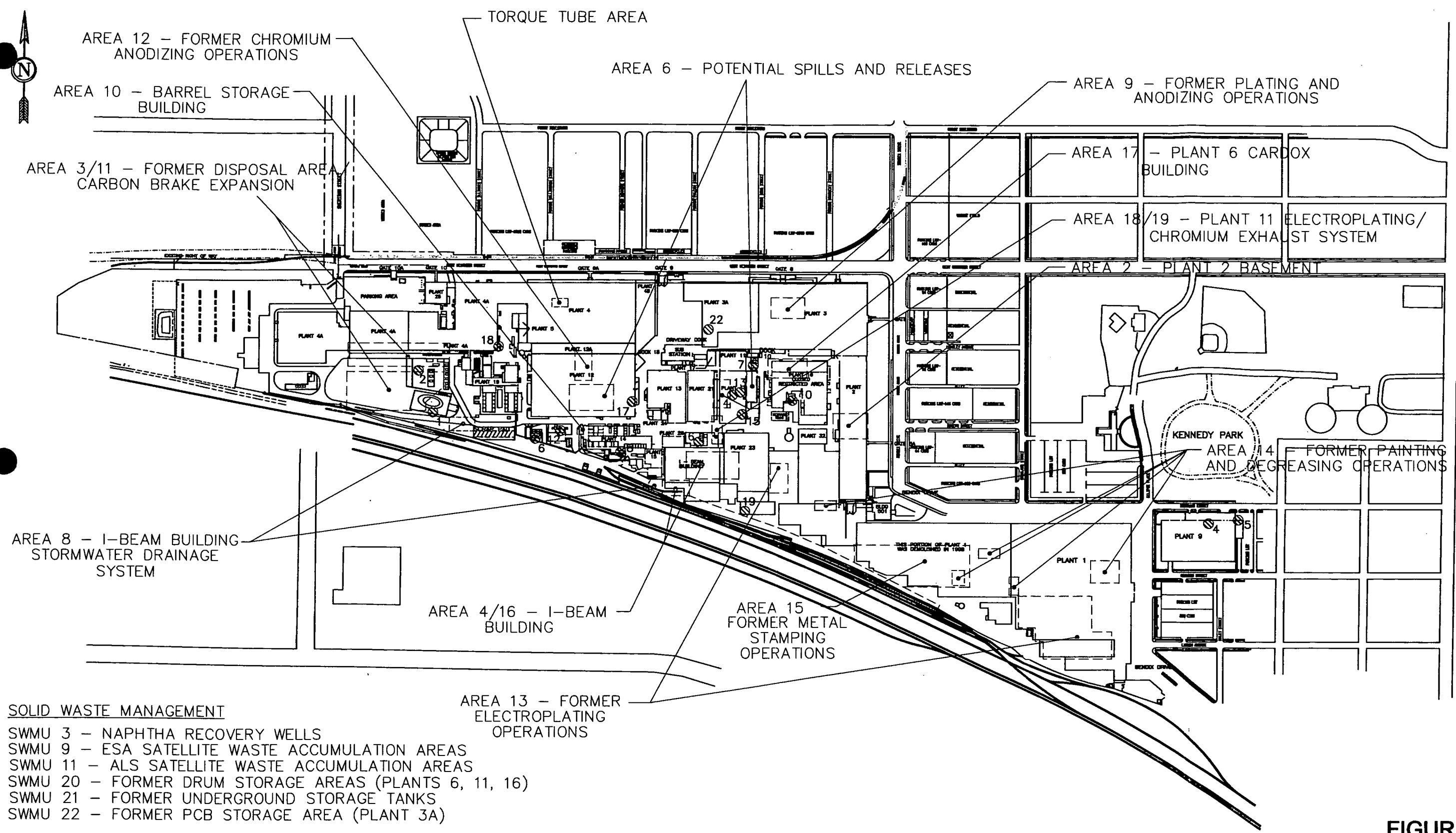
**Summary of Comparison to Tier II Cleanup Goals
Voluntary Site Investigation
AlliedSignal Industrial Complex - South Bend, Indiana**

Area No.	Description	Summary of VSI Findings	Results of Tier II Comparison
Area 13 (cont'd)	Plant 31 Former Electroplating Operations	<ul style="list-style-type: none"> • No VOCs were detected in soils. • Metals in soils were slightly elevated relative to expected background ranges • No VOCs were detected in groundwater, and metals in groundwater were consistent with typical background. 	<ul style="list-style-type: none"> • No VOCs were detected in soils or groundwater. • Metals in soils and groundwater were below Tier II Cleanup Goals.
Area 14	Plant 1 Former Painting and Degreasing Operations	<ul style="list-style-type: none"> • VOCs were detected in soils. • PNAs were detected in one soil sample (14GP021). • TPH was detected in soils at varying concentrations. • VOCs were detected in groundwater near each area. • Saturated soils samples indicate that chlorinated VOC impacts are present as deep as 20 feet below the water table. • Metals in soils and groundwater were slightly elevated relative to expected background ranges 	<ul style="list-style-type: none"> • TCE (a VOC) exceeds the Tier II Cleanup Goal in one soil sample. • PNAs in soil are below the Tier II Cleanup Goal. • TPH in soil is below the risk-based criteria. • Lead and cadmium in soil at the western most Painting/Degreasing Area exceeds the Tier II Cleanup Goals. • VOCs in groundwater (1,1-DCE, 1,2-DCE, TCE, and vinyl chloride) exceed the Tier II Cleanup Goal. • Metals in groundwater were below the Tier II Cleanup Goal.
Area 15	Plant 1 Former Metal Stamping Operations	<ul style="list-style-type: none"> • VOCs were detected in some soil samples. • TPH was detected in soils at varying concentrations. • Metals in soils and groundwater were slightly elevated relative to expected background ranges 	<ul style="list-style-type: none"> • TCE exceeds the Tier II Cleanup Goal in one soil sample. • TPH in soil exceeds the risk-based criteria of 6,000 mg/kg in one sample. • VOCs in groundwater (1,2-DCA, cis-1,2-DCE, TCE and vinyl chloride) exceed the Tier II Cleanup Goals. • Metals in soil and groundwater are below the Tier II Cleanup Goals.
Area 17	Plant 6 CARDOX Building	<ul style="list-style-type: none"> • This area is located inside the Area 5 - Plant 6/16 and is addressed under Plant 6/16. 	Not applicable
Area 18/19	Plant 11 Electroplating	<ul style="list-style-type: none"> • PCE was detected in a soil sample. • Chromium in soil was above typical background. • VOCs were detected in groundwater; however, they are likely unrelated to the electroplating operation. • Metals in groundwater were above typical background levels. 	<ul style="list-style-type: none"> • PCE in soil is below the Tier II Cleanup Goal. • Metals in soil (including chromium) are below the Tier II Cleanup Goals. • Vinyl chloride in one groundwater sample exceeded the Tier II Cleanup Goal. The vinyl chloride is likely unrelated to the electroplating operation. • Metals in groundwater were below the Tier II Cleanup Goals.

TABLE 4-1

Summary of Comparison to Tier II Cleanup Goals
 Voluntary Site Investigation
 AlliedSignal Industrial Complex - South Bend, Indiana

Area No.	Description	Summary of VSI Findings	Results of Tier II Comparison
Area 18/19 (cont'd)	Exhaust Tunnel	<ul style="list-style-type: none"> Material build up in the exhaust tunnel contains significant levels of hexavalent chromium. Chromium was detected in surface soils in the area of the exhaust stack, but at concentrations below the RBSL. 	<ul style="list-style-type: none"> The sample of material from inside the exhaust tunnel was not compared to the Tier II Cleanup Goal because it is a source material and not a soil or groundwater sample. Although elevated concentrations of chromium were detected, this area will be addressed during shut-down of the electroplating operations.
Plant 4	Torque Tube Area	<ul style="list-style-type: none"> TCE was detected in soils. TPH was detected in soil at concentrations \leq 16 mg/kg. 	<ul style="list-style-type: none"> TCE in soil is below the Tier II Cleanup Goal. TPH in soil is below the risk-based criteria of 6,000 mg/kg.
Area 1	VOC and Naphtha Releases	<ul style="list-style-type: none"> An intermediate silt/clay layer separates the shallow and deep flow systems. Free-product is limited to localized areas, and indicates that the naphtha recovery system was effective in removing the free-phase naphtha. Chlorinated solvents were detected in on-site groundwater within the shallow flow system. Areas with the highest solvent concentrations in shallow groundwater were south of the Carbon Brake Building, in the area of Plant 3A, and in Plant 1. Volatile fuel constituents were also detected within a smaller area inside the on-site chlorinated VOC plume. During the VSI, groundwater samples collected for metals analysis were field filtered, and these data indicate that metals are of concern only at limited areas within Plant 1. Cyanide is also of concern in Plant 1 groundwater. The naphtha and VOC recovery system (once rehabilitated) are effective in containing groundwater impacts to the shallow flow system on-site. Groundwater impacts were detected off-site to the northeast of the complex, but these impacts occurred prior to installation of the VOC recovery system. Concentrations of VOCs in off-site groundwater have remained stable or decreased since installation of the VOC recovery system. Impacts to the deep flow system are limited to chlorinated solvents beneath and northeast of Plant 1. 	<p><i>On-Site Groundwater - Shallow Flow System</i></p> <ul style="list-style-type: none"> VOCs (1,1-DCE, 1,2-DCA, 1,2-DCP, TCE, vinyl chloride, and benzene) were detected above the Tier II Cleanup Goals, primarily at sampling locations near soil source areas. Cyanide was detected in one Geoprobe groundwater sample collected at the Plant 10 Electroplating Area above the Tier II Cleanup Goal. Metals and phenols are below the Tier II Cleanup Goal. <p><i>On-Site Groundwater - Deep Flow System</i></p> <ul style="list-style-type: none"> VOCs are below the Tier II Cleanup Goals, excluding vinyl chloride at well D4. Phenols, metals, and cyanide are below the Tier II Cleanup Goals. <p><i>Off-Site Groundwater - Shallow Flow System</i></p> <ul style="list-style-type: none"> TCE at wells S21, S23, S24, and S27 exceed the Tier II Cleanup Goals, as well as cis-1,2-DCE at S24 and 1,2-DCA at S9. Phenols, metals, and cyanide are below the Tier II Cleanup Goals. <p><i>Off-Site Groundwater - Deep Flow System</i></p> <ul style="list-style-type: none"> VOCs, phenols, metals, and cyanide are all below the Tier II Cleanup Goals.



SOLID WASTE MANAGEMENT

- SWMU 3 - NAPHTHA RECOVERY WELLS
- SWMU 9 - ESA SATELLITE WASTE ACCUMULATION AREAS
- SWMU 11 - ALS SATELLITE WASTE ACCUMULATION AREAS
- SWMU 20 - FORMER DRUM STORAGE AREAS (PLANTS 6, 11, 16)
- SWMU 21 - FORMER UNDERGROUND STORAGE TANKS
- SWMU 22 - FORMER PCB STORAGE AREA (PLANT 3A)

Legend

	Areas of Concern
	Solid Waste Management Unit

- GENERAL AREAS OF CONCERN**
- AREA 1 - NAPHTHA AND VOC RELEASES
 - AREA 5 - FORMER USTs
 - AREA 6 - SPILLS AND RELEASES
 - AREA 7 - SWMU ASSESSMENT

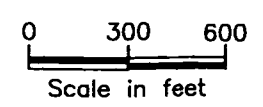
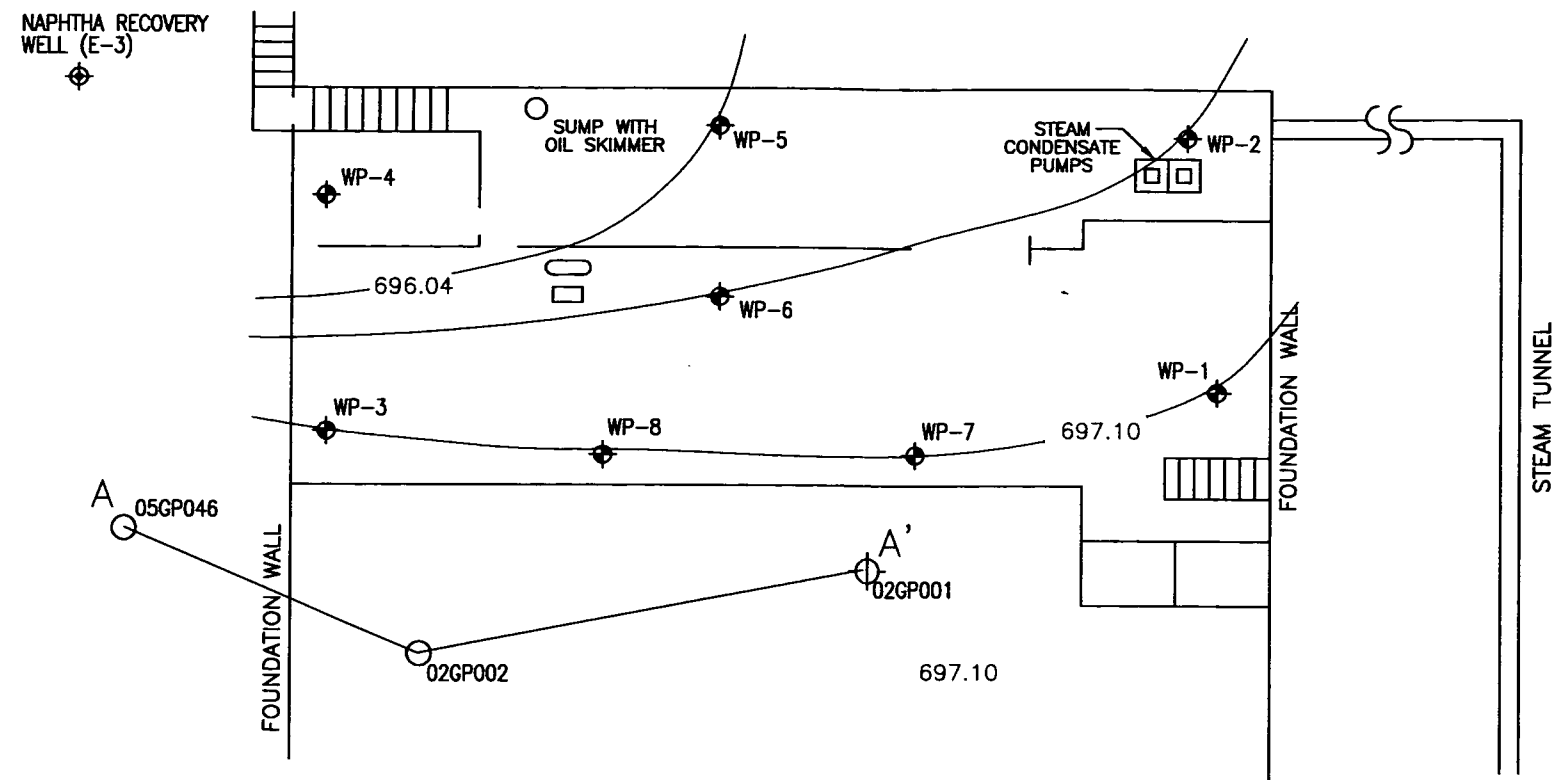
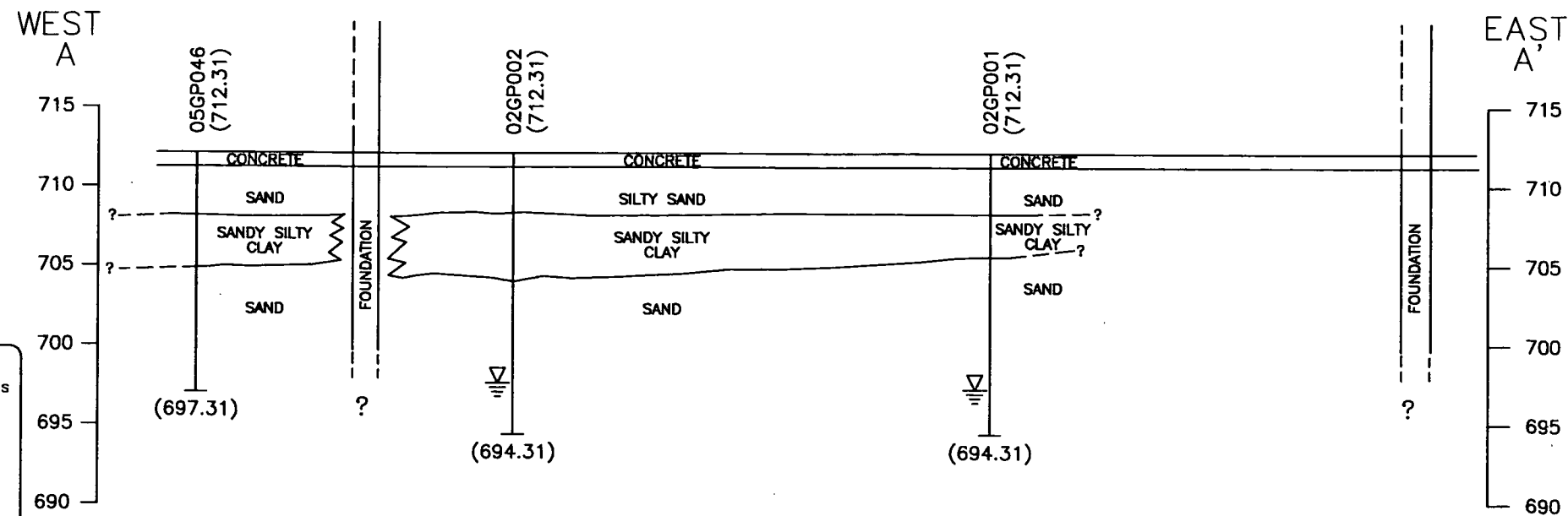


FIGURE 1
AREAS OF CONCERN
VOLUNTARY SITE INVESTIGATION
ALLIEDSIGNAL INDUSTRIAL COMPLEX
SOUTH BEND, INDIANA



PLANT 2/BASEMENT



CROSS-SECTION A-A'

- Legend
- Geoprobe Soil Sampling Location
 - ⊕ Geoprobe Soil and Groundwater Sampling Location
 - ⊙ Existing Monitoring Well Location
 - ▽ Observed Water Table Elevation
 - A—A' Geologic Cross Section Line
 - 696.71— Groundwater Elevation Contour Line
- Red Coloring Indicates Concentrations above VRP Tier II Non-Residential Criteria in Soils
 Blue Coloring indicates Concentrations above VRP Tier II Non-Residential Criteria in Groundwater

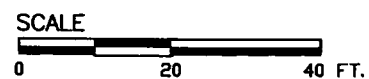


FIGURE 2
 PLANT 2 BASEMENT
 VOLUNTARY SITE INVESTIGATION
 ALLIEDSIGNAL INDUSTRIAL COMPLEX
 SOUTH BEND, INDIANA
 Harding Lawson Associates

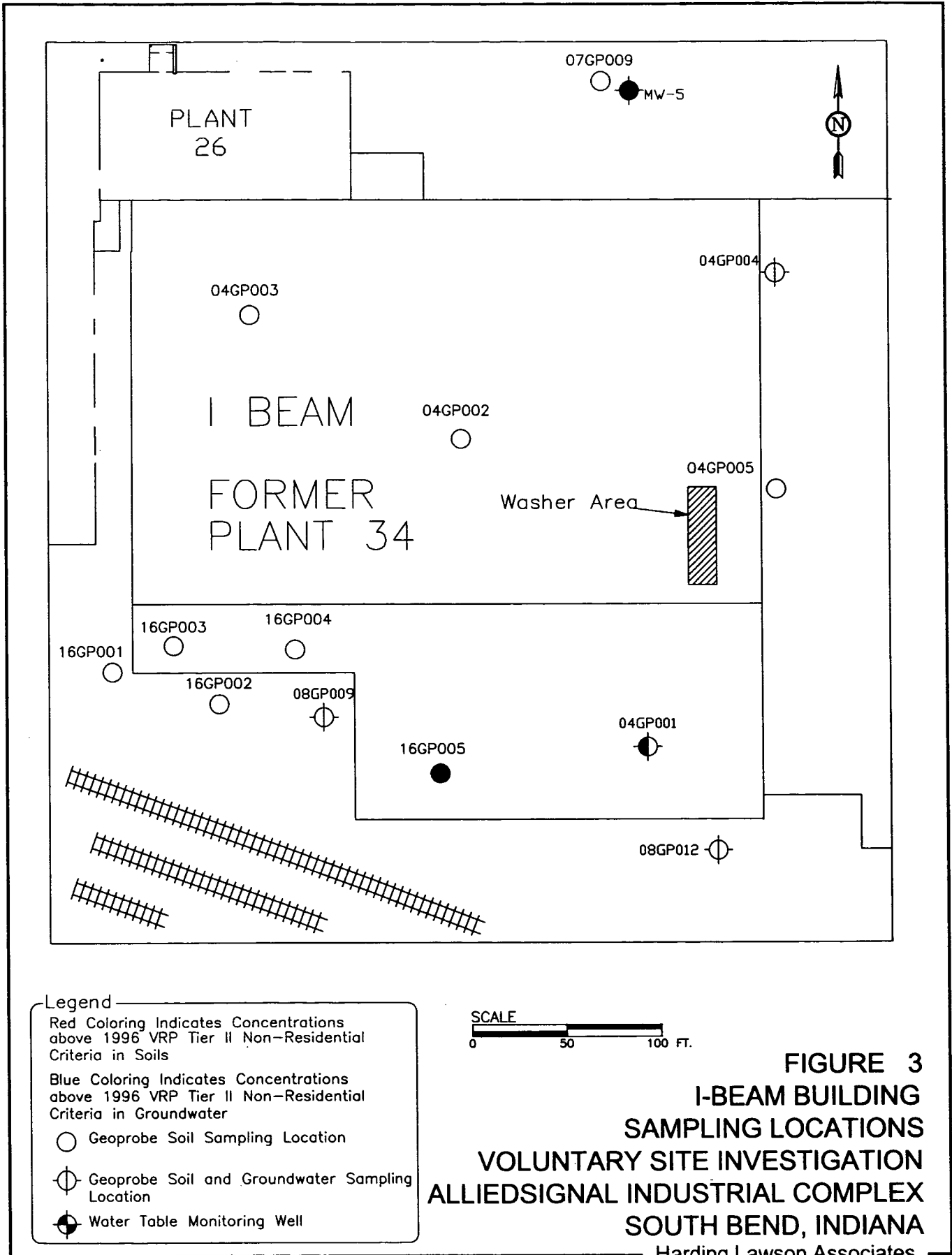
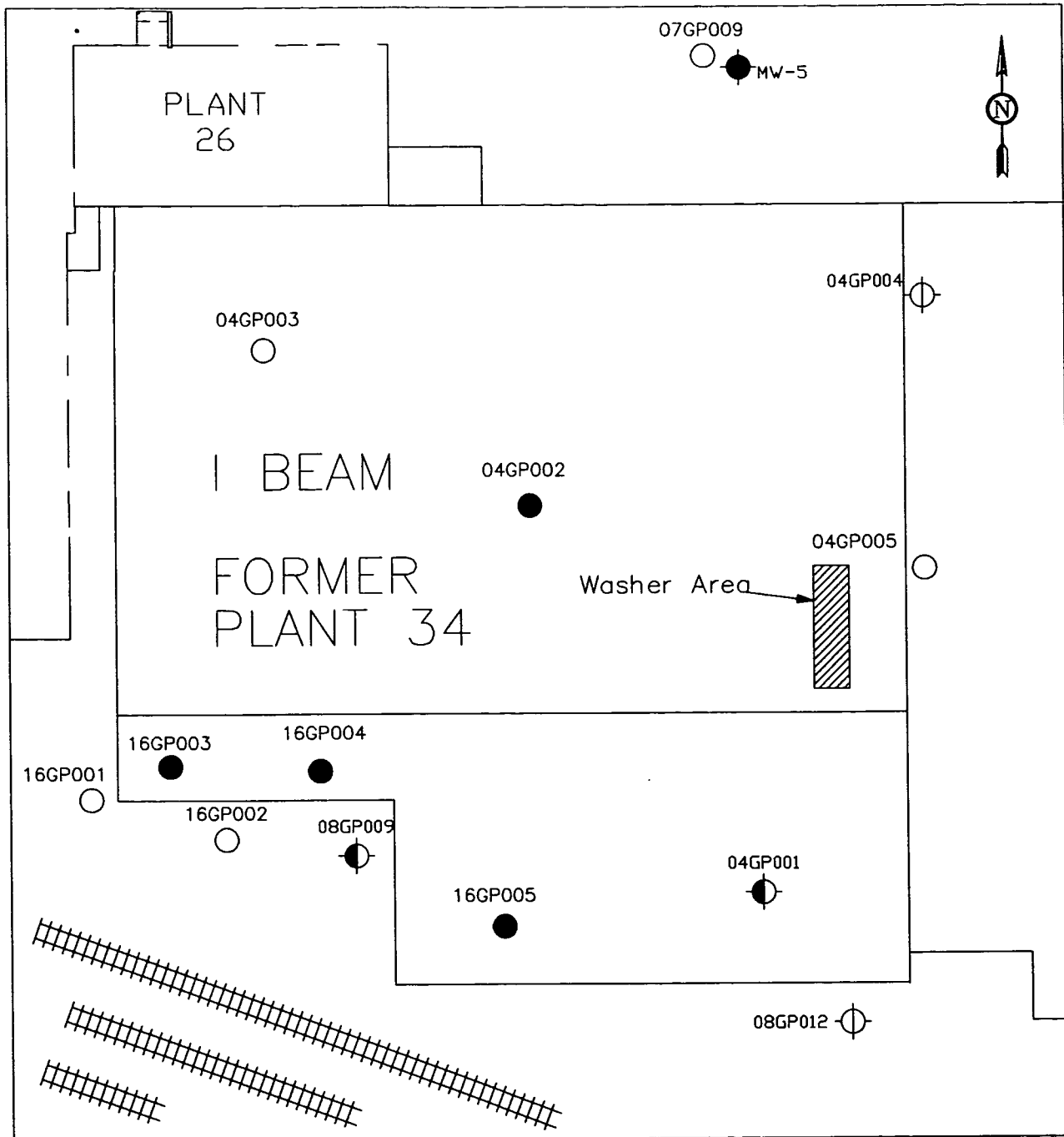


FIGURE 3
I-BEAM BUILDING
SAMPLING LOCATIONS
VOLUNTARY SITE INVESTIGATION
ALLIEDSIGNAL INDUSTRIAL COMPLEX
SOUTH BEND, INDIANA
 Harding Lawson Associates



Legend

Red Coloring Indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Soils

Blue Coloring Indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Groundwater

○ Geoprobe Soil Sampling Location

⊕ Geoprobe Soil and Groundwater Sampling Location

⊙ Water Table Monitoring Well

SCALE

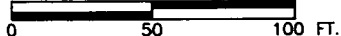
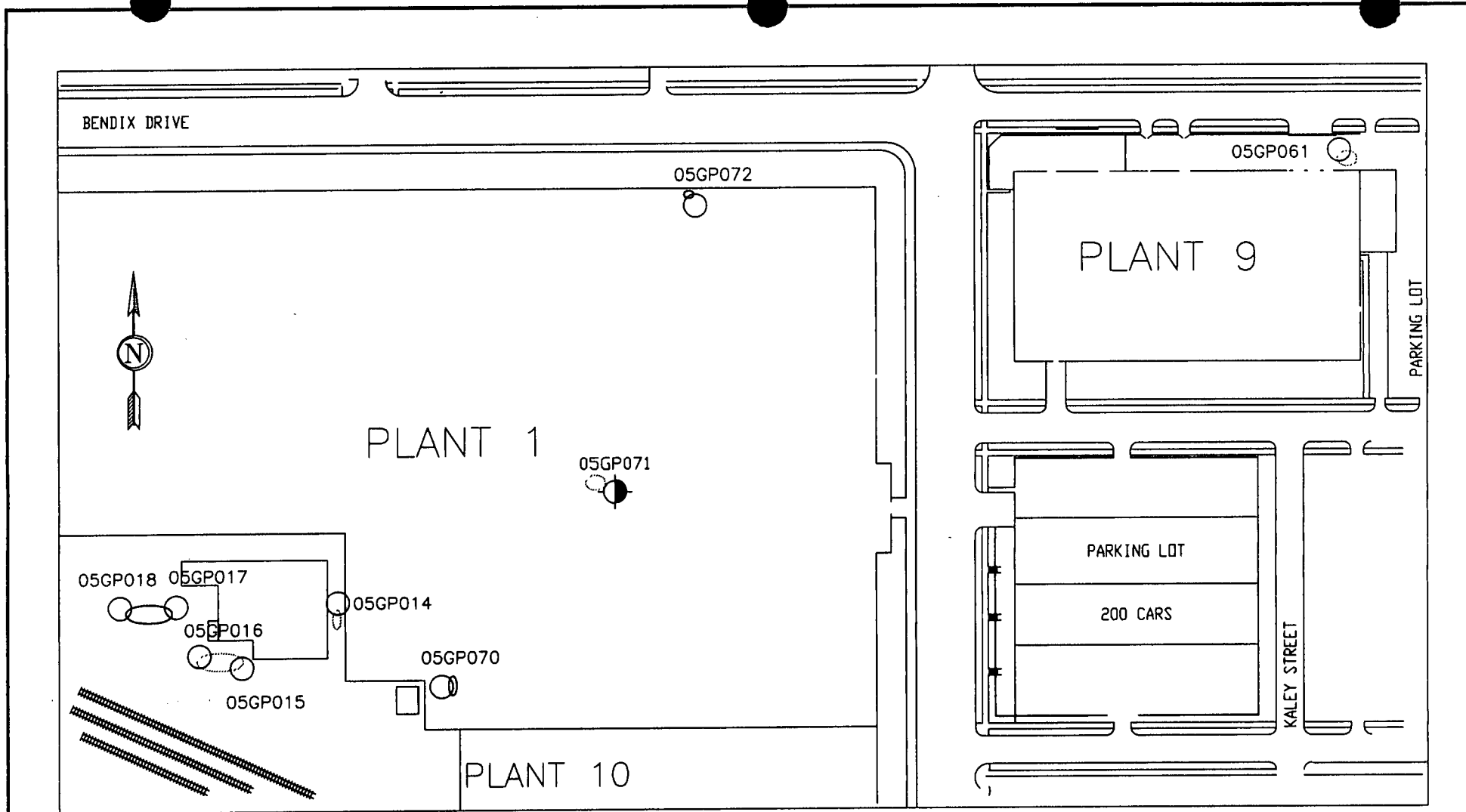


FIGURE 4
I-BEAM BUILDING
SAMPLING LOCATIONS
VOLUNTARY SITE INVESTIGATION
ALLIEDSIGNAL INDUSTRIAL COMPLEX
SOUTH BEND, INDIANA
 Harding Lawson Associates



Legend

Red Coloring Indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Soils

Blue Coloring indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Groundwater

○ Former UST Location

○ Geoprobe Soil Sampling Location

⊕ Geoprobe Soil and Groundwater Sampling Location

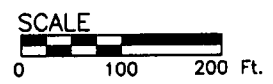
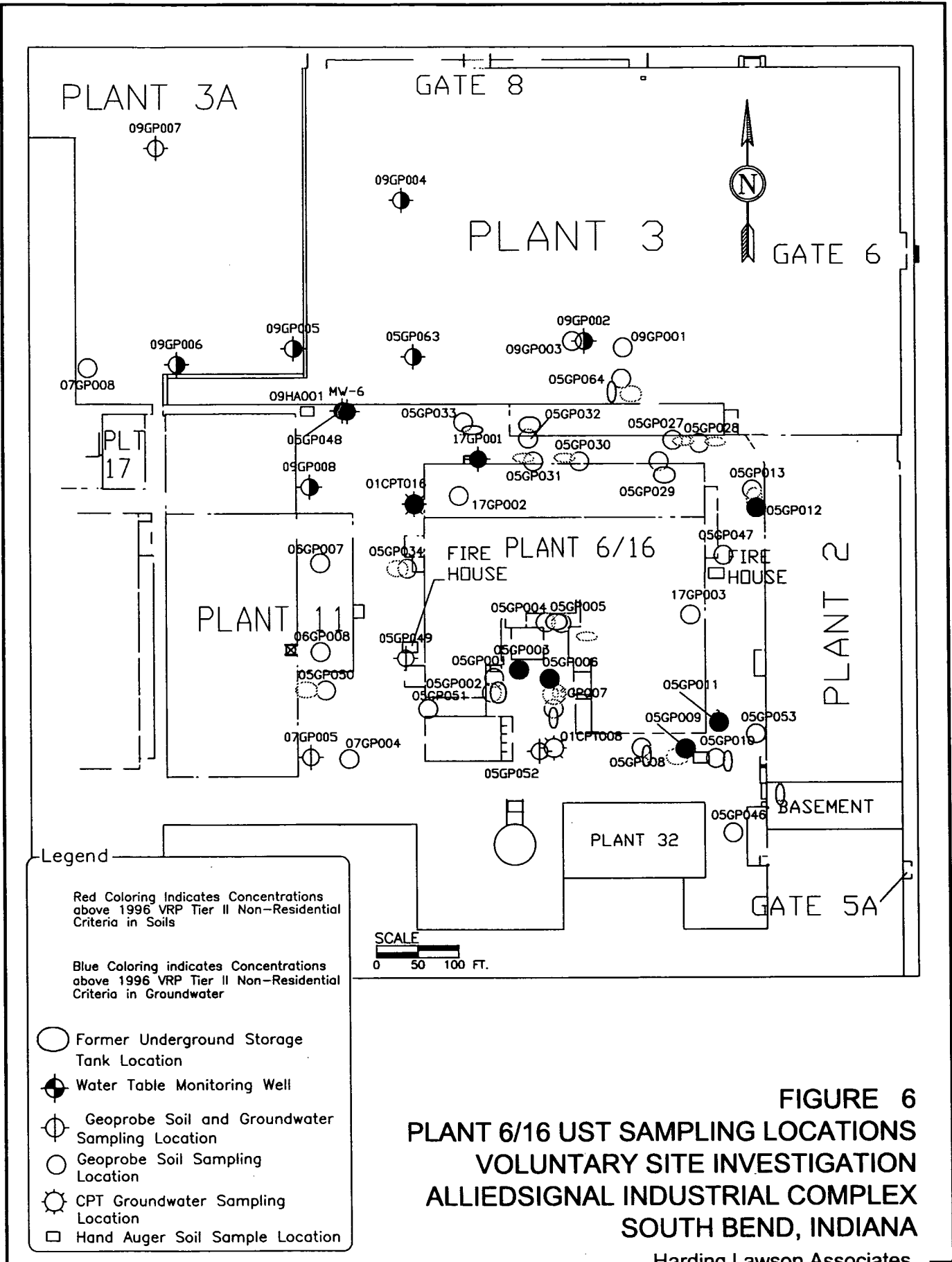
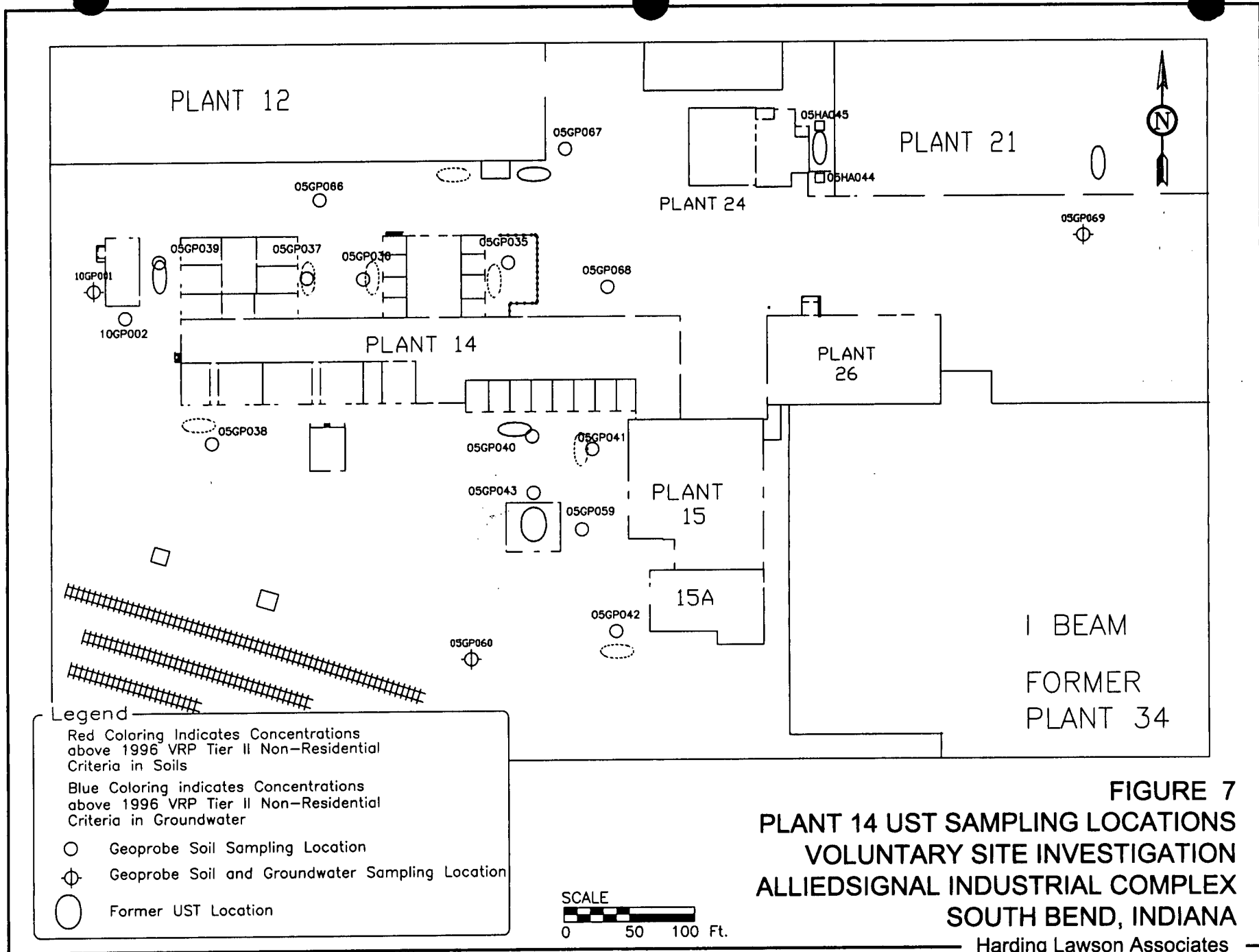


FIGURE 5
PLANT 1/9 UST SAMPLING LOCATIONS
VOLUNTARY SITE INVESTIGATION
ALLIEDSIGNAL INDUSTRIAL COMPLEX
SOUTH BEND, INDIANA

Harding Lawson Associates





Legend

Red Coloring Indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Soils

Blue Coloring indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Groundwater

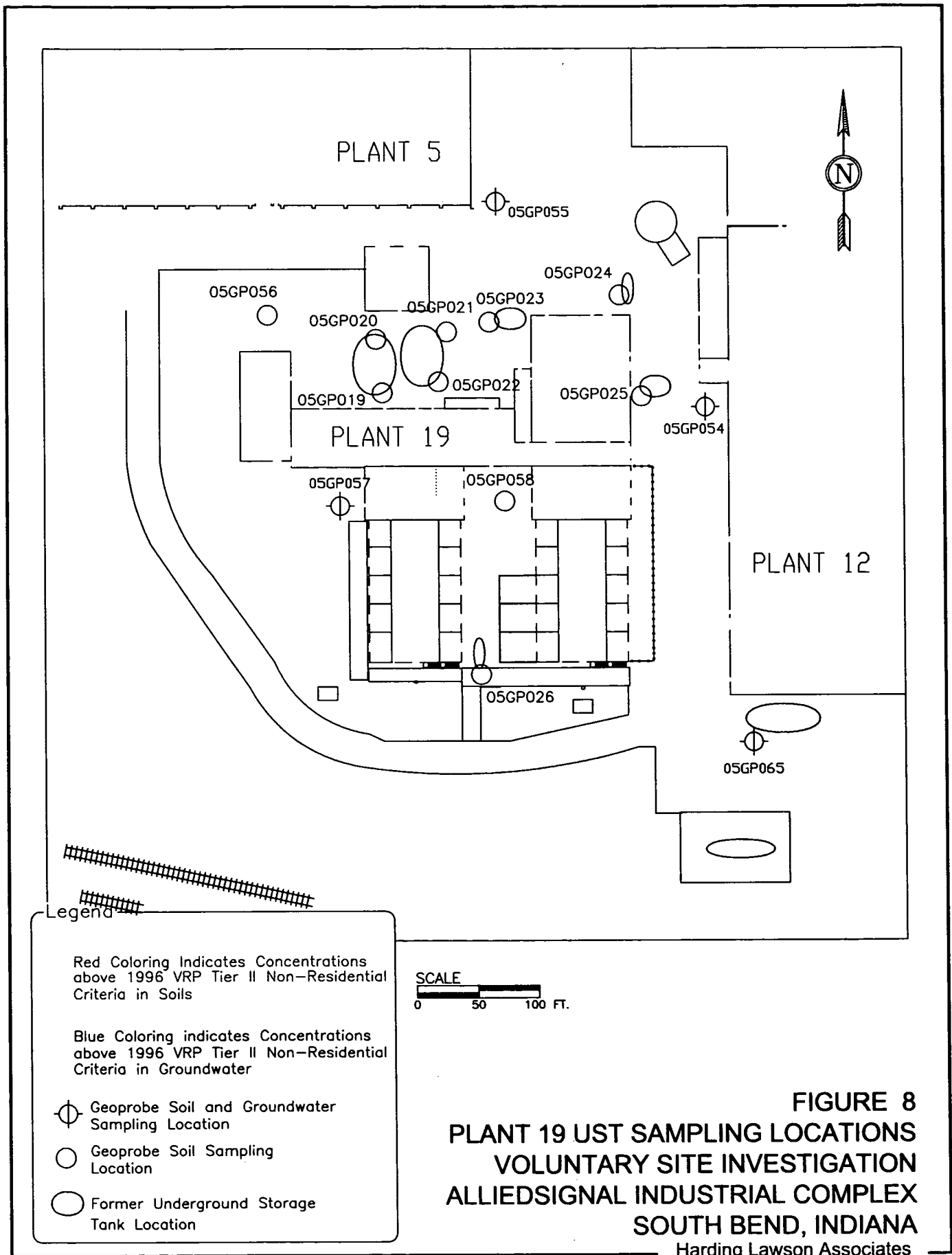
○ Geoprobe Soil Sampling Location

⊕ Geoprobe Soil and Groundwater Sampling Location

○ Former UST Location

FIGURE 7
PLANT 14 UST SAMPLING LOCATIONS
VOLUNTARY SITE INVESTIGATION
ALLIEDSIGNAL INDUSTRIAL COMPLEX
SOUTH BEND, INDIANA

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Legend

Red Coloring Indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Soils

Blue Coloring indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Groundwater

⊕ Geoprobe Soil and Groundwater Sampling Location

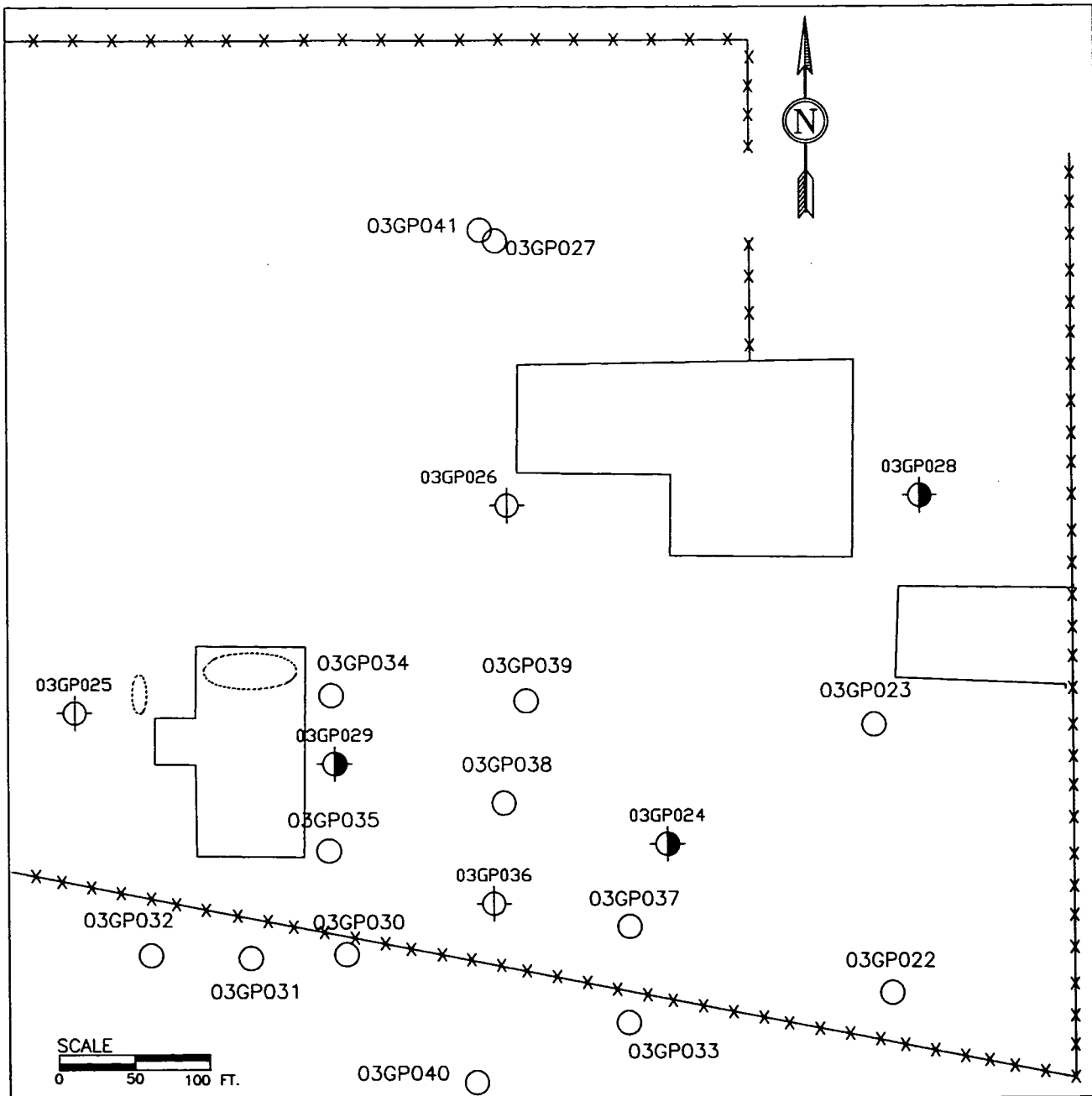
○ Geoprobe Soil Sampling Location

▨ Former Underground Storage Tank Location

SCALE

0 50 100 FT.

FIGURE 8
PLANT 19 UST SAMPLING LOCATIONS
VOLUNTARY SITE INVESTIGATION
ALLIEDSIGNAL INDUSTRIAL COMPLEX
SOUTH BEND, INDIANA
 Harding Lawson Associates



Legend

Red Coloring Indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Soils

Blue Coloring indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Groundwater

⊕ Geoprobe Soil and Groundwater Sampling Location

○ Geoprobe Soil Sampling Location

○ Former Underground Storage Tank Location

**FIGURE 9
TRANSPORTATION AREA
UST SAMPLING LOCATIONS
VOLUNTARY SITE INVESTIGATION
ALLIEDSIGNAL INDUSTRIAL COMPLEX
SOUTH BEND, INDIANA**

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PLANT 11

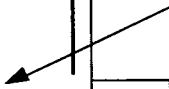
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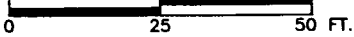
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HEAT TREAT
OPERATIONS



SCALE



Legend

Red Coloring Indicates Concentrations
above 1996 VRP Tier II Non-Residential
Criteria in Soils

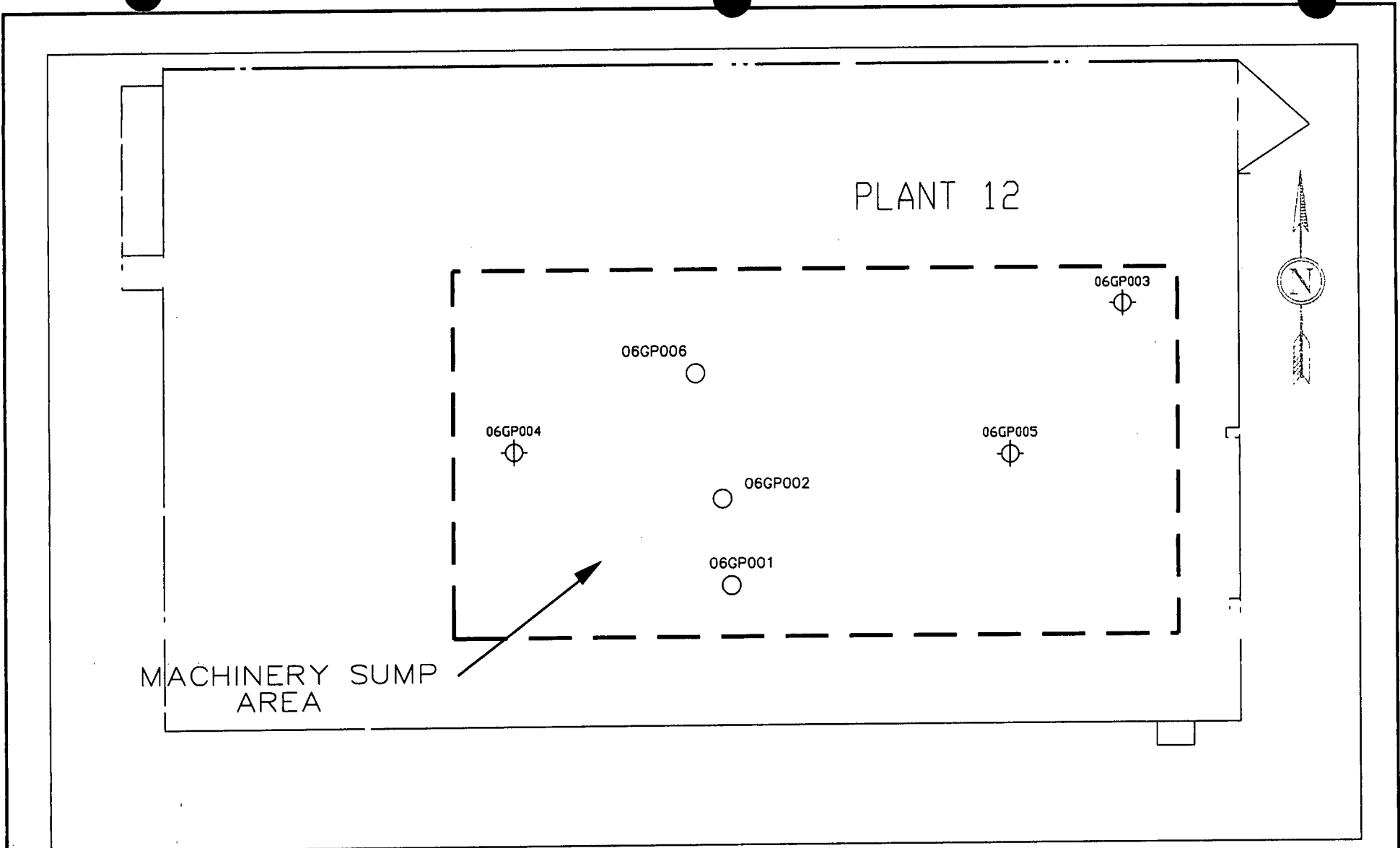
Blue Coloring indicates Concentrations
above 1996 VPR Tier II Non-Residential
Criteria in Groundwater



Geoprobe Soil Sampling
Location

FIGURE 10
PLANT 11
HEAT TREATING SAMPLING LOCATIONS
VOLUNTARY SITE INVESTIGATION
ALLIEDSIGNAL INDUSTRIAL COMPLEX
SOUTH BEND, INDIANA

Harding Lawson Associates



Legend

Red Coloring Indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Soils

Blue Coloring indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Groundwater

- Geoprobe Soil Sampling Location
- ⊕ Geoprobe Soil and Groundwater Sampling Location

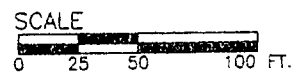
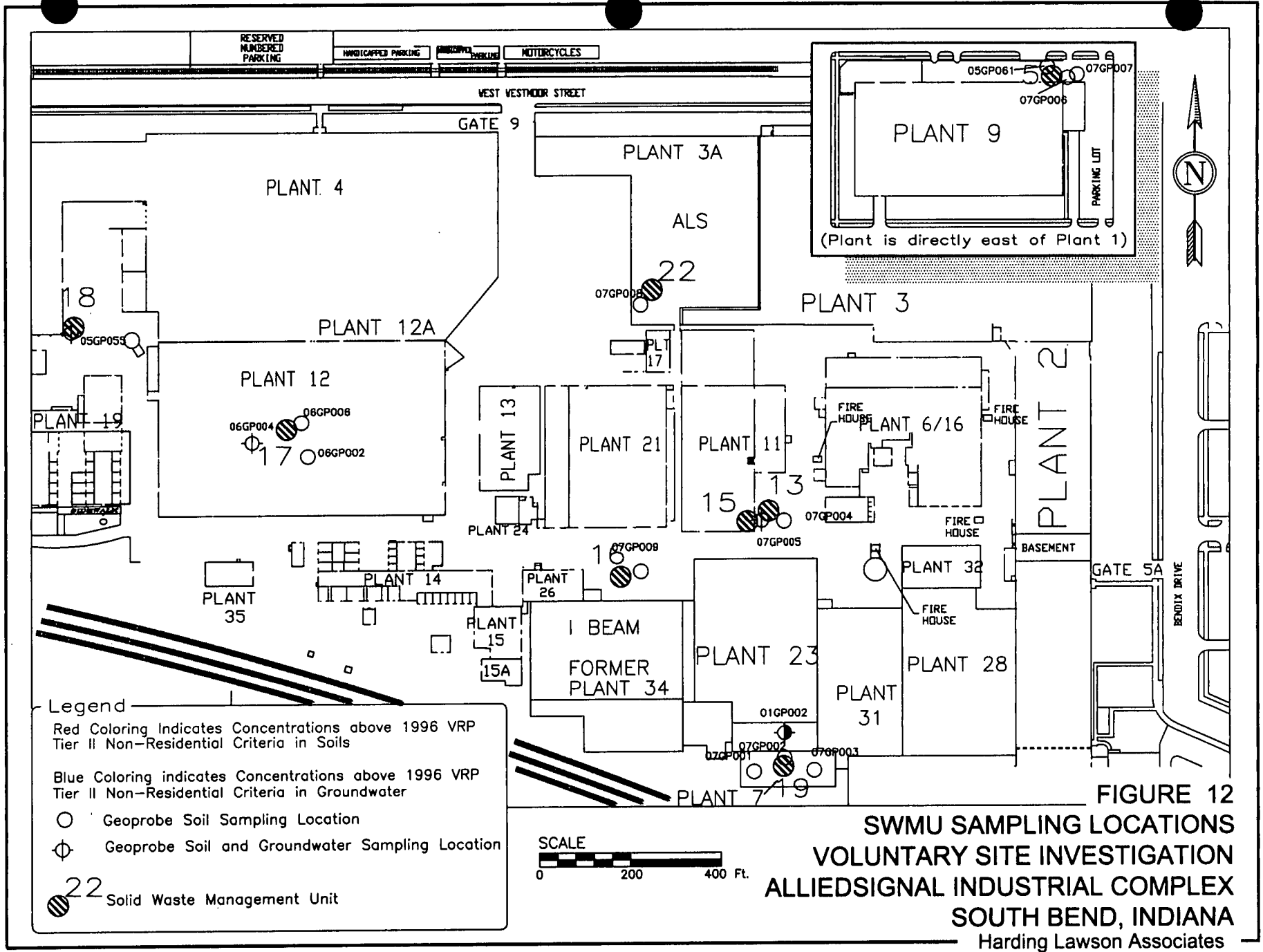
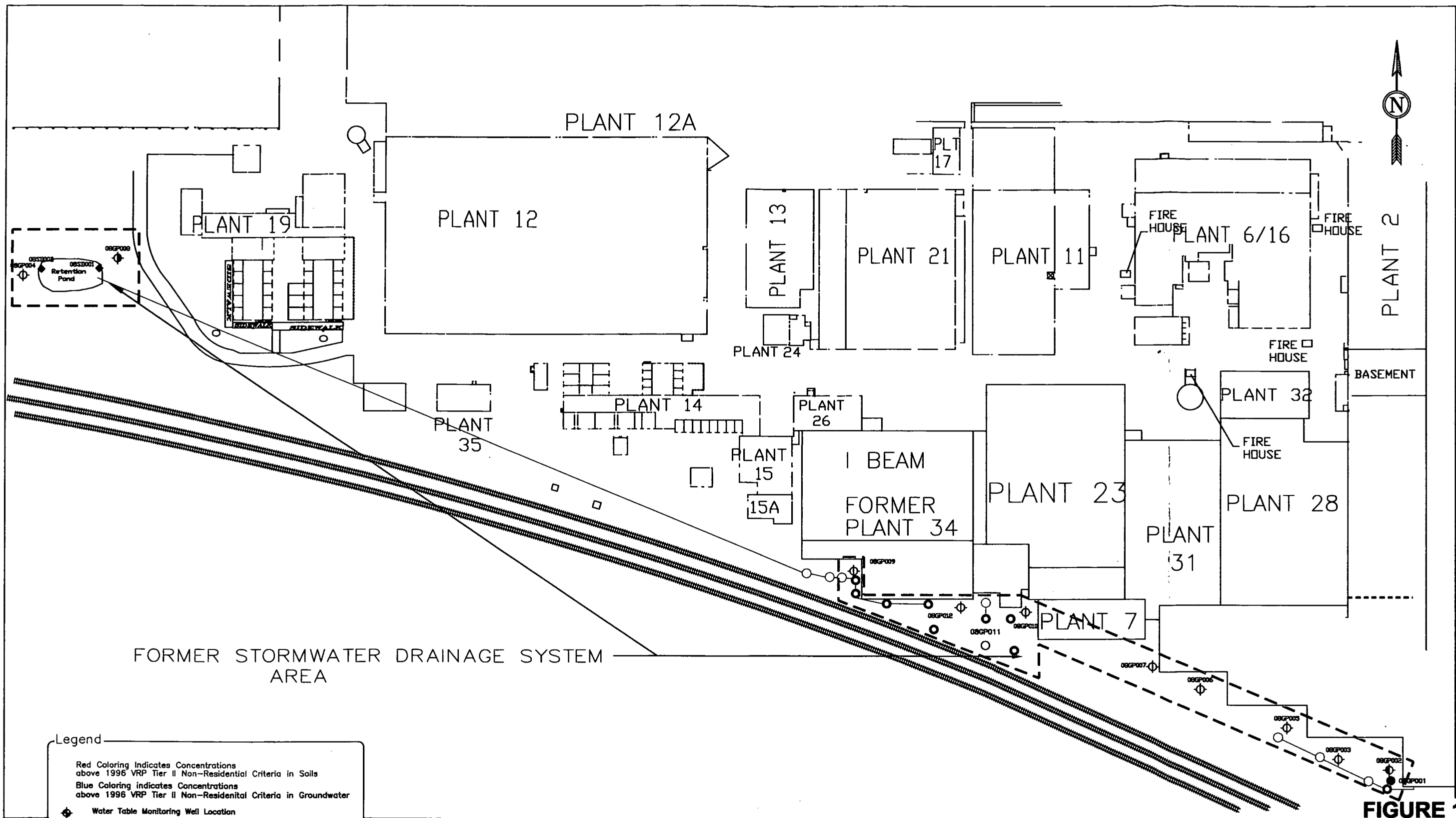


FIGURE 11
PLANT 12 MACHINERY SUMPS SAMPLING LOCATIONS
VOLUNTARY SITE INVESTIGATION
ALLIEDSIGNAL INDUSTRIAL COMPLEX
SOUTH BEND, INDIANA

Harding Lawson Associates

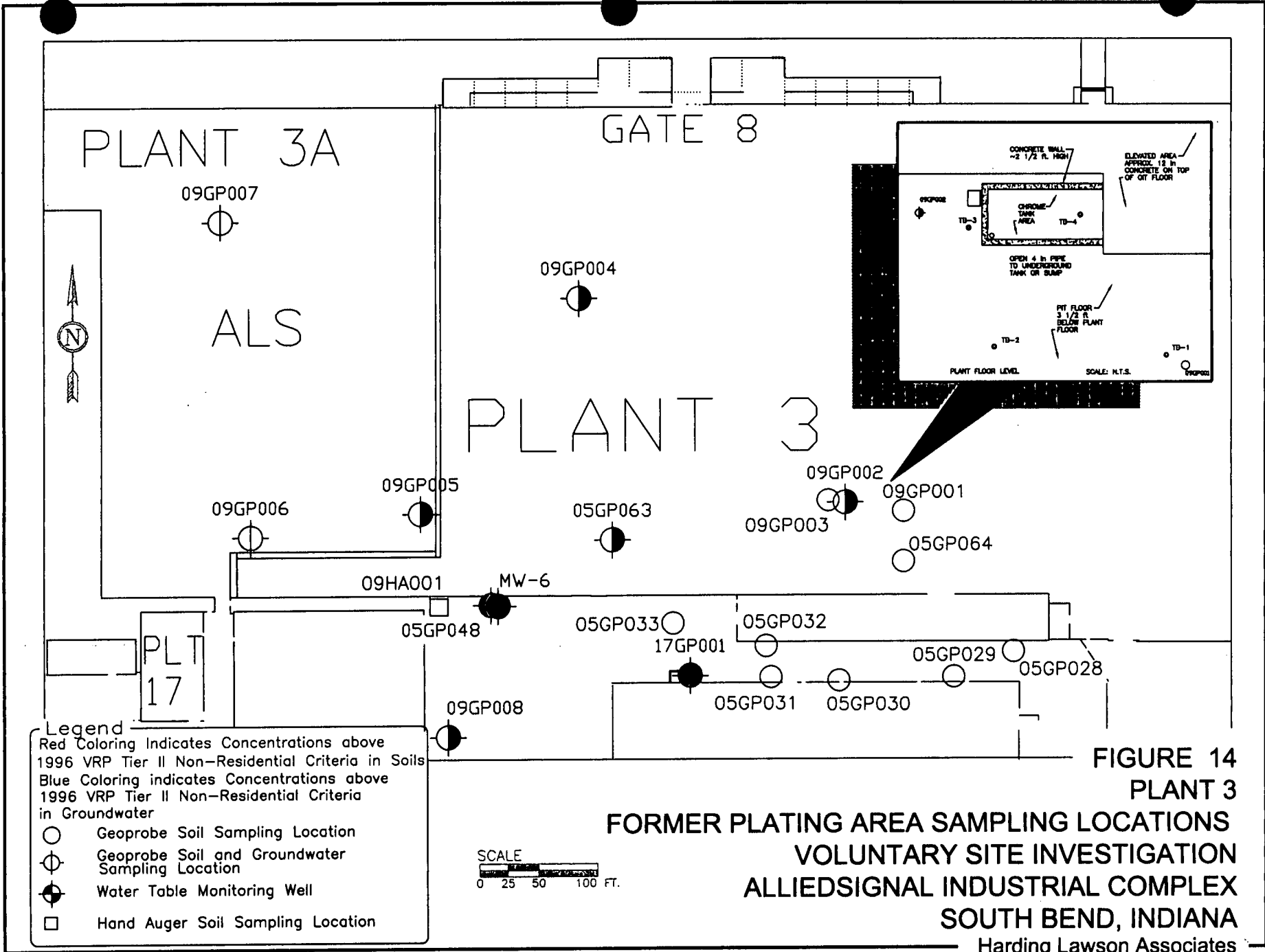


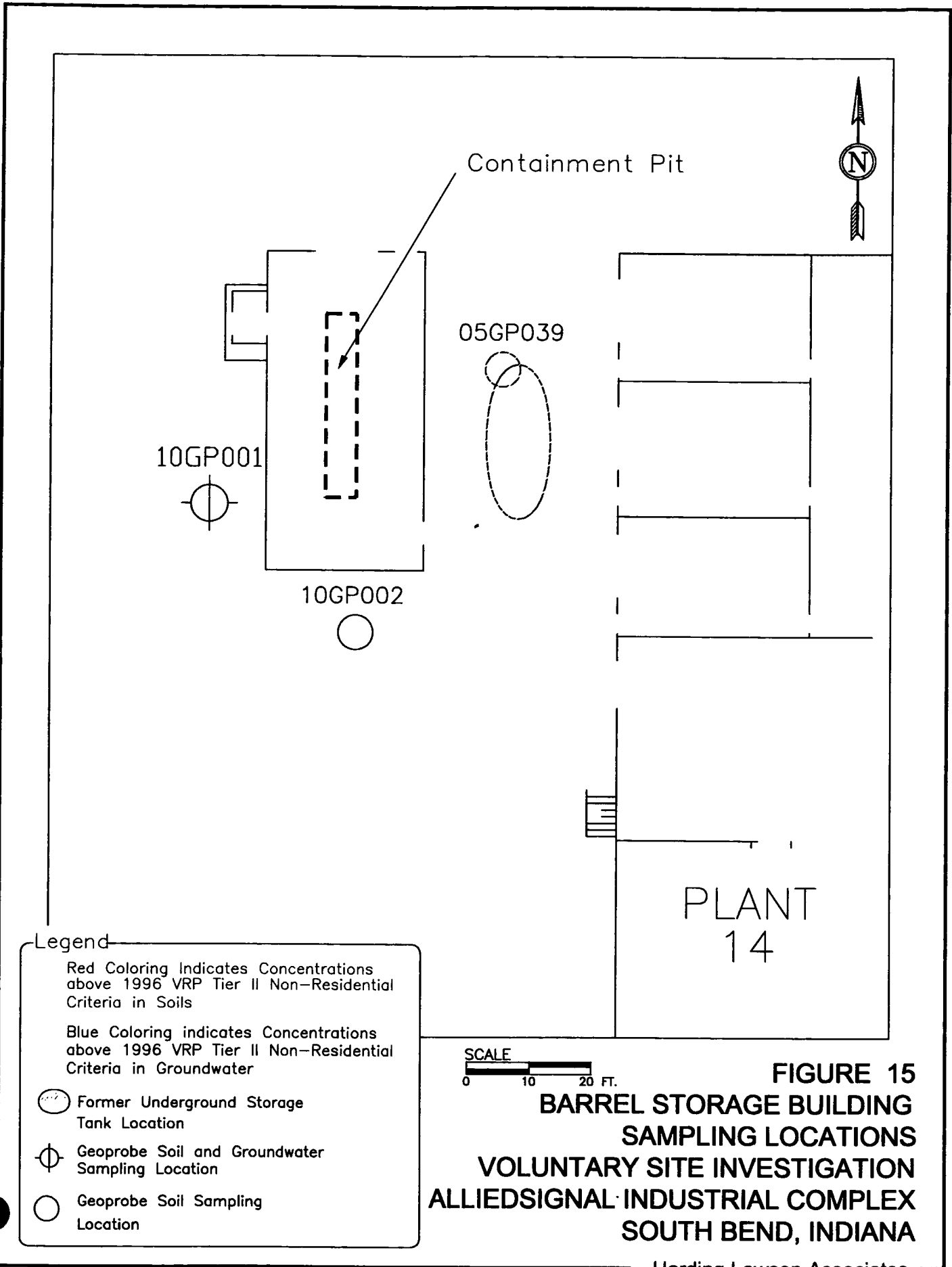


Legend

- Red Coloring Indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Soils
- Blue Coloring indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Groundwater
- ◆ Water Table Monitoring Well Location
- ⊕ Geoprobe Groundwater and Soil Sampling Location
- Geoprobe Soil Sampling Location
- ◆ Sediment Sampling Location
- 800 Gallon Catch Basin
- 1800 Gallon Drywell

FIGURE 13
FORMER STORMWATER DRAINAGE SYSTEM SAMPLING LOCATIONS
VOLUNTARY SITE INVESTIGATION
ALLIEDSIGNAL INDUSTRIAL COMPLEX
SOUTH BEND, INDIANA
 Harding Lawson Associates








Legend

Red Coloring Indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Soils

Blue Coloring indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Groundwater

-  Former Underground Storage Tank Location
-  Geoprobe Soil and Groundwater Sampling Location
-  Geoprobe Soil Sampling Location

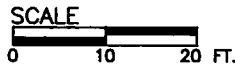
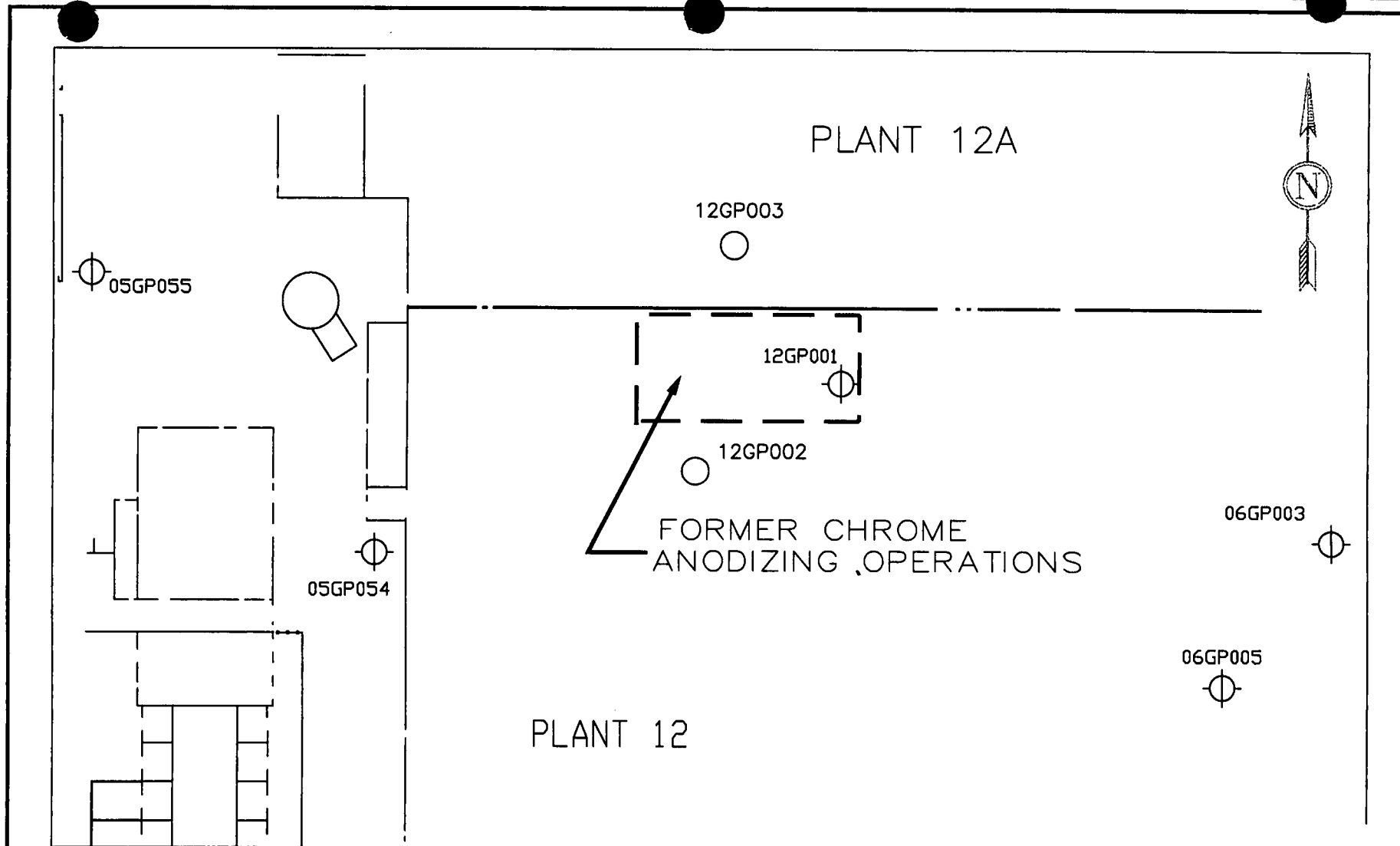


FIGURE 15
BARREL STORAGE BUILDING
SAMPLING LOCATIONS
VOLUNTARY SITE INVESTIGATION
ALLIEDSIGNAL INDUSTRIAL COMPLEX
SOUTH BEND, INDIANA

Harding Lawson Associates



Legend

Red Coloring Indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Soils

Blue Coloring indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Groundwater

○ Geoprobe Soil Sampling Location

⊕ Geoprobe Soil and Groundwater Sampling Location

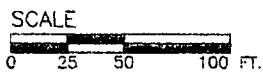


FIGURE 16

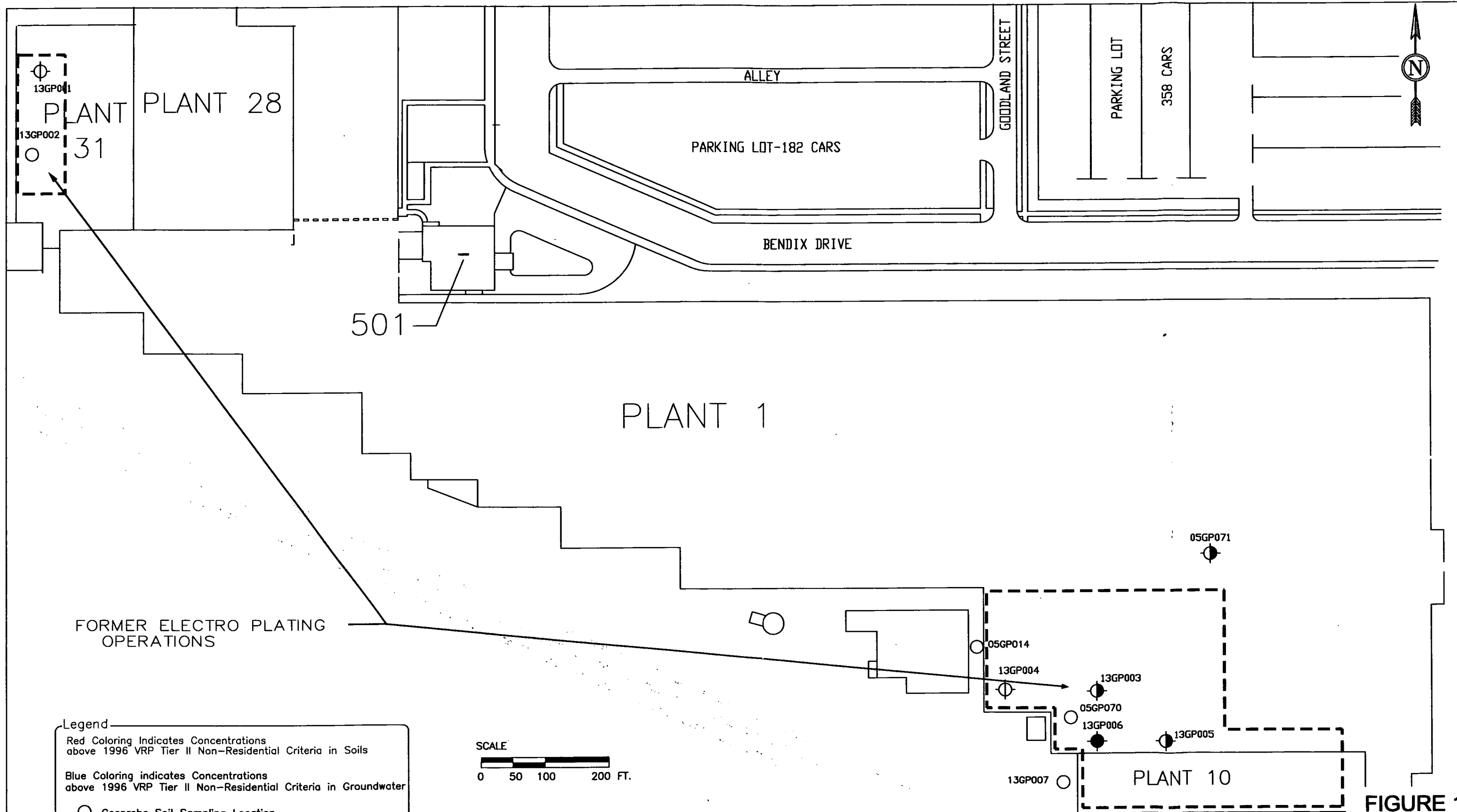
PLANT 12 - FORMER CHROME ANODIZING OPERATIONS SAMPLING LOCATIONS

VOLUNTARY SITE INVESTIGATION

ALLIEDSIGNAL INDUSTRIAL COMPLEX

SOUTH BEND, INDIANA

Harding Lawson Associates



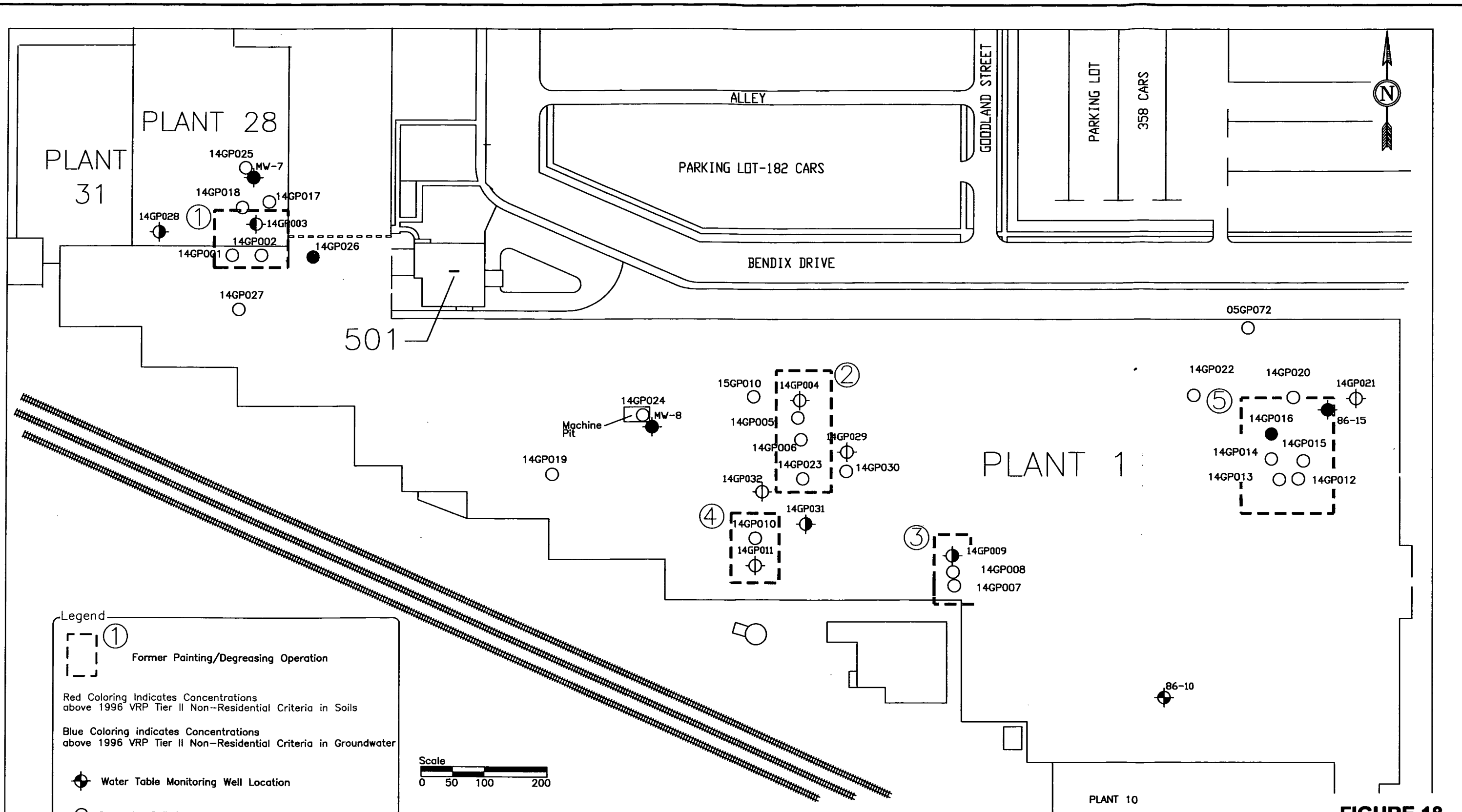
FORMER ELECTRO PLATING OPERATIONS

Legend

- Red Coloring Indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Soils
- Blue Coloring indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Groundwater
- Geoprobe Soil Sampling Location
- ⊕ Geoprobe Soil and Groundwater Sampling Location



FIGURE 17
PLANT 1 - FORMER ELECTRO PLATING OPERATIONS
VOLUNTARY SITE INVESTIGATION
ALLIEDSIGNAL INDUSTRIAL COMPLEX
SOUTH BEND, INDIANA
 Harding Lawson Associates



Legend

① Former Painting/Degreasing Operation

Red Coloring Indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Soils

Blue Coloring indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Groundwater

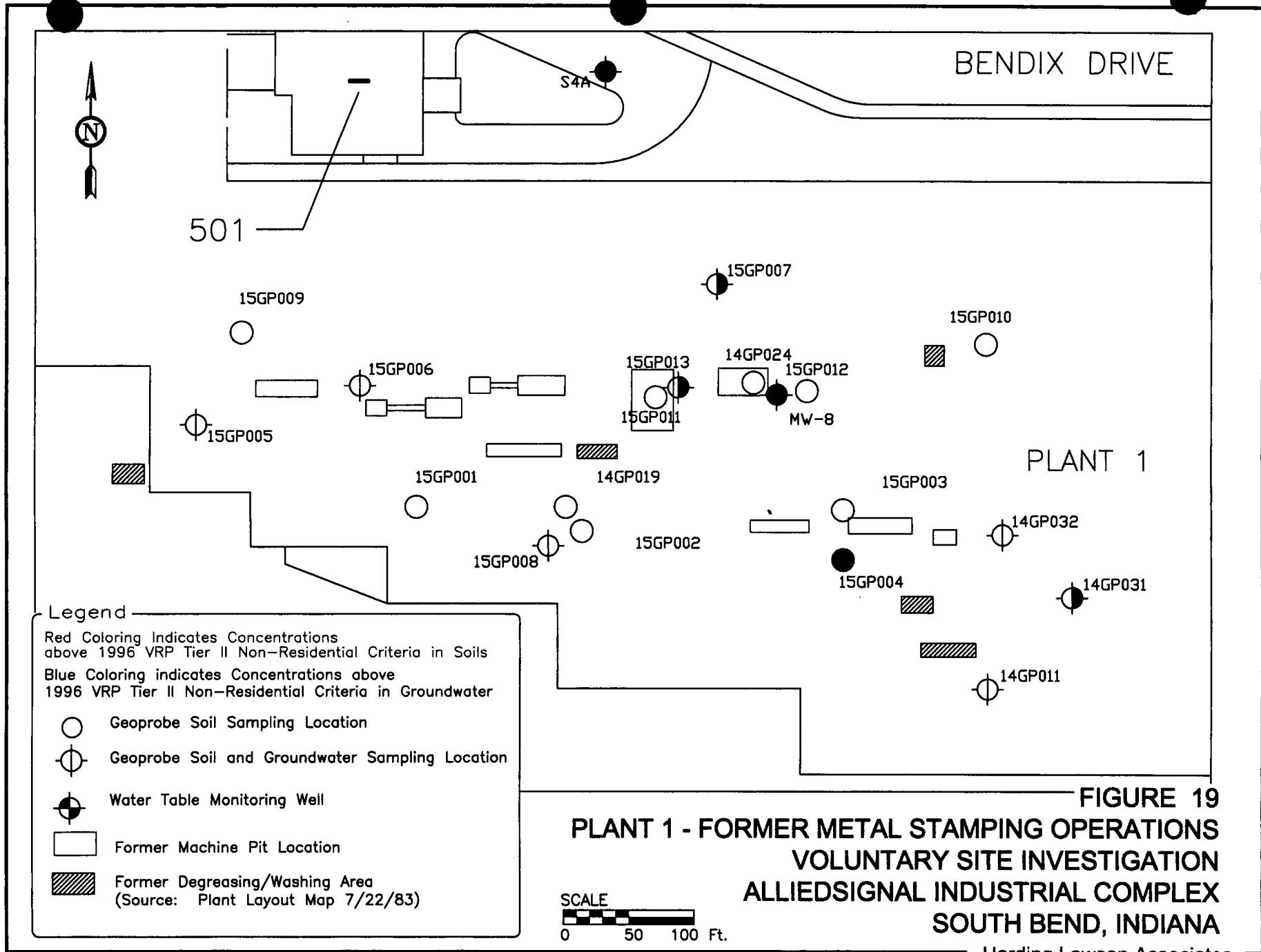
⊕ Water Table Monitoring Well Location

○ Geoprobe Soil Sampling Location

⊕ Geoprobe Soil and Groundwater Sampling Location



FIGURE 18
FORMER PAINTING /DEGREASING OPERATIONS
VOLUNTARY SITE INVESTIGATION
ALLIEDSIGNAL INDUSTRIAL COMPLEX
SOUTH BEND, INDIANA
 Harding Lawson Associates

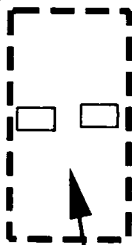




PLANT
21

PLANT 11

18HA003




18HA002

ELECTROPLATING AREA

Legend

Red Coloring Indicates Concentrations
1996 VRP Tier II Non-Residential
Criteria in Soils

Blue Coloring indicates Concentrations
1996 VRP Tier II Non-Residential
in Groundwater

 Hand Auger Soil Sampling
Location

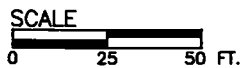
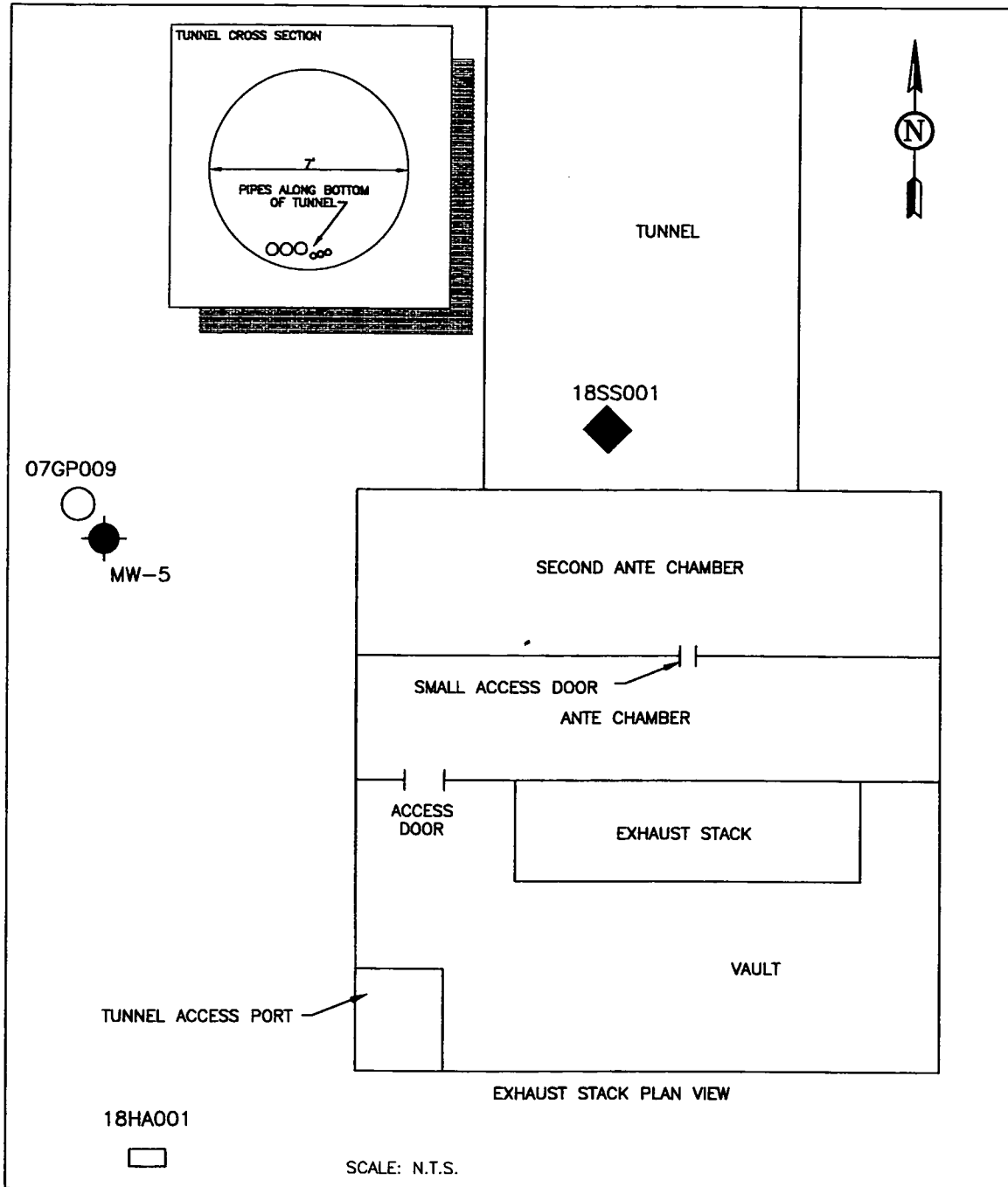


FIGURE 20
PLANT 11 - ELECTROPLATING OPERATIONS
VOLUNTARY SITE INVESTIGATION
ALLIEDSIGNAL INDUSTRIAL COMPLEX
SOUTH BEND, INDIANA

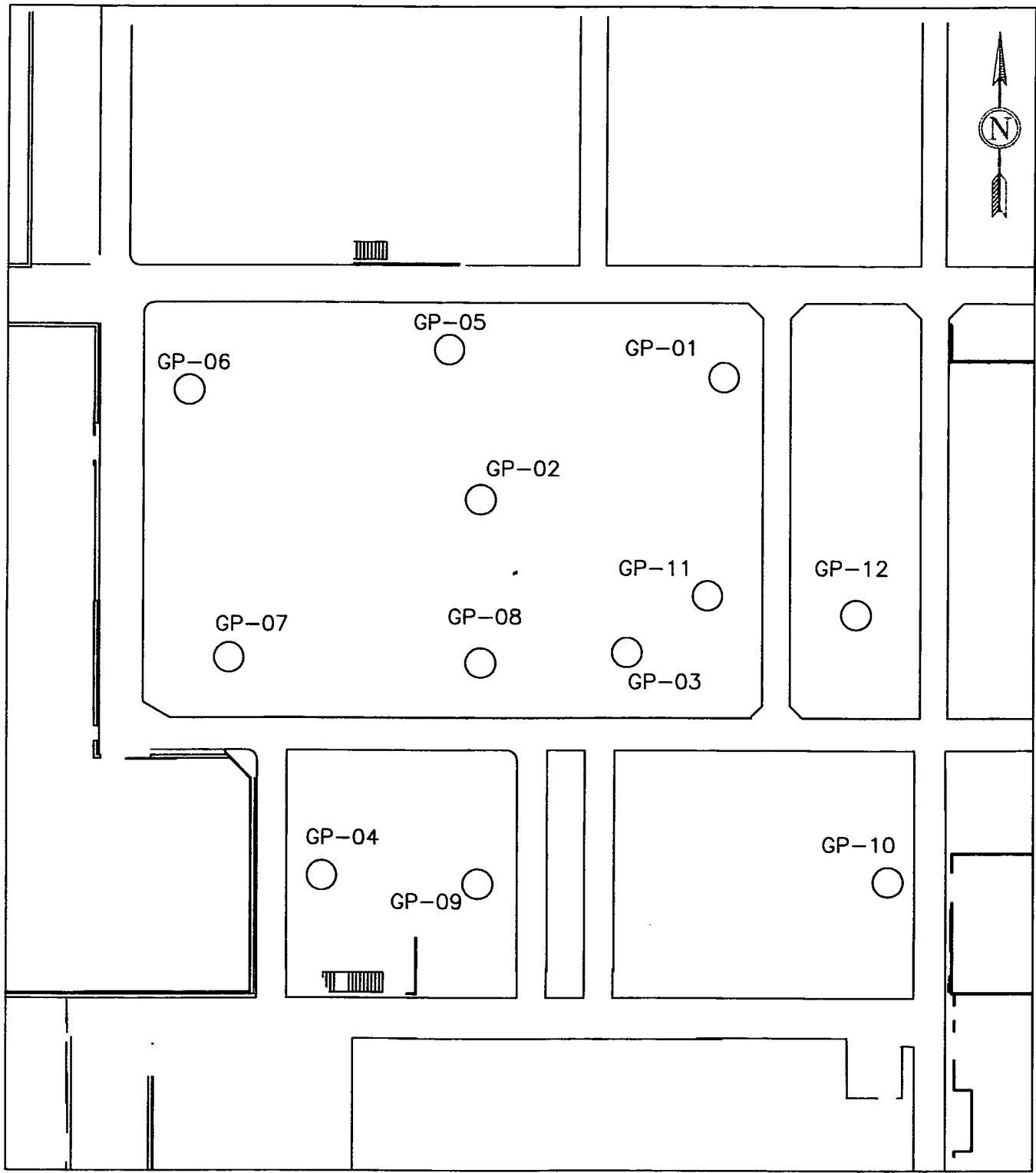
Harding Lawson Associates



- Legend
- Red Coloring Indicates Concentrations 1996 VRP Tier II Non-Residential Criteria in Soils
 - Blue Coloring indicates Concentrations 1996 VRP Tier II Non-Residential Criteria in Groundwater
 - ⊕ Water Table Monitoring Well
 - Geoprobe Soil Sampling Location
 - ◇ Scrape Sample Location
 - Hand Auger Soil Sampling Location

FIGURE 21
CHROMIUM EXHAUST SYSTEM
VOLUNTARY SITE INVESTIGATION
ALLIEDSIGNAL INDUSTRIAL COMPLEX
SOUTH BEND, INDIANA

Harding Lawson Associates



Legend

○ Geoprobe Boring

Red Coloring Indicates Concentrations above 1996 VRP Non-Residential Criteria for Soils

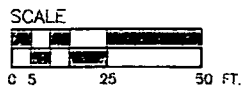
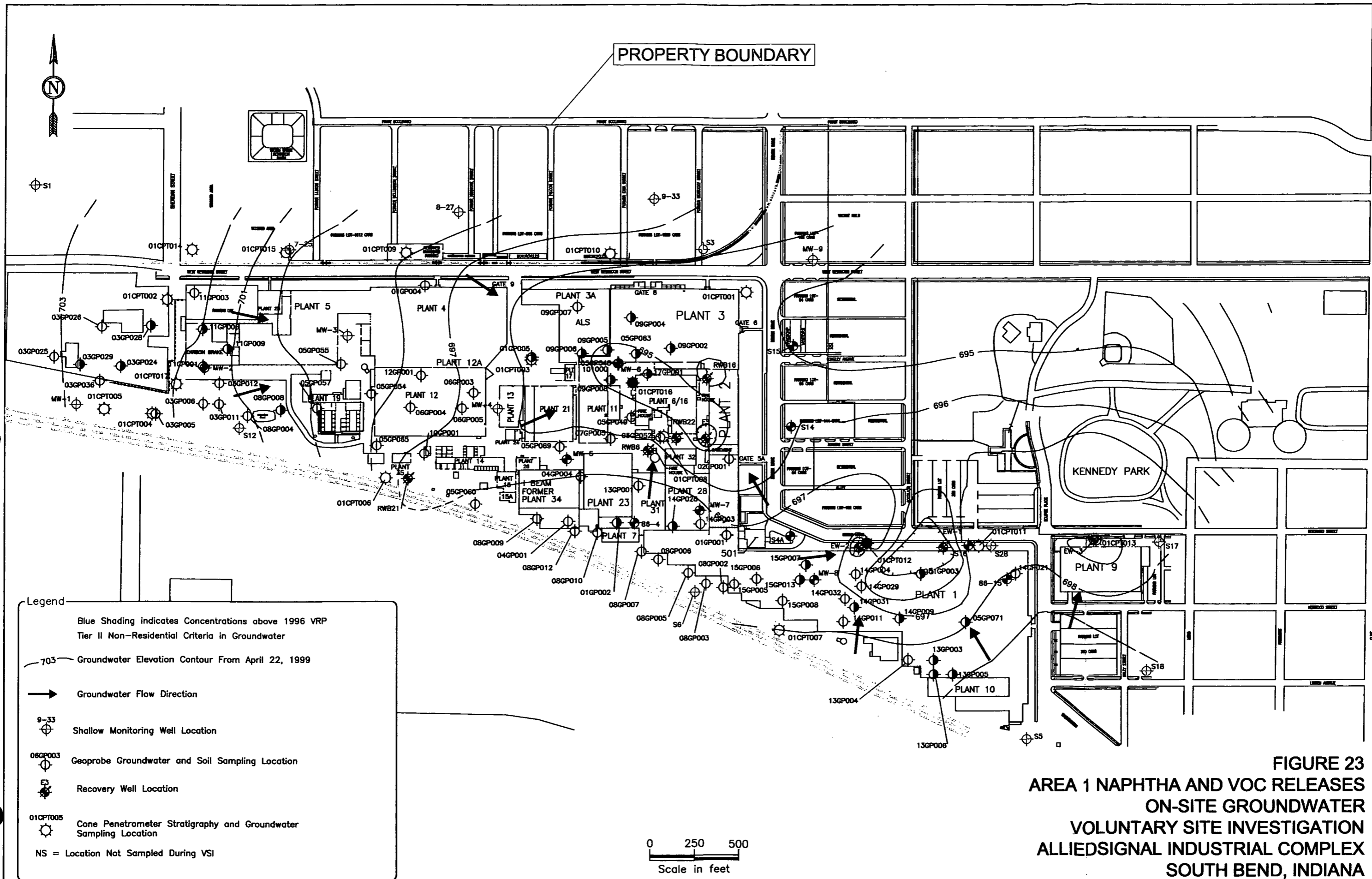


FIGURE 22
PLANT 4 - TORQUE TUBE AREA
VOLUNTARY SITE INVESTIGATION
ALLIEDSIGNAL INDUSTRIAL COMPLEX
SOUTH BEND, INDIANA



PROPERTY BOUNDARY

Legend

- Blue Shading indicates Concentrations above 1996 VRP Tier II Non-Residential Criteria in Groundwater
- 703 Groundwater Elevation Contour From April 22, 1999
- Groundwater Flow Direction
- 9-33 Shallow Monitoring Well Location
- 08GP003 Geoprobe Groundwater and Soil Sampling Location
- EW Recovery Well Location
- 01CPT005 Cone Penetrometer Stratigraphy and Groundwater Sampling Location
- NS = Location Not Sampled During VSI

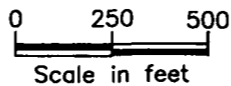
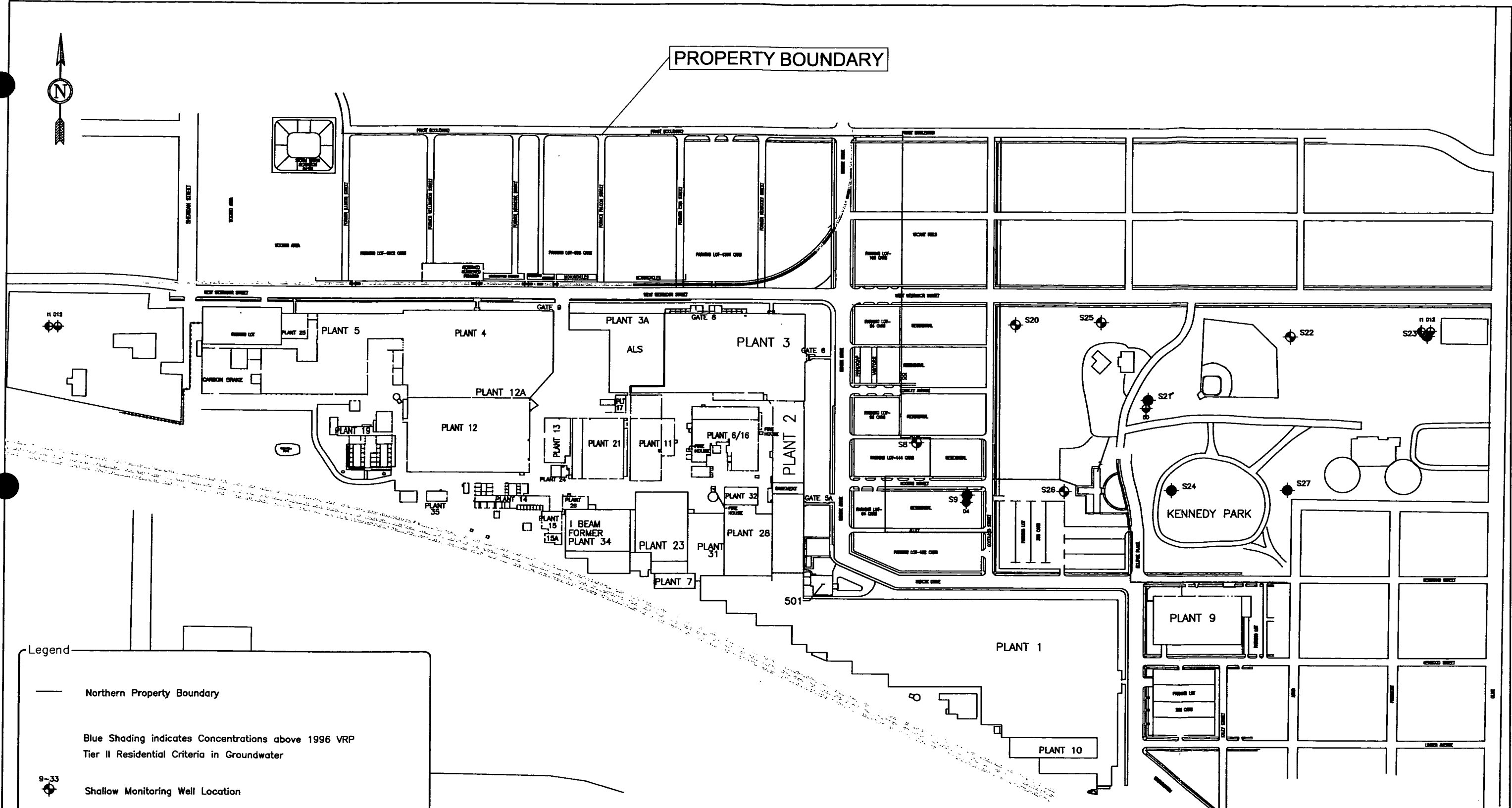


FIGURE 23
AREA 1 NAPHTHA AND VOC RELEASES
ON-SITE GROUNDWATER
VOLUNTARY SITE INVESTIGATION
ALLIEDSIGNAL INDUSTRIAL COMPLEX
SOUTH BEND, INDIANA

P:\allied\08822-13\3221331.DWG 9/30/99 SDM



Legend

- Northern Property Boundary
- Blue Shading indicates Concentrations above 1996 VRP Tier II Residential Criteria in Groundwater
- 9-33 Shallow Monitoring Well Location
- H Intermediate Monitoring Well Location
- D12 Deep Monitoring Well Location

0 250 500
Scale in feet

FIGURE 24
AREA 1 NAPHTHA AND VOC RELEASES
OFF-SITE GROUNDWATER
VOLUNTARY SITE INVESTIGATION
ALLIEDSIGNAL INDUSTRIAL COMPLEX
SOUTH BEND, INDIANA

P:\allied\08822-13\98221332.DWG 8/30/98 SDM

DEVELOPMENT OF TIER II CLEANUP GOALS



TECHNICAL MEMORANDUM

SUBJECT: Development of Tier II Cleanup Goals for Non-Residential Subsurface Soil, Non-Residential Groundwater, and Residential Groundwater

PROJECT: AlliedSignal Industrial Complex, South Bend, Indiana

PREPARED BY: Jay Peters and Don Walsh, Harding Lawson Associates (HLA)

DATE: October 12, 1999

INTRODUCTION

The AlliedSignal Industrial Complex in South Bend, Indiana is completing environmental activities under the Indiana Department of Environmental Management's (IDEM's) Voluntary Remediation Program (VRP). As one of the first steps in the VRP process, soil and groundwater analytical results are being compared to the Tier II cleanup goals published in the IDEM VRP Resource Guide (IDEM, 1996). Criteria are not published in the Resource Guide for certain constituents detected at the site. This technical memorandum documents the calculation of Tier II cleanup goals for those constituents where criteria are not published in the Resource Guide.

METHODS

Tier II cleanup goals were developed for non-residential subsurface soil, non-residential groundwater, and residential groundwater using the algorithms and default values presented in the IDEM VRP Resource Guide. The methods used to calculate the cleanup goals are discussed below.

Tier II Cleanup Goals for Non-Residential Subsurface Soil

In accordance with IDEM (1996) guidance, the Tier II cleanup goals for non-residential subsurface soil are based on the lowest of the following values:

- Health-based value for direct soil contact; protective for cancerous effects at an excess lifetime cancer risk of 1 in 100,000
- Health-based value for direct soil contact; protective for non-cancerous effects at a hazard index of 1
- Leaching-based value; protective for groundwater quality consistent with non-residential groundwater
- 1,000 mg/kg for VOCs



TECHNICAL MEMORANDUM

- 10,000 mg/kg for SVOCs

As shown in Table 1, health-based Tier II cleanup goals were calculated for five VOCs, eight SVOCs, two PCB congeners, chromium, and lead.

The health-based values were calculated using IDEM default inputs and algorithms for non-residential subsurface soil (IDEM, 1996). The values are based on the assumption that a construction or excavation worker contacts the soil 5 days per week, 35 weeks per year, over a two-year period. The exposure routes included in the cleanup goals development are incidental soil ingestion, dermal contact, particulate inhalation, and volatile inhalation. The chemical-specific parameters required for calculation of cleanup goals included dose-response values and volatilization factors (Table 1).

Dose-response values include cancer slope factors and non-cancer reference doses. In accordance with IDEM guidance (IDEM, 1996), dose-response values were obtained from the most recent update of the USEPA Integrated Risk Information System (IRIS; USEPA, 1999). When values were not available in IRIS, values published in the USEPA Health Effects Assessment Summary Tables (HEAST; USEPA, 1997) were used. Provisional dose-response values published by the National Center for Environmental Assessment (NCEA) were used when values were not available in IRIS or HEAST.

As shown in Table 1, separate Tier II cleanup goals were calculated for chromium III and chromium VI, because chromium VI is considered more toxic than chromium III. Also, there are no published dose-response values for lead. As a result, the selected Tier II cleanup goal is based on the residential soil lead screening value published by USEPA's Office of Solid Waste and Emergency Response (OSWER; USEPA, 1994).

Volatilization factors for volatile chemicals were calculated using the default parameters and algorithms published by IDEM (IDEM, 1996). Chemical-specific inputs for calculation of the volatilization factor included air diffusivity, Henry's law constant, and oil-water partition coefficient. Values for these parameters were obtained from the USEPA Soil Screening Level Guidance (USEPA, 1996). Volatilization factor calculations are presented in Table 2.



TECHNICAL MEMORANDUM

Per IDEM guidance (IDEM, 1996), leaching-based values were included in the selection of Tier II cleanup goals to consider soil concentrations that are protective of groundwater quality. Leaching-based values were calculated using the algorithms published in IDEM guidance (IDEM, 1996), and are documented in Table 3. Chemical-specific parameters required for the calculation included aqueous solubility and target groundwater concentration. Aqueous solubility values were obtained from the USEPA Soil Screening Level Guidance (USEPA, 1996). Because the leaching model used in the Tier II calculation is applicable to groundwater directly beneath the soil source, as opposed to groundwater at a distant downgradient point, the appropriate target groundwater concentration was the Tier II non-residential groundwater cleanup goal (see Table 4).

Tier II Cleanup Goals for Non-Residential Groundwater

In accordance with IDEM (1996) guidance, the Tier II cleanup goals for non-residential groundwater are based on the lowest of the following values:

- Health-based value for direct groundwater contact; protective for cancerous effects at an excess lifetime cancer risk of 1 in 100,000
- Health-based value for direct groundwater contact; protective for non-cancerous effects at a hazard index of 1

As shown in Table 4, health-based Tier II cleanup goals were calculated for 11 VOCs, 12 SVOCs, two PCB congeners, chromium, and lead.

The health-based values were calculated using IDEM default inputs and algorithms for non-residential groundwater (IDEM, 1996). These values are based on the assumption that a worker drinks the water 5 days per week, 50 weeks per year, over a 25-year period. For the AlliedSignal Industrial Complex, this is a very conservative assumption since groundwater is not used as a drinking water source or as an industrial water supply, and the site-closure strategy will include a groundwater use restriction.

The chemical-specific parameters required for calculation of groundwater health-based cleanup goals included dose-response values (Table 4). Dose-response values were obtained from the same sources used for development of Tier II soil values.



TECHNICAL MEMORANDUM

Tier II Cleanup Goals for Residential Groundwater

In accordance with IDEM (1996) guidance, the Tier II values for residential groundwater are based on the lowest of the following values:

- Health-based value for direct groundwater contact; protective for cancerous effects at an excess lifetime cancer risk of 1 in 100,000
- Health-based value for direct groundwater contact; protective for non-cancerous effects at a hazard index of 1
- If either of these health-based values was higher than the federal Maximum Contaminant Limit (MCL), the MCL was used as the Tier II cleanup goal.

As shown in Table 5, health-based Tier II cleanup goals were calculated for nine VOCs, five SVOCs, chromium, and lead.

The health-based values were calculated using IDEM default inputs and algorithms for residential groundwater (IDEM, 1996). These values are based on the assumption that a resident drinks the water and inhales volatile chemicals released from the water during bathing 7 days per week, 50 weeks per year, over a 30-year period. For the AlliedSignal Industrial Complex, this is a conservative assumption considering that off-site groundwater in the vicinity of the site is not used as a drinking water source (i.e., the area is serviced by municipal water supplies). Additionally, an existing St. Joseph County Health Department Well Drilling and Water Supply Systems Ordinance would likely prohibit the installation of water supply wells in the future.

The chemical-specific parameters required for calculation of groundwater health-based cleanup goals included dose-response values and MCLs (Table 5). Dose-response values were obtained from the same sources used for development of Tier II soil values. MCLs were obtained from "Drinking Water Regulations and Health Advisories" (USEPA, 1996).



TECHNICAL MEMORANDUM

REFERENCES

- Indiana Department of Environmental Management (IDEM), 1996. Voluntary Remediation Program: Resource Guide. Indiana Department of Environmental Management, Office of Environmental Response. July.
- USEPA, 1994. Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities. OSWER Directive 9355.4-12.
- USEPA, 1996. Soil Screening Guidance: Technical Background Document. Office of Solid Waste and Emergency Response. EPA/540/R-95/128. May.
- USEPA, 1997. Health Effects Assessment Summary Tables (HEAST), Annual Update: Office of Solid Waste and Emergency Response, EPA 540/R/97/036, PB97-921199
- USEPA, 1998. Drinking Water Regulations and Health Advisories. Office of Water. EPA822-B-96-002. October.
- U.S. Environmental Protection Agency (USEPA), 1999. "Integrated Risk Information System (IRIS)"; on-line data-base search; September.

TABLE 1
HEALTH-BASED TIER II VALUES - NON-RESIDENTIAL SUBSURFACE SOIL
AlliedSignal Industrial Complex, South Bend, Indiana

Tier II Values based on Carcinogenic Effects														
$C_{goal} = \frac{0.051}{(1E-04 \times SFo) + (SFi \times (20/VF + 4.3E-09))}$														
Tier II Values based on Non-Carcinogenic Effects														
$C_{goal} = \frac{146}{(1E-04 / RfDo) + (1/RfDi \times (20/VF + 4.3E-09))}$														
Chemical	SFo (mg/kg/day)	Source	SFi (mg/kg/day)	Source	RfDo (mg/kg/day)	Source	RfDi (mg/kg/day)	Source	VF [f] (mg/kg)	Cgoal - Cancer (mg/kg)	Cgoal -Non-cancer (mg/kg)	Leaching to GW [d] (mg/kg)	Ceiling Conc. (mg/kg)	Selected Tier II (mg/kg)
VOCs														
Isopropylbenzene					1.00E-01	IRIS	1.10E-01	IRIS	1.38E+04	NC	1.03E+04	2.96E+04	1.00E+03	1.00E+03
n-Propylbenzene					1.00E-01	[a]	1.10E-01	[a]	1.38E+04	NC	1.03E+04	2.96E+04	1.00E+03	1.00E+03
1,3,5-Trimethylbenzene					5.00E-02	NCEA	1.70E-03	NCEA	1.13E+04	NC	NA	9.84E+03	1.00E+03	1.00E+03
Chlorobenzene					2.00E-02	IRIS	5.70E-03	HEAST	7.67E+03	NC	3.16E+02	7.84E+02	1.00E+03	3.16E+02
Methylene chloride	7.50E-03	IRIS	1.65E-03	IRIS	6.00E-02	IRIS	8.60E-01	HEAST	1.72E+03	2.56E+03	9.61E+03	9.08E+00	1.00E+03	9.08E+00
SVOCs														
2,4-Dimethylphenol					2.00E-02	IRIS	ND		3.57E+05	NC	2.92E+04	1.70E+02	1.00E+04	1.70E+02
Acenaphthene					6.00E-02	IRIS	ND		2.32E+05	NC	8.76E+04	5.41E+04	1.00E+04	1.00E+04
Anthracene					3.00E-01	IRIS	ND		8.93E+05	NC	4.38E+05	7.23E+06	1.00E+04	1.00E+04
Carbazole	2.00E-02	HEAST			ND		ND		2.01E+07	2.55E+04	NA	NA	1.00E+04	1.00E+04
Chrysene	7.30E-03	NCEA	ND		ND	IRIS	ND		3.48E+06	6.99E+04	NA	7.16E+04	1.00E+04	1.00E+04
Di-n-butylphthalate					1.00E-01	IRIS	ND		5.22E+07	NC	1.46E+05	6.74E+04	1.00E+04	1.00E+04
Fluorene					4.00E-02	IRIS	ND		4.88E+05	NC	5.84E+04	4.52E+04	1.00E+04	1.00E+04
Phenanthrene					3.00E-02	[b]	ND		6.87E+05	NC	4.38E+04	3.75E+04	1.00E+04	1.00E+04
PCBs														
Aroclor 1248	2.00E+00	IRIS	2.00E+00	IRIS	2.00E-05	[c]	ND		9.04E+05	2.09E+02	2.92E+01	1.28E+00	NA	1.28E+00
Aroclor 1254	2.00E+00	IRIS	2.00E+00	IRIS	2.00E-05	IRIS	ND		3.81E+06	2.42E+02	2.92E+01	3.05E+00	NA	3.05E+00
Inorganics														
Chromium, total									NA	NC	NA	NA	NA	NA
Chromium (III)					1.50E+00	IRIS	ND		NA	NC	2.19E+06	NA	NA	2.19E+06
Chromium (VI)			4.10E+01	IRIS	3.00E-03	IRIS	2.90E-05	IRIS	NA	2.89E+05	4.36E+03	NA	NA	4.36E+03
Lead, total	ND	IRIS	ND	IRIS	ND		ND		NA	NC	NA	NA	NA	400 [e]

- Notes:**
- [a] - Isopropylbenzene value used as surrogate.
 - [b] - Pyrene value used as surrogate.
 - [c] - Aroclor 1254 value used as surrogate.
 - [d] - Based on leaching to Non-Residential Groundwater.
 - [e] - Residential soil lead screening value. Office of Solid Waste and Emergency Response. Directive 9355.4-12. USEPA. 1994.
 - [f] - See Table 2
 - NA - Not Applicable/Available
 - NC - Non-Carcinogenic

**TABLE 2
CALCULATION OF SOIL VOLATILIZATION FACTOR
AlliedSignal Industrial Complex, South Bend, Indiana**

Site-Specific Parameters							
Parameter	Value	Unit					
LS	45	m	$VF = \frac{((LS \times V \times DH)/A) \times (3.14 \times \alpha \times T)^{1/2}}{2 \times Dei \times E \times Ksa \times 1e-03}$				
V	2.25	m/s					
DH	2	m	$\alpha = \frac{Dei \times E}{E + Ps(1-E)/Ksa}$				
A	20,250,000	cm ²					
Dei	Di x E ^{0.33}	cm ²					
E	0.35						
Ksa	H/Kd x 41	g soil/cm ³ air					
Kd	Koc x OC	cm ³ /g					
Ps	2.65	g/cm ²					
T	7.95E+08	s					
Chemical Specific Parameters							
Chemical	Di (cm ² /sec)	Dei cm ³	H atm-m ³ -mol	Koc cm ³ /g	OC	α	VF
VOCs							
Isopropylbenzene	6.77E-02	4.79E-02	1.50E-02	2.70E+03	0.02	1.11E-04	1.38E+04
n-Propylbenzene	6.77E-02	4.79E-02	1.50E-02	2.70E+03	0.02	1.11E-04	1.38E+04
1,3,5-Trimethylbenzene	6.63E-02	4.69E-02	5.57E-03	6.61E+02	0.02	1.64E-04	1.13E+04
Chlorobenzene	7.30E-02	5.16E-02	3.70E-03	2.24E+02	0.02	3.53E-04	7.67E+03
Methylene chloride	1.01E-01	7.14E-02	2.19E-03	1.00E+01	0.02	5.97E-03	1.72E+03
SVOCs							
2,4-Dimethylphenol	5.84E-02	4.13E-02	2.00E-06	2.09E+02	0.02	1.65E-07	3.57E+05
Acenaphthene	4.21E-02	2.98E-02	1.55E-04	4.90E+03	0.02	3.92E-07	2.32E+05
Anthracene	3.24E-02	2.29E-02	6.50E-05	2.35E+04	0.02	2.64E-08	8.93E+05
Carbazole	3.90E-02	2.76E-02	1.53E-08	3.39E+03	0.02	5.19E-11	2.01E+07
Chrysene	2.48E-02	1.75E-02	9.46E-05	3.98E+05	0.02	1.74E-09	3.48E+06
Di-n-butylphthalate	4.38E-02	3.10E-02	9.38E-10	1.57E+03	0.02	7.71E-12	5.22E+07
Fluorene	3.63E-02	2.57E-02	6.36E-05	7.71E+03	0.02	8.82E-08	4.88E+05
Phenanthrene	5.43E-02	3.84E-02	3.90E-05	1.40E+04	0.02	4.46E-08	6.87E+05
PCBs							
Aroclor 1248	5.50E-02	3.89E-02	4.40E-04	2.77E+05	0.02	2.57E-08	9.04E+05
Aroclor 1254	5.25E-02	3.71E-02	2.00E-04	2.14E+06	0.02	1.45E-09	3.81E+06
Inorganics							
Chromium, total	NA	NA	NA	NA	NA	NA	NA
Chromium (III)	NA	NA	NA	NA	NA	NA	NA
Chromium (VI)	NA	NA	NA	NA	NA	NA	NA
Lead, total	NA	NA	NA	NA	NA	NA	NA

Notes:

NA - Not Applicable/Available

TABLE 3
CALCULATION OF SOIL LEACHING VALUE
AlliedSignal Industrial Complex, South Bend, Indiana

$C_{soil} = (C_{gw}/(0.00221 * Sol^{0.373}))^{(1/0.678)}$			
Chemical	Groundwater Cleanup Goal [a] (mg/L)	Aqueous Solubility (mg/L)	Target Soil Concentration (mg/Kg)
VOCs			
Isopropylbenzene	1.02E+01	5.00E+01	2.96E+04
n-Propylbenzene	1.02E+01	5.00E+01	2.96E+04
1,3,5-Trimethylbenzene	5.11E+00	5.76E+01	9.84E+03
Chlorobenzene	2.04E+00	4.91E+02	7.84E+02
Methylene chloride	3.81E-01	1.80E+04	9.08E+00
SVOCs			
2,4-Dimethylphenol	2.04E+00	7.87E+03	1.70E+02
Acenaphthene	6.13E+00	4.24E+00	5.41E+04
Anthracene	3.07E+01	4.34E-02	7.23E+06
Carbazole	1.43E-01	NA	NA
Chrysene	3.92E-01	1.60E-03	7.16E+04
Di-n-butylphthalate	1.02E+01	1.12E+01	6.74E+04
Fluorene	4.09E+00	1.98E+00	4.52E+04
Phenanthrene	3.07E+00	1.29E+00	3.75E+04
PCBs			
Aroclor 1248	1.43E-03	2.00E-01	1.28E+00
Aroclor 1254	1.43E-03	4.10E-02	3.05E+00
Inorganics			
Chromium, total	NA	insoluble	NA
Chromium (III)	1.53E+02	insoluble	NA
Chromium (VI)	3.07E-01	insoluble	NA
Lead, total	1.50E-02	insoluble	NA

Notes:

[a] - Non-Residential Groundwater Tier II Values

NA - Not Applicable/Available

TABLE 4
HEALTH-BASED TIER II VALUES - NON-RESIDENTIAL GROUNDWATER
AlliedSignal Industrial Complex, South Bend, Indiana

Tier II Values based on Carcinogenic Effects							
Cgoal =		$\frac{2.86E-03}{S_{Fo}}$					
Tier II Values based on Non-Carcinogenic Effects							
Cgoal =		102.2 x RfDo					
Chemical	SFo (mg/kg/day)	Source	RfDo (mg/kg/day)	Source	Cgoal - Cancer (mg/L)	Cgoal - Non-cancer (mg/L)	Selected Tier II (mg/L)
VOCs							
Isopropylbenzene			1.00E-01	IRIS	NC	1.02E+01	1.02E+01
n-Propylbenzene			1.00E-01	[a]	NC	1.02E+01	1.02E+01
2-Methylnaphthalene			2.00E-02	NCEA	NC	2.04E+00	2.04E+00
1,2,4-Trimethylbenzene			5.00E-02	NCEA	NC	5.11E+00	5.11E+00
1,3,5-Trimethylbenzene			5.00E-02	NCEA	NC	5.11E+00	5.11E+00
trans-1,2-Dichloroethene			2.00E-02	IRIS	NC	2.04E+00	2.04E+00
1,2-dichloropropane	6.80E-02	IRIS	ND		4.21E-02	NA	4.21E-02
methyl-t-butyl ether							6.95E+00 [d]
Chlorobenzene			2.00E-02	IRIS	NC	2.04E+00	2.04E+00
Chloroethane	2.90E-03	NCEA	4.00E-01	NCEA	9.86E-01	4.09E+01	9.86E-01
Methylene chloride	7.50E-03	IRIS	6.00E-02	IRIS	3.81E-01	6.13E+00	3.81E-01
SVOCs							
Benzo(g,h,i)perylene			3.00E-02	[b]	NC	3.07E+00	3.07E+00
1,2-Dichlorobenzene			9.00E-02	NCEA	NC	9.20E+00	9.20E+00
1,3-Dichlorobenzene			9.00E-04	NCEA	NC	9.20E-02	9.20E-02
1,4-Dichlorobenzene	2.40E-02	HEAST	3.00E-02	HEAST	1.19E-01	3.07E+00	1.19E-01
2,4-Dimethylphenol			2.00E-02	IRIS	NC	2.04E+00	2.04E+00
Acenaphthene			6.00E-02	IRIS	NC	6.13E+00	6.13E+00
Anthracene			3.00E-01	IRIS	NC	3.07E+01	3.07E+01
Carbazole	2.00E-02	HEAST	ND		1.43E-01	NA	1.43E-01
Chrysene	7.30E-03	NCEA	ND	IRIS	3.92E-01	NA	3.92E-01
Di-n-butylphthalate			1.00E-01	IRIS	NC	1.02E+01	1.02E+01
Fluorene			4.00E-02	IRIS	NC	4.09E+00	4.09E+00
Phenanthrene			3.00E-02	IRIS	NC	3.07E+00	3.07E+00
PCBs							
Aroclor 1248	2.00E+00	IRIS	2.00E-05	[c]	1.43E-03	2.04E-03	1.43E-03
Aroclor 1254	2.00E+00	IRIS	2.00E-05	IRIS	1.43E-03	2.04E-03	1.43E-03
Inorganics							
Chromium, total					NC	NA	NA
Chromium (III)			1.50E+00	IRIS	NC	1.53E+02	1.53E+02
Chromium (VI)			3.00E-03	IRIS	NC	3.07E-01	3.07E-01
Lead, total	ND	IRIS			NC	NA	1.50E-02

Notes:

[a] - Isopropylbenzene value used as surrogate.

[b] - Pyrene value used as surrogate.

[c] - Aroclor 1254 value used as surrogate.

[d] - Residential groundwater value used as surrogate; the only available dose-response data are for the inhalation exposure route, which is not evaluated for non-residential groundwater.

NA - Not Applicable/Available

NC - Non-Carcinogenic

TABLE 5
HEALTH-BASED TIER II VALUES - RESIDENTIAL GROUNDWATER
AlliedSignal Industrial Complex, South Bend, Indiana

Tier II Values based on Carcinogenic Effects												
$C_{goal} = \frac{1.70E-04}{(2 \times SFo) + (7.5 \times SFi)}$												
Tier II Values based on Non-Carcinogenic Effects												
$C_{goal} = \frac{60.8}{(2 / RfDo) + (7.5 / RfDi)}$												
Chemical	SFo (mg/kg/day)	Source	RfDo (mg/kg/day)	Source	SFi (mg/kg/day)	Source	RfDi (mg/kg/day)	Source	Cgoal - Cancer (mg/kg)	Cgoal -Non-cancer (mg/kg)	MCLs (mg/L)	Selected Tier II (mg/L)
VOCs												
Isopropylbenzene			1.00E-01	IRIS			1.10E-01	IRIS	NC	6.89E-01		6.89E-01
2-Methylnaphthalene			2.00E-02	NCEA			ND		NC	6.08E-01		6.08E-01
1,2,4-Trimethylbenzene			5.00E-02	NCEA			1.70E-03	NCEA	NC	1.37E-02		1.37E-02
1,3,5-Trimethylbenzene			5.00E-02	NCEA			1.70E-03	NCEA	NC	1.37E-02		1.37E-02
trans-1,2-Dichloroethene			2.00E-02	IRIS			ND		NC	6.08E-01	0.1	1.00E-01
1,2-dichloropropane	6.80E-02	IRIS	ND				1.10E-03	IRIS	1.25E-03	8.92E-03	0.005	5.00E-03
methyl-t-butyl ether			ND				8.57E-01	IRIS	NC	6.95E+00		6.95E+00
Chlorobenzene			2.00E-02	IRIS			5.70E-03	HEAST	NC	4.29E-02		4.29E-02
Chloroethane	2.90E-03	NCEA	4.00E-01	NCEA			2.80E+00	IRIS	2.93E-02	7.92E+00		2.93E-02
SVOCs												
Benzo(g,h,i)perylene			3.00E-02	[a]			ND		NC	9.12E-01		9.12E-01
1,2-Dichlorobenzene			9.00E-02	NCEA			5.70E-02	HEAST	NC	3.95E-01	6.00E-01	6.00E-01
1,3-Dichlorobenzene			9.00E-04	NCEA			ND		NC	2.74E-02		2.74E-02
1,4-Dichlorobenzene	2.40E-02	HEAST	3.00E-02	HEAST	2.20E-02	NCEA	2.30E-01	IRIS	7.98E-04	6.12E-01	7.50E-02	7.50E-02
2,4-Dimethylphenol			2.00E-02	IRIS			ND		NC	6.08E-01		6.08E-01
Inorganics												
Chromium, total									NC	NA		NA
Chromium (III)			1.50E+00	IRIS			ND		NC	4.56E+01	1.00E-01	4.56E+01
Chromium (VI)			3.00E-03	IRIS	4.10E+01	IRIS	2.90E-05	IRIS	5.53E-07	2.34E-04	1.00E-01	1.00E-01
Lead, total	ND	IRIS							NC	NA	1.50E-02	1.50E-02

Notes:
[a] - Pyrene value used as surrogate.
NA - Not Applicable/Available
NC - Non-Carcinogenic

RISK-BASED CLEANUP GOALS FOR TPH

ABB M E M O R A N D U M

DATE: November 10, 1996
TO: Donald A. Walsh
FROM: Gregory A. Beumel
SUBJECT: Calculation of Acceptable Risk-Based TPH Values for Jet Fuel in Soil

Acceptable risk-based TPH levels were calculated for jet fuel in soil. These calculations were performed using the methodology developed by the Massachusetts Department of Environmental Protection Office (1994)¹ and assumed an excavation worker exposure scenario. This scenario assumes 30 days of exposure during one year and no future exposure. Based on these calculations, three risk-based TPH values were determined. The first is for jet fuel that has been "weathered" (i.e., the release occurred sufficiently long ago that the volatile and most semi-volatile organic compounds, including benzene, toluene, ethylbenzene, and xylenes (BETX) have evaporated). The next two are for (1) JP5 or Jet A, and (2) JP4 that have been recently released and still contain the BTEX compounds and other volatile and semi-volatile organic compounds. The results are as follows:

Compound	Risk-Based Level (ppm)
Jet Fuel (weathered)	14,300
JP5 or Jet A	12,000
JP4	6,000

The spreadsheets used to perform the calculations are attached.

¹ Massachusetts Department of Environmental Protection, 1994. "Interim Final Petroleum Report: Development of Health-Based Alternative to the Total Petroleum Hydrocarbon (TPH) Parameter (August, 1994)".

Table 8

JP-4 Composition from USAir Force and ATSDR

Ref. Interim Final Petroleum Report: Development of Health-Based Alternative to the Total Petroleum Hydrocarbon (TPH) Parameter, (MADEP, August 1994)

Component	Wt %			
C4-C8 Alkanes	34.70%			
C9-C18 Alkanes	19.20%			
Aromatics	7.57%			
Benzene	0.50%			
Toluene	1.33%			
Ethylbenzene	0.37%			
Xylenes	2.32%			
Naphthalenes	2.90%			

TABLE 9

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SUBSURFACE SOIL
EXCAVATION WORKER
ALLIED
SOUTH BEND, IN
CALCULATION OF RISK-BASED TPH LEVELS FOR JP-4 (based on Air Force/ATSDR composition)

EXPOSURE PARAMETERS

EQUATIONS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION SOIL	CS	chemical-specific	chemical-specific	
INGESTION RATE	IR	480	mg/day	USEPA, 1991
FRACTION INGESTED	FI	100%	unitless	Assumption
ADHERENCE FACTOR	AF	1	mg/cm ² -event	USEPA, 1992a
ABSORPTION FRACTION	ABS	chemical-specific	unitless	USEPA, 1992b
SURFACE AREA EXPOSED	SA	5,750	cm ²	USEPA, 1992a
DOSE ABSORBED PER EVENT	DA _{event}	chemical-specific	mg/cm ² -event	USEPA, 1992a
CONVERSION FACTOR	CF	1.00E-09	kg/ug	Organic conversion
CONVERSION FACTOR	CF	1.00E-06	kg/mg	Inorganic conversion
BODY WEIGHT	BW	70	kg	USEPA, 1991
EXPOSURE FREQUENCY	EF	30	days/year [1]	Assumption
EXPOSURE DURATION	ED	1	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	1	years	USEPA, 1991

[1] Units for exposure frequency are events/year in the calculation of the dermally absorbed dose.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.
USEPA, 1992a. Annual Exposure Assessment: Principles and Applications; EPA/600/8-91/011B; January 1992.
USEPA, 1992b. USEPA Region IV Guidance Memorandum; February 10, 1992.

CANCER RISK = INTAKE (mg/kg-day) x CANCER SLOPE FACTOR (mg/kg-day)⁻¹

HAZARD QUOTIENT = INTAKE (mg/kg-day) / REFERENCE DOSE (mg/kg-day)

INTAKE-INGESTION = $\frac{CS \times IR \times FI \times CF \times EF \times ED}{BW \times AT \times 365 \text{ days/yr}}$

INTAKE-DERMAL = $\frac{DA_{\text{event}} \times SA \times EF \times ED}{BW \times AT \times 365 \text{ days/year}}$

Where:
DA_{event} = CS x AF x ABS x CF

Note: For noncardiogenic effects, AT = ED

TABLE 9

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SUBSURFACE SOIL
 EXCAVATION WORKER
 ALLIED
 SOUTH BEND, IN
 CALCULATION OF RISK-BASED TPH LEVELS FOR JP-4 (based on Air Force/ATSDR composition)

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	BOIL CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	ORAL CSF (mg/kg-day) ⁻¹	CANCER RISK INGESTION	DERMAL ABS [1]	INTAKE DERMAL (mg/kg-day)	DERMAL CSF [1] (mg/kg-day) ⁻¹	CANCER RISK DERMAL	TOTAL CANCER RISK
TPH Concentration	o	6,000,000	ug/kg	4.8E-05			0.01	5.8E-06			
Aromatics/Alkenes (9.66%)	o	579,600	ug/kg	4.7E-06			0.01	5.6E-07			
Alkanes	o										
C4-C8 (34.70%)	o	2,082,000	ug/kg	1.7E-05			0.01	2.0E-06			
C9-C18 (19.20%)	o	1,152,000	ug/kg	9.3E-06			0.01	1.1E-06			
C19-C36 (0%)	o	0									
Benzene (0.50%)	o	30,000	ug/kg	2.4E-07	0.029	7.0E-09	0.01	2.9E-08	0.029	8.4E-10	7.8E-09
Toluene (1.33%)	o	79,800	ug/kg	6.4E-07			0.01	7.7E-08			
Ethylbenzene (0.37%)	o	22,200	ug/kg	1.8E-07			0.01	2.1E-08			
Xylenes (2.32%)	o	139,200	ug/kg	1.1E-06			0.01	1.3E-07			
	o										
	o										
	o										
SUMMARY CANCER RISK											
						7E-09				8E-10	8E-09
[1] USEPA Region IV guidance specifies absorption factors of 1% for organics and 0.1% for inorganics (February 10, 1992). [2] Calculated from Oral CSFs. NB = not evaluated.											

TABLE 9

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SUBSURFACE SOIL,
EXCAVATION WORKER
ALLIED
SOUTH BEND, IN
CALCULATION OF RISK-BASED TPH LEVELS FOR JP-4 (based on Air Force/ATSDR composition)

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC NO	SOIL CONCENTRATION	UNITS	INTAKE INGESTION (ug/kg-day)	ORAL RfD (mg/kg-day)	HAZARD QUOTIENT INGESTION	DERMAL ABS (1)	INTAKE DERMAL (ug/kg-day)	DERMAL RfD (2) (mg/kg-day)	HAZARD QUOTIENT DERMAL	TOTAL HAZARD QUOTIENT
TPH Concentration	o	6,000,000	ug/kg	3.4E-03			0.01	4.1E-04			
Aromatics/Alkene (9.66%)	o	579,600	ug/kg	3.3E-04	0.03	1.1E-02	0.01	3.9E-05	0.03	1.3E-03	1.2E-02
Alkanes	o										
C4-C8 (34.70%)	o	2,082,000	ug/kg	1.2E-03	0.06	2.0E-02	0.01	1.4E-04	0.06	2.3E-03	2.2E-02
C9-C18 (19.20%)	o	1,152,000	ug/kg	6.5E-04	0.6	1.1E-03	0.01	7.8E-05	0.6	1.3E-04	1.2E-03
C19-C36 (0%)	o	0			6				6		
Benzene (0.50%)	o	30,000	ug/kg	1.7E-05	0.0003	5.6E-02	0.01	2.0E-06	0.0003	6.8E-03	6.3E-02
Toluene (1.33%)	o	79,800	ug/kg	4.5E-05	2	2.2E-05	0.01	5.4E-06	2	2.7E-06	2.5E-05
Ethylbenzene (0.37%)	o	22,200	ug/kg	1.3E-05	0.01	1.3E-03	0.01	1.5E-06	0.082	1.8E-05	1.3E-03
Xylenes (2.32%)	o	139,200	ug/kg	7.8E-05	2	3.9E-05	0.01	9.4E-06	2	4.7E-06	4.4E-05
SUMMARY HAZARD INDEX						9E-02				1E-02	1.0E-01
(1) USEPA Region IV guidance specifies absorption factors of 1% for organics and 0.1% for inorganics (February 10, 1992). (2) Calculated from Oral RfDs. ND = no data available.											

TABLE 10

INITIATION OF PARTICULATES - SUBSURFACE SOIL
EXCAVATION WORKER

ALLIED

SOUTH BEND, IN

CALCULATION OF RISK-BASED TPH LEVELS FOR JP-4 (based on Air Force/ATSDR composition)

EXPOSURE PARAMETERS

EQUATIONS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PBF	5.00E+07	m ³ /kg	(1)
CONCENTRATION AIR	CA	chemical-specific	mg/m ³	
INHALATION RATE	IR	2.5	m ³ /hour	USEPA, 1995
BODY WEIGHT	BW	70	kg	USEPA, 1991
EXPOSURE TIME	ET	8	hours/day	Assumption
EXPOSURE FREQUENCY	EF	30	days/year	Assumption
EXPOSURE DURATION	ED	1	years	Assumption
CONVERSION FACTOR	CF	0.001	mg/kg	Organics only
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	1	years	USEPA, 1991

CANCER RISK = INTAKE (mg/kg-day) × INITIATION CANCER SLOPE FACTOR (mg/kg-day)⁻¹

HAZARD QUOTIENT = INTAKE (mg/kg-day) / INITIATION REFERENCE DOSE (mg/kg-day)

INTAKE = $\frac{CA \times IR \times ET \times EF \times ED}{BW \times AT \times 365 \text{ days/yr}}$

Where:

CA = C × CF × (1/PBF)

Note: For noncarcinogenic effects, AT = ED

(1) PEF has been derived in Appendix A to this report.
 USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9245.6-03.
 USEPA, 1995. Supplemental Guidance to RAGS: Region IV, Human Health Risk Assessment Bulletin No. 3.

TABLE 10

INITIALATION OF PARTICULATES - SUBSURFACE SOIL.
 EXCAVATION WORKER
 ALLIED
 SOUTH BEND, IN
 CALCULATION OF RISK-BASED TPH LEVELS FOR JP-4 (based on Air Force/ATSDR composition)

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION (I)	UNITS	AIR CONCENTRATION (ug/m ³)	INTAKE (mg/kg-day)	INHALATION CSF (mg/kg-day) ⁻¹	CANCER RISK
TPH Concentration	o	6,000,000	ug/kg	1.20E-04	4.0E-08		
Aromatics/Alkenes (9.66%)	o	579,600	ug/kg	1.16E-05	3.9E-09		
Alkanes	o						
C4-C8 (34.70%)	o	2,082,000	ug/kg	4.16E-05	1.4E-08		
C9-C18 (19.20%)	o	1,152,000	ug/kg	2.30E-05	7.7E-09		
C19-C36 (0%)	o	0					
Benzene (0.50%)	o	30,000	ug/kg	6.00E-07	2.0E-10	0.029	5.8E-12
Toluene (1.33%)	o	79,800	ug/kg	1.60E-06	5.4E-10		
Ethylbenzene (0.37%)	o	22,200	ug/kg	4.44E-07	1.5E-10		
Xylenes (3.32%)	o	139,200	ug/kg	2.78E-06	9.3E-10		
SUMMARY CANCER RISK							6E-12
NE = not evaluated.							

TABLE 10

INHALATION OF PARTICULATES - SUBSURFACE SOIL,
EXCAVATION WORKER

ALLIED

SOUTH BEND, IN

CALCULATION OF RISK-BASED TPH LEVELS FOR JP-4 (based on Air Force/ATSDR composition)

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	AIR CONCENTRATION ($\mu\text{g}/\text{m}^3$)	INTAKE ($\text{mg}/\text{kg}\cdot\text{day}$)	INHALATION RID ($\text{mg}/\text{kg}\cdot\text{day}$)	HAZARD QUOTIENT
TPH Concentration	o	6,000,000	ug/kg	1.20E-04	2.8E-06		
Aromatics/Alkenes (9.66%)	o	579,600	ug/kg	1.16E-05	2.7E-07	400	6.8E-10
Alkanes	o						
C4-C8 (34.70%)	o	2,082,000	ug/kg	4.16E-05	9.8E-07		
C9-C18 (19.20%)	o	1,152,000	ug/kg	2.30E-05	5.4E-07		
Benzene (0.50%)	o	30,000	ug/kg	6.00E-07	1.4E-08		
Toluene (1.33%)	o	79,800	ug/kg	1.60E-06	3.7E-08	400	9.4E-11
Ethylbenzene (0.37%)	o	22,200	ug/kg	4.44E-07	1.0E-08	1000	1.0E-11
Xylenes (2.32%)	o	139,200	ug/kg	2.78E-06	6.5E-08		
SUMMARY HAZARD INDEX							8E-10
ND = no data available.							

TIER II CLEANUP GOALS COMPARISON TABLES

Analytical Summary - VOCs in Groundwater
 Area 2 - Plant 2 Basement
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in ug/l)	SITE	1996 VRP	02GP001
		SAMPLE ID		02PW00119
		DATE	Tier II	11/16/96
		RESULT TYPE	Non-Residential	Primary
Benzene			98.6	8.9
Ethylbenzene			10220	9.5
Isopropylbenzene			1.02E+4	14
1,2,4-Trimethylbenzene			5.11E+3	11
Sum of Concentrations				43.40

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
Area 3/11- Alleged Former Disposal Area/Carbon Brake Exp.
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

Page: 1B

Date: 09/27/99

CONSTITUENT (Units in mg/kg)	SITE	03GP002	03GP002	03GP003	03GP003	03GP004	
	SAMPLE ID	03PS0208	03PS0212	03PS0304	03PS0306	03PS0402	
	DATE	1996 VRP	09/30/96	09/30/96	09/30/96	09/30/96	
	DEPTH (ft)	Tier II	8.00	12.00	4.00	6.00	
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	
Toluene		1000	<0.25	<0.25	<0.25	<0.25	0.28
Ethyl benzene		1000	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)		1000	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene		1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene		1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25	<0.25
Acenaphthene		1.0E+04	---	---	---	---	---
2-Methylnaphthalene		10000	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane		1000	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethane		0.08	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichloroethane		0.37	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethane		102.49	<0.1	0.35	<0.1	0.12	0.15
trans-1,2-Dichloroethane		2.29E+02	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane		1000	0.18	0.2	<0.1	0.28	0.23
Chlorobenzene		3.16E+02	<0.1	<0.1	<0.1	<0.1	<0.1
Methylene chloride		9.08E+00	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene		8.01	<0.1	<0.1	<0.1	<0.1	0.27
Trichloroethene		25.73	0.62	0.96	0.11	0.33	0.19
Vinyl chloride		0.13	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichlorobenzene			---	---	---	---	---
1,3-Dichlorobenzene			---	---	---	---	---
1,4-Dichlorobenzene			---	---	---	---	---
Sum of Concentrations			0.80	1.51	0.11	0.71	1.12

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Soils
Area 3/11- Alleged Former Disposal Area/Carbon Brake Exp.
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	1996 VRP	03GP004	03GP004	03GP005	03GP005	03GP005
			SAMPLE ID	03PS0408	03PS0410	03PS0504	03PS0508
	DATE	Tier II	09/30/96	09/30/96	10/01/96	10/01/96	10/01/96
	DEPTH (ft)	Non-Residential	8.00	10.00	4.00	8.00	12.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene		1000	<0.05	<0.25	<0.25	<0.25	<0.25
Ethyl benzene		1000	<0.05	<0.25	<0.25	<0.25	<0.25
Xylene (total)		1000	<0.1	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene		1.0E+03	<0.01	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene		1.00E+03	<0.01	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.01	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.01	<0.25	<0.25	<0.25	<0.25
Naphthalene		10000	<0.05#	<0.25	<0.25	<0.25	<0.25
Acenaphthene		1.0E+04	<0.33	---	---	---	---
2-Methylnaphthalene		10000	<0.1#	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane		1000	<0.05	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethene		0.08	<0.05	<0.1	<0.1	<0.1	<0.1
1,2-Dichloroethane		0.37	<0.05	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene		102.49	<0.05	<0.1	<0.1	<0.1	<0.1
trans-1,2-Dichloroethene		2.29E+02	<0.05	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane		1000	<0.05	0.16	<0.1	<0.1	<0.1
Chlorobenzene		3.16E+02	<0.05	<0.1	<0.1	<0.1	<0.1
Methylene chloride		9.08E+00	<0.05	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene		8.01	0.15	1.2	<0.1	<0.1	<0.1
Trichloroethene		26.73	<0.05	<0.1	<0.1	<0.1	<0.1
Vinyl chloride		0.13	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichlorobenzene			<0.05#	---	---	---	---
1,3-Dichlorobenzene			<0.05#	---	---	---	---
1,4-Dichlorobenzene			<0.05#	---	---	---	---
Sum of Concentrations			0.15	1.36	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent analyzed by more than one test method, highest result reported.

For RCL VOCs: 0.1 mg/kg for 03GP004, 0.1 mg/kg for 03GP004, 0.1 mg/kg for 03GP005, 0.1 mg/kg for 03GP005, 0.1 mg/kg for 03GP005

Analytical Summary - VOCs in Soils
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CONSTITUENT	(Units in mg/kg)	SITE	03GP006	03GP006	03GP006	03GP006	03GP007	
		SAMPLE ID	03PS0606	03PS0610	03PS0618	03GP00801	03PS0704	
		DATE	1996 VRP	10/01/96	10/01/96	10/01/96	11/06/97	10/01/96
		DEPTH (ft)	Tier II	6.00	10.00	18.00	1.00	4.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene		1000	<2.5	<2.5	<1	<0.05	0.43	
Ethyl benzene		1000	<2.5	<2.5	<1	<0.05	1.4	
Xylene (total)		1000	<2.5	<2.5	<1	<0.05	2.2	
Isopropylbenzene		1.0E+03	<2.5	<2.5	<1	<0.05	0.48	
n-Propylbenzene		1.00E+03	<2.5	<2.5	<1	<0.05	<0.25	
1,3,5-Trimethylbenzene		1.00E+03	<2.5	<2.5	<1	<0.05	0.44	
1,2,4-Trimethylbenzene		1.00E+3	<2.5	<2.5	<1	<0.05	0.37	
Naphthalene		10000	<2.5	<2.5	<1	<0.05#	0.34	
Acenaphthene		1.0E+04	---	---	---	<0.00033	---	
2-Methylnaphthalene		10000	<5	<5	<2	0.00048#	<0.5	
1,1-Dichloroethane		1000	<0.1	<0.1	<0.1	<0.05	<0.1	
1,1-Dichloroethene		0.08	[6.9]	<0.1	<0.1	<0.05	<0.1	
1,2-Dichloroethane		0.37	<0.1	<0.1	<0.1	<0.05	<0.1	
cis-1,2-Dichloroethene		102.49	<0.1	<0.1	<0.1	<0.05	<0.1	
trans-1,2-Dichloroethene		2.29E+02	<0.1	<0.1	<0.1	<0.05	<0.1	
1,1,1-Trichloroethane		1000	<0.1	<0.1	<0.1	<0.05	<0.1	
Chlorobenzene		3.16E+02	<0.1	<0.1	<0.1	<0.05	<0.1	
Methylene chloride		9.08E+00	<0.1	<0.1	<0.1	<0.05	<0.1	
Tetrachloroethene		8.01	<0.1	<0.1	2.5	<0.05	<0.1	
Trichloroethene		25.73	[29]	[48]	19	<0.05	<0.1	
Vinyl chloride		0.13	<1	<1	<0.4	<0.1	<0.1	
1,2-Dichlorobenzene			---	---	---	<0.05#	---	
1,3-Dichlorobenzene			---	---	---	<0.05#	---	
1,4-Dichlorobenzene			---	---	---	<0.05#	---	
Sum of Concentrations			35.90	48.00	21.50	0.00	5.66	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported. [] = Greater than Action Level

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units: in mg/kg)	SITE	03GP007	03GP007	03GP008	03GP008	03GP008
	SAMPLE ID	03PS0708	03PS0714	03PS0802	03PS0806	03PS0808
DATE	1996 VRP	10/01/96	10/01/96	10/01/96	10/01/96	10/01/96
DEPTH (ft)	Tier II	8.00	14.00	2.00	6.00	8.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	0.46	<0.25	<0.25	<0.25
Ethyl benzene	1000	0.89	0.83	<0.25	<0.25	<0.25
Xylene (total)	1000	0.61	0.91	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	0.65	0.36	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	0.42	0.58	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	0.29	<0.25	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	0.85	<0.25	<0.25	<0.25
Acenaphthene	1.0E+04	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethene	0.08	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichloroethane	0.37	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,2-Dichloroethene	2.29E+02	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	3.16E+02	<0.1	<0.1	<0.1	<0.1	<0.1
Methylene chloride	9.08E+00	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene	25.73	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichlorobenzene		---	---	---	---	---
1,3-Dichlorobenzene		---	---	---	---	---
1,4-Dichlorobenzene		---	---	---	---	---
Sum of Concentrations		2.86	4.49	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
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CONSTITUENT	(Units in mg/kg)	SITE	03GP008	03GP009	03GP009	03GP009	03GP010
		SAMPLE ID	03QD0808	03PS0904	03PS0908	03PS0910	03PS1004
		DATE	1996 VRP	10/01/96	10/02/96	10/02/96	10/02/96
		DEPTH (ft)	Tier II	8.00	4.00	8.00	10.00
		RESULT TYPE	Non-Residential	Duplicate 1	Primary	Primary	Primary
Toluene		1000	<0.25	<0.25	<0.25	<0.25	<0.25
Ethyl benzene		1000	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)		1000	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene		1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene		1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25	<0.25
Acenaphthene		1.0E+04	---	---	---	---	---
2-Methylnaphthalene		10000	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane		1000	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethene		0.08	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichloroethane		0.37	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene		102.49	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,2-Dichloroethene		2.29E+02	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane		1000	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene		3.16E+02	<0.1	<0.1	<0.1	<0.1	<0.1
Methylene chloride		9.08E+00	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene		8.01	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene		25.73	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl chloride		0.13	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichlorobenzene			---	---	---	---	---
1,3-Dichlorobenzene			---	---	---	---	---
1,4-Dichlorobenzene			---	---	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	03GP010	03GP010	03GP011	03GP011	03GP011
	SAMPLE ID	03PS1006	03PS1012	03PS1106	03PS1108	03PS1114
	DATE	1996 VRP	10/02/96	10/02/96	10/02/96	10/02/96
	DEPTH (ft)	Tier II	6.00	12.00	6.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	2.5	<0.05	<0.25
Ethyl benzene	1000	<0.25	<0.25	4.9	<0.05	<0.25
Xylene (total)	1000	<0.25	<0.25	12	<0.1	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.25	4.7	<0.01	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.01	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.01	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	1.8	<0.01	<0.25
Naphthalene	10000	<0.25	<0.25	1.3	<0.05#	<0.25
Acenaphthene	1.0E+04	---	---	---	<0.33	---
2-Methylnaphthalene	10000	<0.5	<0.5	7	<0.1#	<0.5
1,1-Dichloroethane	1000	<0.1	<0.1	0.93	<0.05	<0.1
1,1-Dichloroethene	0.08	<0.1	<0.1	<0.1	<0.05	<0.1
1,2-Dichloroethane	0.37	<0.1	<0.1	<0.1	<0.05	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	1.5	1.7	<0.05	0.22
trans-1,2-Dichloroethene	2.29E+02	<0.1	<0.1	0.11	<0.05	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.1	0.74	0.23	0.31
Chlorobenzene	3.16E+02	<0.1	<0.1	<0.1	<0.05	<0.1
Methylene chloride	9.08E+00	<0.1	<0.1	<0.1	<0.05	<0.1
Tetrachloroethene	8.01	<0.1	<0.1	0.24	0.57	0.29
Trichloroethene	26.73	0.18	0.52	0.52	0.24 J	1.7
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichlorobenzene		---	---	---	<0.05#	---
1,3-Dichlorobenzene		---	---	---	<0.05#	---
1,4-Dichlorobenzene		---	---	---	<0.05#	---
Sum of Concentrations		0.18	2.02	38.44	1.04	2.52

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 # = Constituent analyzed by more than one test method, highest result reported.

RCL 1000

Site C 1000 VRP 1000 Non-Residential

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CONSTITUENT	(Units in mg/kg)	SITE	03GP011	03GP012	03GP012	03GP012	03GP012
		SAMPLE ID	03PS1122	03PS1208	03PS1216	03PS1220	03GP01201
DATE	1996 VRP	10/02/96	10/02/96	10/02/96	10/02/96	11/06/97	
DEPTH (ft)	Tier II	22.00	8.00	16.00	20.00	1.00	
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary	
Toluene	1000	<0.25	0.73	<0.25	<0.6	<0.05	
Ethyl benzene	1000	<0.25	0.53	<0.25	<0.6	<0.05	
Xylene (total)	1000	<0.25	1.3	<0.25	<0.6	<0.05	
Isopropylbenzene	1.0E+03	<0.25	0.59	<0.25	<0.6	<0.05	
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.6	<0.05	
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.6	<0.05	
1,2,4-Trimethylbenzene	1.00E+3	<0.25	0.32	<0.25	<0.6	<0.05	
Naphthalene	10000	<0.25	<0.25	<0.25	<0.6	<0.05#	
Acenaphthene	1.0E+04	---	---	---	---	<0.33	
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<1	0.81#	
1,1-Dichloroethane	1000	<0.1	0.7	<0.1	<0.1	<0.05	
1,1-Dichloroethene	0.08	[1]	<0.1	<0.1	<0.1	<0.05	
1,2-Dichloroethane	0.37	<0.1	<0.1	<0.1	<0.1	<0.05	
cis-1,2-Dichloroethene	102.49	<0.1	0.23	<0.1	0.24	<0.05	
trans-1,2-Dichloroethene	2.29E+02	<0.1	<0.1	<0.1	<0.1	<0.05	
1,1,1-Trichloroethane	1000	0.4	0.11	1.8	2.2	<0.05	
Chlorobenzene	3.16E+02	<0.1	<0.1	<0.1	<0.1	<0.05	
Methylene chloride	9.08E+00	<0.1	<0.1	<0.1	<0.1	<0.05	
Tetrachloroethene	8.01	0.3	<0.1	0.41	<0.1	<0.05	
Trichloroethene	25.73	2.1	0.16	10	19	<0.05	
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.24	<0.1	
1,2-Dichlorobenzene		---	---	---	---	<0.05#	
1,3-Dichlorobenzene		---	---	---	---	<0.05#	
1,4-Dichlorobenzene		---	---	---	---	<0.05#	
Sum of Concentrations		3.80	4.67	12.21	21.44	0.81	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported. [] = Greater than Action Level

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	03GP013	03GP013	03GP013	03GP014	03GP014
	SAMPLE ID	03PS1308	03PS1312	03PS1318	03PS01404	03PS01408
	DATE	1996 VRP	10/02/96	10/02/96	10/02/96	10/03/96
	DEPTH (ft)	Tier II	8.00	12.00	18.00	4.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	13	5	<0.05	150
Ethyl benzene	1000	<0.25	<2.6	1.5	<0.05	<60
Xylene (total)	1000	<0.25	11	6.3	<0.05	<60
Isopropylbenzene	1.0E+03	<0.25	<2.6	0.61	<0.05	<60
n-Propylbenzene	1.00E+03	<0.25	<2.6	<0.55	<0.05	<60
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<2.6	<0.55	<0.05	<60
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<2.6	<0.55	<0.05	<60
Naphthalene	10000	<0.25	<2.6	<0.55	<0.05#	<60
Acenaphthene	1.0E+04	---	---	---	ND	---
2-Methylnaphthalene	10000	<0.5	<5.2	<1.1	<0.1#	<120
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.05	<0.1
1,1-Dichloroethene	0.08	<0.1	<0.1	[0.57]	<0.05	<0.1
1,2-Dichloroethane	0.37	<0.1	<0.1	0.3	<0.05	<0.1
cis-1,2-Dichloroethene	102.49	0.43	26	12	56	<0.1
trans-1,2-Dichloroethene	2.29E+02	<0.1	<0.1	0.41	<0.05	<0.1
1,1,1-Trichloroethane	1000	0.47	37	14	<0.05	290
Chlorobenzene	3.16E+02	<0.1	<0.1	<0.1	<0.05	<0.1
Methylene chloride	9.08E+00	<0.1	<0.1	<0.1	<0.05	<0.1
Tetrachloroethene	8.01	2.1	[55]	[20]	<0.05	[170]
Trichloroethene	25.73	1.8	[70]	22	<0.05	[1500]
Vinyl chloride	0.13	<0.1	<1	<0.22	<0.1	<24
1,2-Dichlorobenzene	---	---	---	---	<7.2#	---
1,3-Dichlorobenzene	---	---	---	---	<7.2#	---
1,4-Dichlorobenzene	---	---	---	---	<7.2#	---
Sum of Concentrations		4.80	212.00	82.69	56.00	[2110.00]

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
= Constituent analyzed by more than one test method, highest result reported. [] = Greater than Action Level ND = Not Detected
For RCL VOC Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	03GP014	03GP014	03GP014	03GP015	03GP015	
	SAMPLE ID	03PS01412	03PS01416	03GP014	03PS01508	03PS01512	
	DATE	1996 VRP	10/03/96	10/03/96	11/06/97	10/03/96	10/03/96
	DEPTH (ft)	Tier II	12.00	16.00	1.00	8.00	12.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	47	42	<0.05	<0.68	<0.53	
Ethyl benzene	1000	<26	<15	<0.05	<0.68	<0.53	
Xylene (total)	1000	<26	<15	<0.05	<0.68	<0.53	
Isopropylbenzene	1.0E+03	<26	<15	<0.05	<0.68	<0.53	
n-Propylbenzene	1.00E+03	<26	<15	<0.05	<0.68	<0.53	
1,3,5-Trimethylbenzene	1.00E+03	<26	<15	<0.05	<0.68	<0.53	
1,2,4-Trimethylbenzene	1.00E+3	<26	<15	<0.05	<0.68	<0.53	
Naphthalene	10000	<26	<15	<0.05#	<0.68	<0.53	
Acenaphthene	1.0E+04	---	---	<0.00033	---	---	
2-Methylnaphthalene	10000	<52	<30	<0.1#	<1.4	<1.1	
1,1-Dichloroethane	1000	<0.1	<0.1	<0.05	<0.1	<0.1	
1,1-Dichloroethane	0.08	<0.1	<0.1	<0.05	<0.1	<0.1	
1,2-Dichloroethane	0.37	<0.1	<0.1	<0.05	<0.1	<0.1	
cis-1,2-Dichloroethane	102.49	<0.1	<0.1	<0.05	0.89	<0.1	
trans-1,2-Dichloroethane	2.29E+02	<0.1	<0.1	<0.05	<0.1	<0.1	
1,1,1-Trichloroethane	1000	<0.1	17	<0.05	1.5	0.48	
Chlorobenzene	3.16E+02	<0.1	<0.1	<0.05	<0.1	<0.1	
Methylene chloride	9.08E+00	<0.1	<0.1	<0.05	<0.1	<0.1	
Tetrachloroethene	8.01	[48]	[16]	<0.05	<0.1	<0.1	
Trichloroethene	25.73	[300]	[200]	<0.05	6	0.71	
Vinyl chloride	0.13	<10	<6	<0.1	<0.27	<0.21	
1,2-Dichlorobenzene		---	---	<0.05#	---	---	
1,3-Dichlorobenzene		---	---	<0.05#	---	---	
1,4-Dichlorobenzene		---	---	<0.05#	---	---	
Sum of Concentrations		395.00	275.00	0.00	8.39	1.19	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported. [] = Greater than Action Level

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	03GP015	03GP015	03GP015	03GP015	03GP015	
	SAMPLE ID	03PS01514	03QD01514	03PS01518	03PS01520	03GP01501	
	DATE	1996 VRP	10/03/96	10/03/96	10/03/96	10/03/96	11/06/97
	DEPTH (ft)	Tier II	14.00	14.00	18.00	20.00	1.00
	RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary	Primary
Toluene	1000	<0.6 *	0.28	1	2.5	<0.05	
Ethyl benzene	1000	<0.6 *	<0.25	<0.62	<1.2	<0.05	
Xylene (total)	1000	<0.6 *	0.35	<0.62	<1.2	<0.05	
Isopropylbenzene	1.0E+03	<0.6 *	<0.25	<0.62	<1.2	<0.05	
n-Propylbenzene	1.00E+03	<0.6 *	<0.25	<0.62	<1.2	<0.05	
1,3,5-Trimethylbenzene	1.00E+03	<0.6 *	<0.25	<0.62	<1.2	<0.05	
1,2,4-Trimethylbenzene	1.00E+3	<0.6 *	<0.25	<0.62	<1.2	<0.05	
Naphthalene	10000	<0.6 *	<0.25	<0.62	<1.2	<0.05#	
Acenaphthene	1.0E+04	---	---	---	---	<0.00033	
2-Methylnaphthalene	10000	<1.2 *	<0.5	<1.2	<2.5	<0.1#	
1,1-Dichloroethane	1000	<0.1 *	<0.1	2.2	0.84	<0.05	
1,1-Dichloroethene	0.08	<0.1 *	<0.1	<0.1	<0.1	<0.05	
1,2-Dichloroethane	0.37	<0.1 *	<0.1	<0.1	<0.1	<0.05	
cis-1,2-Dichloroethene	102.49	<0.1 *	0.42	12	23	<0.05	
trans-1,2-Dichloroethene	2.29E+02	<0.1 *	<0.1	<0.1	<0.1	<0.05	
1,1,1-Trichloroethane	1000	0.75 *	1.2	<0.1	6.5	<0.05	
Chlorobenzene	3.16E+02	<0.1 *	<0.1	<0.1	<0.1	<0.05	
Methylene chloride	9.08E+00	<0.1 *	<0.1	<0.1	7.6	<0.05	
Tetrachloroethene	8.01	<0.1 *	0.11	<0.1	<0.1	<0.05	
Trichloroethene	25.73	<0.1 *	3.4	1.3	16	<0.05	
Vinyl chloride	0.13	<0.24 *	<0.1	<0.25	<0.49	<0.1	
1,2-Dichlorobenzene		---	---	---	---	<0.05#	
1,3-Dichlorobenzene		---	---	---	---	<0.05#	
1,4-Dichlorobenzene		---	---	---	---	<0.05#	
Sum of Concentrations		0.75	5.76	16.50	56.44	0.00	

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= Constituent analyzed by more than one test method, highest result reported.

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CONSTITUENT (Units in mg/kg)	SITE	03GP016	03GP016	03GP016	03GP017	03GP017
	SAMPLE ID	03PS01604	03PS01608	03PS01614	03PS01708	03PS01712
DATE	1996 VRP	10/03/96	10/03/96	10/03/96	10/04/96	10/04/96
DEPTH (ft)	Tier II	4.00	8.00	14.00	8.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.62	<0.6	<0.25	<0.25
Ethyl benzene	1000	<0.25	<0.62	<0.6	<0.25	<0.25
Xylene (total)	1000	<0.25	<0.62	<0.6	<0.25	0.31 J
Isopropylbenzene	1.0E+03	<0.25	<0.62	<0.6	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.62	<0.6	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.62	<0.6	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.62	<0.6	<0.25	0.55
Naphthalene	10000	<0.25	<0.62	<0.6	<0.25	<0.25
Acenaphthene	1.0E+04	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	<1.2	<1.2	<0.5	<0.5
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethene	0.08	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichloroethane	0.37	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,2-Dichloroethene	2.29E+02	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.1	0.85	0.39	<0.1	<0.1
Chlorobenzene	3.16E+02	<0.1	<0.1	<0.1	<0.1	<0.1
Methylene chloride	9.08E+00	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene	25.73	<0.1	<0.1	0.69	<0.1	<0.1
Vinyl chloride	0.13	<0.1	<0.25	<0.24	<0.1	<0.1
1,2-Dichlorobenzene		---	---	---	---	---
1,3-Dichlorobenzene		---	---	---	---	---
1,4-Dichlorobenzene		---	---	---	---	---
Sum of Concentrations		0.00	0.85	1.08	0.00	0.86

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units: in mg/kg)	SITE	03GP017	03GP017	03GP018	03GP018	03GP019
	SAMPLE ID	03QD01712	03PS01716	03PS01808	03PS01812	03PS01904
DATE	1996 VRP	10/04/96	10/04/96	10/25/96	10/25/96	10/28/96
DEPTH (ft)	Tier II	12.00	15.00	8.00	12.00	4.00
RESULT TYPE	Non-Residential	Duplicate 1	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	21	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.25	74	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	160	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.25	13	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	8.1	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	44	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	0.35	88	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	9	<0.25	<0.25	<0.25
Acenaphthene	1.0E+04	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	24	<0.5	<0.5	<0.5
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethene	0.08	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichloroethane	0.37	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,2-Dichloroethene	2.29E+02	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	3.16E+02	<0.1	<0.1	<0.1	<0.1	<0.1
Methylene chloride	9.08E+00	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene	25.73	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl chloride	0.13	<0.1	<2.5	<0.1	<0.1	<0.1
1,2-Dichlorobenzene		---	---	---	---	---
1,3-Dichlorobenzene		---	---	---	---	---
1,4-Dichlorobenzene		---	---	---	---	---
Sum of Concentrations		0.35	441.10	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT	(Units in mg/kg)	SITE	03GP019	03GP019	03GP020	03GP020	03GP020	
		SAMPLE ID	03PS01908	03PS01912	03PS02004	03PS02008	03PS02014	
		DATE	1996 VRP	10/28/96	10/28/96	10/28/96	10/28/96	10/28/96
		DEPTH (ft)	Tier II	8.00	12.00	4.00	8.00	14.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene		1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Ethyl benzene		1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)		1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene		1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene		1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Acenaphthene		1.0E+04	---	---	---	---	---	---
2-Methylnaphthalene		10000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane		1000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethene		0.08	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichloroethane		0.37	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene		102.49	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,2-Dichloroethene		2.29E+02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane		1000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene		3.16E+02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methylene chloride		9.08E+00	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene		8.01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene		26.73	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl chloride		0.13	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichlorobenzene			---	---	---	---	---	---
1,3-Dichlorobenzene			---	---	---	---	---	---
1,4-Dichlorobenzene			---	---	---	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	03GP021	03GP021	03GP022	03GP022	03GP022
	SAMPLE ID	03PS02104	03PS02108	03PS02204	03PS02208	03PS02212
	DATE	1996 VRP	10/28/96	10/28/96	10/28/96	10/28/96
	DEPTH (ft)	Tier II	4.00	8.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25
Acenaphthene	1.0E+04	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethene	0.08	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichloroethane	0.37	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,2-Dichloroethene	2.29E+02	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	3.16E+02	<0.1	<0.1	<0.1	<0.1	<0.1
Methylene chloride	9.08E+00	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene	25.73	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichlorobenzene		---	---	---	---	---
1,3-Dichlorobenzene		---	---	---	---	---
1,4-Dichlorobenzene		---	---	---	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT	(Units in mg/kg)	SITE	03GP022	08GP004	08GP004	08GP004	11GP001	
		SAMPLE ID	03QD02212	08PS00408	08PS00412	08PS00418	11PS00104	
		DATE	1996 VRP	10/28/96	10/08/96	10/08/96	10/08/96	10/03/96
		DEPTH (ft)	Tier II	12.00	8.00	12.00	16.00	4.00
		RESULT TYPE	Non-Residential	Duplicate 1	Primary	Primary	Primary	Primary
Toluene		1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Ethyl benzene		1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)		1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene		1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene		1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Acenaphthene		1.0E+04	---	---	---	---	---	---
2-Methylnaphthalene		10000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane		1000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethene		0.08	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichloroethane		0.37	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene		102.49	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,2-Dichloroethene		2.29E+02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane		1000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene		3.16E+02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methylene chloride		9.08E+00	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene		8.01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene		25.73	<0.1	<0.1	<0.1	<0.1	<0.1	0.68
Vinyl chloride		0.13	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichlorobenzene			---	---	---	---	---	---
1,3-Dichlorobenzene			---	---	---	---	---	---
1,4-Dichlorobenzene			---	---	---	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00	0.68

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	11GP001	11GP002	11GP002	11GP003	11GP003
	SAMPLE ID	11PS00108	11PS00204	11PS00208	11PS00304	11PS00308
DATE	1996 VRP	10/03/96	10/03/96	10/03/96	10/04/96	10/04/96
DEPTH (ft)	Tier II	8.00	4.00	8.00	4.00	8.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.53	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.25	<0.53	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	<0.53	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.53	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.53	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.53	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.53	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	<0.53	<0.25	<0.25	<0.25
Acenaphthene	1.0E+04	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	<1.1	<0.5	<0.5	<0.5
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethene	0.08	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichloroethane	0.37	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,2-Dichloroethene	2.29E+02	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	3.16E+02	<0.1	<0.1	<0.1	<0.1	<0.1
Methylene chloride	9.08E+00	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene	25.73	0.32	1.4	0.37	<0.1	<0.1
Vinyl chloride	0.13	<0.1	<0.21	<0.1	<0.1	<0.1
1,2-Dichlorobenzene		---	---	---	---	---
1,3-Dichlorobenzene		---	---	---	---	---
1,4-Dichlorobenzene		---	---	---	---	---
Sum of Concentrations		0.32	1.40	0.37	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT	(Units in mg/kg)	SITE	11GP003	11GP004	11GP004	11GP005	11GP005	
		SAMPLE ID	11PS00312	11PS00404	11PS00409	11PS00504	11PS00508	
		DATE	1996 VRP	10/04/96	10/04/96	10/04/96	10/04/96	
		DEPTH (ft)	Tier II	12.00	4.00	9.00	4.00	8.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene		1000	<0.25	<0.25	<0.25	<0.25	<0.25	
Ethyl benzene		1000	<0.25	<0.25	<0.25	<0.25	<0.25	
Xylene (total)		1000	<0.25	<0.25	<0.25	<0.25	<0.25	
Isopropylbenzene		1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25	
n-Propylbenzene		1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	
1,3,5-Trimethylbenzene		1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	
1,2,4-Trimethylbenzene		1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25	
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25	<0.25	
Acenaphthene		1.0E+04	---	---	---	---	---	
2-Methylnaphthalene		10000	<0.5	<0.5	<0.5	<0.5	<0.5	
1,1-Dichloroethane		1000	<0.1	<0.1	<0.1	<0.1	<0.1	
1,1-Dichloroethene		0.08	<0.1	<0.1	<0.1	<0.1	<0.1	
1,2-Dichloroethane		0.37	<0.1	<0.1	<0.1	<0.1	<0.1	
cis-1,2-Dichloroethene		102.49	<0.1	<0.1	<0.1	<0.1	<0.1	
trans-1,2-Dichloroethene		2.29E+02	<0.1	<0.1	<0.1	<0.1	<0.1	
1,1,1-Trichloroethane		1000	<0.1	<0.1	<0.1	<0.1	<0.1	
Chlorobenzene		3.16E+02	<0.1	<0.1	<0.1	<0.1	<0.1	
Methylene chloride		9.08E+00	<0.1	<0.1	<0.1	<0.1	<0.1	
Tetrachloroethene		8.01	<0.1	<0.1	<0.1	<0.1	<0.1	
Trichloroethene		25.73	0.28	0.18 B	0.24	0.23 B	<0.1	
Vinyl chloride		0.13	<0.1	<0.1	<0.1	<0.1	<0.1	
1,2-Dichlorobenzene			---	---	---	---	---	
1,3-Dichlorobenzene			---	---	---	---	---	
1,4-Dichlorobenzene			---	---	---	---	---	
Sum of Concentrations			0.28	0.18	0.24	0.23	0.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT	(Units in mg/kg)	SITE	11GP005	11GP006	11GP006	11GP006	11GP007	
		SAMPLE ID	11PS00512	11PS00604	11PS00608	11PS00612	11PS00708	
		DATE	1996 VRP	10/04/96	10/04/96	10/04/96	10/04/96	10/05/96
		DEPTH (ft)	Tier II	12.00	4.00	8.00	12.00	8.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene		1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Ethyl benzene		1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)		1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene		1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene		1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Acenaphthene		1.0E+04	---	---	---	---	---	---
2-Methylnaphthalene		10000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane		1000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethene		0.08	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichloroethane		0.37	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene		102.49	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,2-Dichloroethene		2.29E+02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane		1000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene		3.16E+02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methylene chloride		9.08E+00	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene		8.01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene		25.73	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl chloride		0.13	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichlorobenzene			---	---	---	---	---	---
1,3-Dichlorobenzene			---	---	---	---	---	---
1,4-Dichlorobenzene			---	---	---	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT	(Units in mg/kg)	SITE	11GP007	11GP007	11GP008	11GP008	11GP008	
		SAMPLE ID	11PS00712	11PS00715	11PS00804	11PS00808	11PS00812	
		DATE	1996 VRP	10/05/96	10/05/96	10/16/96	10/16/96	10/16/96
		DEPTH (ft)	Tier II	12.00	15.00	4.00	8.00	12.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene		1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Ethyl benzene		1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)		1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene		1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene		1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Acenaphthene		1.0E+04	---	---	---	---	---	---
2-Methylnaphthalene		10000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane		1000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethene		0.08	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichloroethane		0.37	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene		102.49	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,2-Dichloroethene		2.29E+02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane		1000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene		3.16E+02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methylene chloride		9.08E+00	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene		8.01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene		25.73	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl chloride		0.13	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichlorobenzene			---	---	---	---	---	---
1,3-Dichlorobenzene			---	---	---	---	---	---
1,4-Dichlorobenzene			---	---	---	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	11GP009	11GP009	11GP009	11GP010	11GP010	
	SAMPLE ID	11PS00904	11PS00910	11PS00912	11PS01004	11PS01008	
	DATE	1996 VRP	11/13/96	11/13/96	11/13/96	12/17/96	12/17/96
	DEPTH (ft)	Tier II	4.00	10.00	12.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	0.36	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Acenaphthene	1.0E+04	---	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethene	0.08	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichloroethane	0.37	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,2-Dichloroethene	2.29E+02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	3.16E+02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methylene chloride	9.08E+00	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene	26.73	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichlorobenzene			---	---	---	---	---
1,3-Dichlorobenzene			---	---	---	---	---
1,4-Dichlorobenzene			---	---	---	---	---
Sum of Concentrations		0.00	0.36	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT	(Units: in mg/kg)	SITE	11GP010
		SAMPLE ID	11PS01012
		DATE	12/17/96
		1996 VRP	
		DEPTH (ft)	Tier II 12.00
		RESULT TYPE	Non-Residential Primary
Toluene		1000	< 0.25
Ethyl benzene		1000	< 0.25
Xylene (total)		1000	< 0.25
Isopropylbenzene		1.0E+03	< 0.25
n-Propylbenzene		1.00E+03	< 0.25
1,3,5-Trimethylbenzene		1.00E+03	< 0.25
1,2,4-Trimethylbenzene		1.00E+3	< 0.25
Naphthalene		10000	< 0.25
Acenaphthene		1.0E+04	---
2-Methylnaphthalene		10000	< 0.5
1,1-Dichloroethane		1000	< 0.1
1,1-Dichloroethene		0.08	< 0.1
1,2-Dichloroethane		0.37	< 0.1
cis-1,2-Dichloroethene		102.49	< 0.1
trans-1,2-Dichloroethene		2.29E+02	< 0.1
1,1,1-Trichloroethane		1000	< 0.1
Chlorobenzene		3.16E+02	< 0.1
Methylene chloride		8.08E+00	< 0.1
Tetrachloroethene		8.01	< 0.1
Trichloroethene		25.73	< 0.1
Vinyl chloride		0.13	< 0.1
1,2-Dichlorobenzene			---
1,3-Dichlorobenzene			---
1,4-Dichlorobenzene			---
Sum of Concentrations			0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following qualifier(s) exist: J, *, B

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	03GP001	03GP001	03GP001	03GP001	03GP002	
	SAMPLE ID	03PS0104	03PS0106	03PS0108	03PS0112	03PS0202	
	DATE	1996 VRP	09/30/96	09/30/96	09/30/96	09/30/96	
	DEPTH (ft)	Tier II	4.00	6.00	8.00	12.00	2.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
2,4-Dimethylphenol	1.70E+02	---	1.1	---	---	---	
2-Methylnaphthalene	10000	<0.5	6.1#	20	<0.5	<0.5	
2-Methylphenol	375.93	---	2.3	---	---	---	
4-Methylphenol	427.24	---	1.7	---	---	---	
Acenaphthene	1.0E+04	---	<0.33	---	---	---	
Anthracene	1.00E+04	---	<0.33	---	---	---	
Benzo (a) anthracene	103.8	---	<0.33	---	---	---	
Benzo (b) pyrene	69.85	---	<0.33	---	---	---	
Benzo (b) fluoranthene	354.98	---	<0.33	---	---	---	
Benzo (k) fluoranthene	3759.12	---	<0.33	---	---	---	
Benzo (ghi) perylene		---	<0.33	---	---	---	
Bis (2-ethylhexyl) phthalate	1406	---	1.3	---	---	---	
Carbazole	1.00E+04	---	<0.33	---	---	---	
Chrysene	1.00E+04	---	<0.33	---	---	---	
Di-n-butylphthalate	1.00E+04	---	<0.33	---	---	---	
Fluoranthene	10000	---	<0.33	---	---	---	
Fluorene	1.00E+04	---	<0.33	---	---	---	
Naphthalene	10000	<0.25	1.9#	6.7	0.37	<0.25	
Phenanthrene	1.00E+04	---	0.38	---	---	---	
Phenol	658.78	---	0.41	---	---	---	
Pyrene	10000	---	0.34	---	---	---	
Sum of Concentrations		0.00	15.53	26.70	0.37	0.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent analyzed by more than one test method, highest result reported.

For RCL SVOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	03GP002	03GP002	03GP003	03GP003	03GP004
	SAMPLE ID	03PS0208	03PS0212	03PS0304	03PS0306	03PS0402
DATE	1996 VRP	09/30/96	09/30/96	09/30/96	09/30/96	09/30/96
DEPTH (ft)	Tier II	8.00	12.00	4.00	6.00	2.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
2,4-Dimethylphenol	1.70E+02	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.5
2-Methylphenol	375.93	---	---	---	---	---
4-Methylphenol	427.24	---	---	---	---	---
Acenaphthene	1.0E+04	---	---	---	---	---
Anthracene	1.00E+04	---	---	---	---	---
Benzo (a) anthracene	103.8	---	---	---	---	---
Benzo (b) pyrene	69.85	---	---	---	---	---
Benzo (b) fluoranthene	354.98	---	---	---	---	---
Benzo (k) fluoranthene	3759.12	---	---	---	---	---
Benzo (ghi) perylene		---	---	---	---	---
Bis (2-ethylhexyl) phthalate	1406	---	---	---	---	---
Carbazole	1.00E+04	---	---	---	---	---
Chrysene	1.00E+04	---	---	---	---	---
Di-n-butylphthalate	1.00E+04	---	---	---	---	---
Fluoranthene	10000	---	---	---	---	---
Fluorene	1.00E+04	---	---	---	---	---
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25
Phenanthrene	1.00E+04	---	---	---	---	---
Phenol	658.78	---	---	---	---	---
Pyrene	10000	---	---	---	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	03GP004	03GP004	03GP005	03GP005	03GP005	
	SAMPLE ID	03PS0408	03PS0410	03PS0504	03PS0508	03PS0512	
	DATE	1996 VRP	09/30/96	09/30/96	10/01/96	10/01/96	10/01/96
	DEPTH (ft)	Tier II	8.00	10.00	4.00	8.00	12.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
2,4-Dimethylphenol		1.70E+02	<0.33	---	---	---	---
2-Methylnaphthalene		10000	<0.1#	<0.5	<0.5	<0.5	<0.5
2-Methylphenol		375.93	<0.33	---	---	---	---
4-Methylphenol		427.24	<0.33	---	---	---	---
Acenaphthene		1.0E+04	<0.33	---	---	---	---
Anthracene		1.00E+04	<0.33	---	---	---	---
Benzo (a) anthracene		103.8	<0.33	---	---	---	---
Benzo (b) pyrene		69.85	<0.33	---	---	---	---
Benzo (b) fluoranthene		354.98	<0.33	---	---	---	---
Benzo (k) fluoranthene		3759.12	<0.33	---	---	---	---
Benzo (ghi) perylene			<0.33	---	---	---	---
Bis (2-ethylhexyl) phthalate		1408	0.72	---	---	---	---
Carbazole		1.00E+04	<0.33	---	---	---	---
Chrysene		1.00E+04	<0.33	---	---	---	---
Di-n-butylphthalate		1.00E+04	<0.33	---	---	---	---
Fluoranthene		10000	<0.33	---	---	---	---
Fluorene		1.00E+04	<0.33	---	---	---	---
Naphthalene		10000	<0.05#	<0.25	<0.25	<0.25	<0.25
Phenanthrene		1.00E+04	<0.33	---	---	---	---
Phenol		658.78	<0.33	---	---	---	---
Pyrene		10000	<0.33	---	---	---	---
Sum of Concentrations			0.72	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent more than one test method, highest result reported.

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CONSTITUENT (Units in mg/kg)	SITE	03GP006	03GP006	03GP006	03GP006	03GP007
	SAMPLE ID	03PS0606	03PS0610	03PS0618	03GP00601	03PS0704
DATE	1996 VRP	10/01/96	10/01/96	10/01/96	11/06/97	10/01/96
DEPTH (ft)	Tier II	6.00	10.00	18.00	1.00	4.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
2,4-Dimethylphenol	1.70E+02	---	---	---	<0.33	---
2-Methylnaphthalene	10000	<5	<5	<2	0.48#	<0.5
2-Methylphenol	375.93	---	---	---	<0.33	---
4-Methylphenol	427.24	---	---	---	<0.33	---
Acenaphthene	1.0E+04	---	---	---	<0.33	---
Anthracene	1.00E+04	---	---	---	<0.33	---
Benzo (a) anthracene	103.8	---	---	---	<0.33	---
Benzo (b) pyrene	69.85	---	---	---	<0.33	---
Benzo (b) fluoranthene	354.98	---	---	---	<0.33?	---
Benzo (k) fluoranthene	3759.12	---	---	---	<0.33?	---
Benzo (ghi) perylene		---	---	---	<0.33	---
Bis (2-ethylhexyl) phthalate	1406	---	---	---	0.59	---
Carbazole	1.00E+04	---	---	---	<0.33	---
Chrysene	1.00E+04	---	---	---	<0.33	---
Di-n-butylphthalate	1.00E+04	---	---	---	0.52	---
Fluoranthene	10000	---	---	---	<0.33	---
Fluorene	1.00E+04	---	---	---	<0.33	---
Naphthalene	10000	<2.5	<2.5	<1	<0.05#	0.34
Phenanthrene	1.00E+04	---	---	---	<0.33	---
Phenol	658.78	---	---	---	<0.33	---
Pyrene	10000	---	---	---	<0.33	---
Sum of Concentrations		0.00	0.00	0.00	1.59	0.34

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= Constituent in more than one test method, highest result reported. ? = Duplicate records found, Data review required.

For RCL SVOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	03GP007	03GP007	03GP008	03GP008	03GP008	
	SAMPLE ID	03PS0708	03PS0714	03PS0802	03PS0806	03PS0808	
	DATE	1996 VRP	10/01/96	10/01/96	10/01/96	10/01/96	10/01/96
	DEPTH (ft)	Tier II	8.00	14.00	2.00	6.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
2,4-Dimethylphenol		1.70E + 02	---	---	---	---	---
2-Methylnaphthalene		10000	<0.5	0.5	<0.5	<0.5	<0.5
2-Methylphenol		375.93	---	---	---	---	---
4-Methylphenol		427.24	---	---	---	---	---
Acenaphthene		1.0E + 04	---	---	---	---	---
Anthracene		1.00E + 04	---	---	---	---	---
Benzo (a) anthracene		103.8	---	---	---	---	---
Benzo (b) pyrene		69.85	---	---	---	---	---
Benzo (b) fluoranthene		354.98	---	---	---	---	---
Benzo (k) fluoranthene		3759.12	---	---	---	---	---
Benzo (ghi) perylene			---	---	---	---	---
Bis (2-ethylhexyl) phthalate		1406	---	---	---	---	---
Carbazole		1.00E + 04	---	---	---	---	---
Chrysene		1.00E + 04	---	---	---	---	---
Di-n-butylphthalate		1.00E + 04	---	---	---	---	---
Fluoranthene		10000	---	---	---	---	---
Fluorene		1.00E + 04	---	---	---	---	---
Naphthalene		10000	<0.25	0.85	<0.25	<0.25	<0.25
Phenanthrene		1.00E + 04	---	---	---	---	---
Phenol		668.78	---	---	---	---	---
Pyrene		10000	---	---	---	---	---
Sum of Concentrations			0.00	1.35	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	03GP008	03GP009	03GP009	03GP009	03GP010
	SAMPLE ID	03QD0808	03PS0904	03PS0908	03PS0910	03PS1004
	DATE	1996 VRP	10/01/96	10/02/96	10/02/96	10/02/96
	DEPTH (ft)	Tier II	8.00	4.00	8.00	10.00
	RESULT TYPE	Non-Residential	Duplicate 1	Primary	Primary	Primary
2,4-Dimethylphenol		1.70E+02	---	---	---	---
2-Methylnaphthalene		10000	<0.5	<0.5	<0.5	<0.5
2-Methylphenol		375.93	---	---	---	---
4-Methylphenol		427.24	---	---	---	---
Acenaphthene		1.0E+04	---	---	---	---
Anthracene		1.00E+04	---	---	---	---
Benzo (a) anthracene		103.8	---	---	---	---
Benzo (b) pyrene		69.85	---	---	---	---
Benzo (b) fluoranthene		354.98	---	---	---	---
Benzo (k) fluoranthene		3759.12	---	---	---	---
Benzo (ghi) perylene			---	---	---	---
Bis (2-ethylhexyl) phthalate		1406	---	---	---	---
Carbazole		1.00E+04	---	---	---	---
Chrysene		1.00E+04	---	---	---	---
Di-n-butylphthalate		1.00E+04	---	---	---	---
Fluoranthene		10000	---	---	---	---
Fluorene		1.00E+04	---	---	---	---
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25
Phenanthrene		1.00E+04	---	---	---	---
Phenol		658.78	---	---	---	---
Pyrene		10000	---	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	03GP010	03GP010	03GP011	03GP011	03GP011
	SAMPLE ID	03PS1006	03PS1012	03PS1108	03PS1108	03PS1114
DATE	1996 VRP	10/02/96	10/02/96	10/02/96	10/02/96	10/02/96
DEPTH (ft)	Tier II	6.00	12.00	6.00	8.00	14.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
2,4-Dimethylphenol	1.70E+02	---	---	---	<0.33	---
2-Methylnaphthalene	10000	<0.5	<0.5	7	<0.1#	<0.5
2-Methylphenol	375.93	---	---	---	<0.33	---
4-Methylphenol	427.24	---	---	---	<0.33	---
Acenaphthene	1.0E+04	---	---	---	<0.33	---
Anthracene	1.00E+04	---	---	---	<0.33	---
Benzo (a) anthracene	103.8	---	---	---	<0.33	---
Benzo (b) pyrene	69.85	---	---	---	<0.33	---
Benzo (b) fluoranthene	354.98	---	---	---	<0.33	---
Benzo (k) fluoranthene	3759.12	---	---	---	<0.33	---
Benzo (ghi) perylene	---	---	---	---	<0.33	---
Bis (2-ethylhexyl) phthalate	1406	---	---	---	0.5	---
Carbazole	1.00E+04	---	---	---	<0.33	---
Chrysene	1.00E+04	---	---	---	<0.33	---
Di-n-butylphthalate	1.00E+04	---	---	---	<0.33	---
Fluoranthene	10000	---	---	---	<0.33	---
Fluorene	1.00E+04	---	---	---	<0.33	---
Naphthalene	10000	<0.25	<0.25	1.3	<0.05#	<0.25
Phenanthrene	1.00E+04	---	---	---	<0.33	---
Phenol	658.78	---	---	---	<0.33	---
Pyrene	10000	---	---	---	<0.33	---
Sum of Concentrations		0.00	0.00	8.30	0.50	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent analyzed by more than one test method, highest result reported.

For RCL SVOC

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CONSTITUENT (Units in mg/kg)	SITE	03GP011	03GP012	03GP012	03GP012	03GP012	
	SAMPLE ID	03PS1122	03PS1208	03PS1216	03PS1220	03GP01201	
	DATE	1996 VRP	10/02/96	10/02/96	10/02/96	10/02/96	11/06/97
	DEPTH (ft)	Tier II	22.00	8.00	16.00	20.00	1.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
2,4-Dimethylphenol		1.70E+02	---	---	---	---	<0.33
2-Methylnaphthalene		10000	<0.5	<0.5	<0.5	<1	0.81#
2-Methylphenol		375.93	---	---	---	---	<0.33
4-Methylphenol		427.24	---	---	---	---	0.50
Acenaphthene		1.0E+04	---	---	---	---	<0.33
Anthracene		1.00E+04	---	---	---	---	0.34
Benzo (a) anthracene		103.8	---	---	---	---	1.2
Benzo (b) pyrene		69.85	---	---	---	---	0.41
Benzo (b) fluoranthene		354.98	---	---	---	---	0.90?
Benzo (k) fluoranthene		3759.12	---	---	---	---	<0.33?
Benzo (ghi) perylene			---	---	---	---	<0.33
Bis (2-ethylhexyl) phthalate		1406	---	---	---	---	4.0
Carbazole		1.00E+04	---	---	---	---	<0.33
Chrysene		1.00E+04	---	---	---	---	1.1
Di-n-butylphthalate		1.00E+04	---	---	---	---	<0.33
Fluoranthene		10000	---	---	---	---	1.5
Fluorene		1.00E+04	---	---	---	---	<0.33
Naphthalene		10000	<0.25	<0.25	<0.25	<0.6	<0.05#
Phenanthrene		1.00E+04	---	---	---	---	1.1
Phenol		658.78	---	---	---	---	<0.33
Pyrene		10000	---	---	---	---	2.9
Sum of Concentrations			0.00	0.00	0.00	0.00	14.76

Values represent total concentrations unless noted < =Not detected at indicated reporting limit --- =Not analyzed
= Constituent in more than one test method, highest result reported. ? = Duplicate records found, Data review required.

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CONSTITUENT (Units in mg/kg)	SITE	03GP013	03GP013	03GP013	03GP014	03GP014	
	SAMPLE ID	03PS1308	03PS1312	03PS1318	03PS01404	03PS01408	
	DATE	1996 VRP	10/02/96	10/02/96	10/02/96	10/03/96	10/03/96
	DEPTH (ft)	Tier II	8.00	12.00	18.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
2,4-Dimethylphenol		1.70E+02	---	---	---	ND	---
2-Methylnaphthalene		10000	<0.5	<6.2	<1.1	<0.1#	<120
2-Methylphenol		375.93	---	---	---	ND	---
4-Methylphenol		427.24	---	---	---	ND	---
Acenaphthene		1.0E+04	---	---	---	ND	---
Anthracene		1.00E+04	---	---	---	ND	---
Benzo (a) anthracene		103.8	---	---	---	ND	---
Benzo (b) pyrene		69.85	---	---	---	ND	---
Benzo (b) fluoranthene		354.98	---	---	---	<0.33?	---
Benzo (k) fluoranthene		3759.12	---	---	---	<0.33?	---
Benzo (ghi) perylene			---	---	---	ND	---
Bis (2-ethylhexyl) phthalate		1406	---	---	---	ND	---
Carbazole		1.00E+04	---	---	---	ND	---
Chrysene		1.00E+04	---	---	---	ND	---
Di-n-butylphthalate		1.00E+04	---	---	---	ND	---
Fluoranthene		10000	---	---	---	ND	---
Fluorene		1.00E+04	---	---	---	ND	---
Naphthalene		10000	<0.25	<2.6	<0.65	<0.05#	<60
Phenanthrene		1.00E+04	---	---	---	ND	---
Phenol		658.78	---	---	---	ND	---
Pyrene		10000	---	---	---	ND	---
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < =Not detected at indicated reporting limit --- =Not analyzed

= Constituent analyzed by more than one test method, highest result reported. ? = Duplicate record found, Data review required. ND = Not Detected

For RCL SVOCs Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	03GP014	03GP014	03GP014	03GP015	03GP015
	SAMPLE ID	03PS01412	03PS01416	03GP014	03PS01508	03PS01512
DATE	1996 VRP	10/03/96	10/03/96	11/06/97	10/03/96	10/03/96
DEPTH (ft)	Tier II	12.00	16.00	1.00	8.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
2,4-Dimethylphenol	1.70E + 02	---	---	< 0.33	---	---
2-Methylnaphthalene	10000	< 52	< 30	< 0.1#	< 1.4	< 1.1
2-Methylphenol	375.93	---	---	< 0.33	---	---
4-Methylphenol	427.24	---	---	< 0.33	---	---
Acenaphthene	1.0E + 04	---	---	< 0.33	---	---
Anthracene	1.00E + 04	---	---	0.56	---	---
Benzo (a) anthracene	103.8	---	---	1.4	---	---
Benzo (b) pyrene	69.85	---	---	0.92	---	---
Benzo (b) fluoranthene	354.98	---	---	1.4?	---	---
Benzo (k) fluoranthene	3759.12	---	---	< 0.33?	---	---
Benzo (ghi) perylene		---	---	0.46	---	---
Bis (2-ethylhexyl) phthalate	1406	---	---	< 0.33	---	---
Carbazole	1.00E + 04	---	---	< 0.33	---	---
Chrysene	1.00E + 04	---	---	1.0	---	---
Di-n-butylphthalate	1.00E + 04	---	---	0.70	---	---
Fluoranthene	10000	---	---	3.2	---	---
Fluorene	1.00E + 04	---	---	< 0.33	---	---
Naphthalene	10000	< 26	< 15	< 0.05#	< 0.68	< 0.53
Phenanthrene	1.00E + 04	---	---	2.0	---	---
Phenol	658.78	---	---	< 0.33	---	---
Pyrene	10000	---	---	2.1	---	---
Sum of Concentrations		0.00	0.00	13.74	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
= Constituent in more than one test method, highest result reported. ? = Duplicate records found, Data review required.

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CONSTITUENT (Units in mg/kg)	SITE	03GP015	03GP015	03GP015	03GP015	03GP015
	SAMPLE ID	03PS01514	03QD01514	03PS01518	03PS01520	03GP01501
DATE	1996 VRP	10/03/96	10/03/96	10/03/96	10/03/96	11/08/97
DEPTH (ft)	Tier II	14.00	14.00	18.00	20.00	1.00
RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary	Primary
2,4-Dimethylphenol	1.70E+02	---	---	---	---	<0.33
2-Methylnaphthalene	10000	<1.2 *	<0.5	<1.2	<2.5	<0.1#
2-Methylphenol	375.93	---	---	---	---	<0.33
4-Methylphenol	427.24	---	---	---	---	<0.33
Acenaphthene	1.0E+04	---	---	---	---	<0.33
Anthracene	1.00E+04	---	---	---	---	<0.33
Benzo (a) anthracene	103.8	---	---	---	---	<0.33
Benzo (b) pyrene	69.85	---	---	---	---	<0.33
Benzo (b) fluoranthene	354.98	---	---	---	---	<0.33?
Benzo (k) fluoranthene	3759.12	---	---	---	---	<0.33?
Benzo (ghi) perylene		---	---	---	---	<0.33
Bis (2-ethylhexyl) phthalate	1406	---	---	---	---	<0.33
Carbazole	1.00E+04	---	---	---	---	<0.33
Chrysene	1.00E+04	---	---	---	---	<0.33
Di-n-butylphthalate	1.00E+04	---	---	---	---	0.57
Fluoranthene	10000	---	---	---	---	<0.33
Fluorene	1.00E+04	---	---	---	---	<0.33
Naphthalene	10000	<0.6 *	<0.25	<0.62	<1.2	<0.05#
Phenanthrene	1.00E+04	---	---	---	---	<0.33
Phenol	658.78	---	---	---	---	<0.33
Pyrene	10000	---	---	---	---	<0.33
Sum of Concentrations		0.00	0.00	0.00	0.00	0.57

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported. ? = Duplicate record found, Data review required.

For RCL SVOC Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in:mg/kg)	SITE	03GP016	03GP016	03GP016	03GP017	03GP017
	SAMPLE ID	03PS01604	03PS01608	03PS01614	03PS01708	03PS01712
DATE	1996 VRP	10/03/96	10/03/96	10/03/96	10/04/96	10/04/96
DEPTH (ft)	Tier II	4.00	8.00	14.00	8.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
2,4-Dimethylphenol	1.70E+02	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	<1.2	<1.2	<0.5	<0.5
2-Methylphenol	375.93	---	---	---	---	---
4-Methylphenol	427.24	---	---	---	---	---
Acenaphthene	1.0E+04	---	---	---	---	---
Anthracene	1.00E+04	---	---	---	---	---
Benzo (a) anthracene	103.8	---	---	---	---	---
Benzo (b) pyrene	69.85	---	---	---	---	---
Benzo (b) fluoranthene	354.98	---	---	---	---	---
Benzo (k) fluoranthene	3759.12	---	---	---	---	---
Benzo (ghi) perylene	---	---	---	---	---	---
Bis (2-ethylhexyl) phthalate	1406	---	---	---	---	---
Carbazole	1.00E+04	---	---	---	---	---
Chrysene	1.00E+04	---	---	---	---	---
Di-n-butylphthalate	1.00E+04	---	---	---	---	---
Fluoranthene	10000	---	---	---	---	---
Fluorene	1.00E+04	---	---	---	---	---
Naphthalene	10000	<0.25	<0.62	<0.6	<0.25	<0.25
Phenanthrene	1.00E+04	---	---	---	---	---
Phenol	658.78	---	---	---	---	---
Pyrene	10000	---	---	---	---	---
Sum of Concentrations	---	0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	03GP017	03GP017	03GP018	03GP018	03GP019
	SAMPLE ID	03QD01712	03PS01716	03PS01808	03PS01812	03PS01904
DATE	1996 VRP	10/04/96	10/04/96	10/25/96	10/25/96	10/28/96
DEPTH (ft)	Tier II	12.00	15.00	8.00	12.00	4.00
RESULT TYPE	Non-Residential	Duplicate 1	Primary	Primary	Primary	Primary
2,4-Dimethylphenol	1.70E+02	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	24	<0.5	<0.5	<0.5
2-Methylphenol	375.93	---	---	---	---	---
4-Methylphenol	427.24	---	---	---	---	---
Acenaphthene	1.0E+04	---	---	---	---	---
Anthracene	1.00E+04	---	---	---	---	---
Benzo (a) anthracene	103.8	---	---	---	---	---
Benzo (b) pyrene	69.85	---	---	---	---	---
Benzo (b) fluoranthene	354.98	---	---	---	---	---
Benzo (k) fluoranthene	3759.12	---	---	---	---	---
Benzo (ghi) perylene	---	---	---	---	---	---
Bis (2-ethylhexyl) phthalate	1406	---	---	---	---	---
Carbazole	1.00E+04	---	---	---	---	---
Chrysene	1.00E+04	---	---	---	---	---
Di-n-butylphthalate	1.00E+04	---	---	---	---	---
Fluoranthene	10000	---	---	---	---	---
Fluorene	1.00E+04	---	---	---	---	---
Naphthalene	10000	<0.25	9	<0.25	<0.25	<0.25
Phenanthrene	1.00E+04	---	---	---	---	---
Phenol	658.78	---	---	---	---	---
Pyrene	10000	---	---	---	---	---
Sum of Concentrations	---	0.00	33.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	03GP019	03GP019	03GP020	03GP020	03GP020
	SAMPLE ID	03PS01908	03PS01912	03PS02004	03PS02008	03PS02014
	DATE	1996 VRP	10/28/96	10/28/96	10/28/96	10/28/96
	DEPTH (ft)	Tier II	8.00	12.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
2,4-Dimethylphenol		1.70E+02	---	---	---	---
2-Methylnaphthalene		10000	<0.5	<0.5	<0.5	<0.5
2-Methylphenol		375.93	---	---	---	---
4-Methylphenol		427.24	---	---	---	---
Acenaphthene		1.0E+04	---	---	---	---
Anthracene		1.00E+04	---	---	---	---
Benzo (a) anthracene		103.8	---	---	---	---
Benzo (b) pyrene		69.85	---	---	---	---
Benzo (b) fluoranthene		354.98	---	---	---	---
Benzo (k) fluoranthene		3759.12	---	---	---	---
Benzo (ghi) perylene			---	---	---	---
Bis (2-ethylhexyl) phthalate		1406	---	---	---	---
Carbazole		1.00E+04	---	---	---	---
Chrysene		1.00E+04	---	---	---	---
Di-n-butylphthalate		1.00E+04	---	---	---	---
Fluoranthene		10000	---	---	---	---
Fluorene		1.00E+04	---	---	---	---
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25
Phenanthrene		1.00E+04	---	---	---	---
Phenol		658.78	---	---	---	---
Pyrene		10000	---	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	03GP021	03GP021	03GP022	03GP022	03GP022
	SAMPLE ID	03PS02104	03PS02108	03PS02204	03PS02208	03PS02212
	DATE	1996 VRP	10/28/96	10/28/96	10/28/96	10/28/96
	DEPTH (ft)	Tier II	4.00	8.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
2,4-Dimethylphenol		1.70E + 02	---	---	---	---
2-Methylnaphthalene		10000	<0.5	<0.5	<0.5	<0.5
2-Methylphenol		375.93	---	---	---	---
4-Methylphenol		427.24	---	---	---	---
Acenaphthene		1.0E + 04	---	---	---	---
Anthracene		1.00E + 04	---	---	---	---
Benzo (a) anthracene		103.8	---	---	---	---
Benzo (b) pyrene		69.85	---	---	---	---
Benzo (b) fluoranthene		354.98	---	---	---	---
Benzo (k) fluoranthene		3759.12	---	---	---	---
Benzo (ghi) perylene		---	---	---	---	---
Bis (2-ethylhexyl) phthalate		1406	---	---	---	---
Carbazole		1.00E + 04	---	---	---	---
Chrysene		1.00E + 04	---	---	---	---
Di-n-butylphthalate		1.00E + 04	---	---	---	---
Fluoranthene		10000	---	---	---	---
Fluorene		1.00E + 04	---	---	---	---
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25
Phenanthrene		1.00E + 04	---	---	---	---
Phenol		658.78	---	---	---	---
Pyrene		10000	---	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	03GP022	08GP004	08GP004	08GP004	11GP001
	SAMPLE ID	03QD02212	08PS00408	08PS00412	08PS00416	11PS00104
DATE	1996 VRP	10/28/96	10/08/96	10/08/96	10/08/96	10/03/96
DEPTH (ft)	Tier II	12.00	8.00	12.00	16.00	4.00
RESULT TYPE	Non-Residential	Duplicate 1	Primary	Primary	Primary	Primary
2,4-Dimethylphenol	1.70E+02	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.5
2-Methylphenol	375.93	---	---	---	---	---
4-Methylphenol	427.24	---	---	---	---	---
Acenaphthene	1.0E+04	---	---	---	---	---
Anthracene	1.00E+04	---	---	---	---	---
Benzo (a) anthracene	103.8	---	---	---	---	---
Benzo (b) pyrene	69.85	---	---	---	---	---
Benzo (b) fluoranthene	354.98	---	---	---	---	---
Benzo (k) fluoranthene	3759.12	---	---	---	---	---
Benzo (ghi) perylene	---	---	---	---	---	---
Bis (2-ethylhexyl) phthalate	1406	---	---	---	---	---
Carbazole	1.00E+04	---	---	---	---	---
Chrysene	1.00E+04	---	---	---	---	---
Di-n-butylphthalate	1.00E+04	---	---	---	---	---
Fluoranthene	10000	---	---	---	---	---
Fluorene	1.00E+04	---	---	---	---	---
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25
Phenanthrene	1.00E+04	---	---	---	---	---
Phenol	658.78	---	---	---	---	---
Pyrene	10000	---	---	---	---	---
Sum of Concentrations	---	0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	11GP001	11GP002	11GP002	11GP003	11GP003
	SAMPLE ID	11PS00108	11PS00204	11PS00208	11PS00304	11PS00308
	DATE	1996 VRP	10/03/96	10/03/96	10/03/96	10/04/96
	DEPTH (ft)	Tier II	8.00	4.00	8.00	4.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
2,4-Dimethylphenol		1.70E+02	---	---	---	---
2-Methylnaphthalene		10000	<0.5	<1.1	<0.5	<0.5
2-Methylphenol		375.93	---	---	---	---
4-Methylphenol		427.24	---	---	---	---
Acenaphthene		1.0E+04	---	---	---	---
Anthracene		1.00E+04	---	---	---	---
Benzo (a) anthracene		103.8	---	---	---	---
Benzo (b) pyrene		69.85	---	---	---	---
Benzo (b) fluoranthene		354.98	---	---	---	---
Benzo (k) fluoranthene		3759.12	---	---	---	---
Benzo (ghi) perylene		---	---	---	---	---
Bis (2-ethylhexyl) phthalate		1406	---	---	---	---
Carbazole		1.00E+04	---	---	---	---
Chrysene		1.00E+04	---	---	---	---
Di-n-butylphthalate		1.00E+04	---	---	---	---
Fluoranthene		10000	---	---	---	---
Fluorene		1.00E+04	---	---	---	---
Naphthalene		10000	<0.25	<0.53	<0.25	<0.25
Phenanthrene		1.00E+04	---	---	---	---
Phenol		658.78	---	---	---	---
Pyrene		10000	---	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	11GP003	11GP004	11GP004	11GP005	11GP005
	SAMPLE ID	11PS00312	11PS00404	11PS00409	11PS00504	11PS00508
	DATE	1996 VRP	10/04/96	10/04/96	10/04/96	10/04/96
	DEPTH (ft)	Tier II	12.00	4.00	9.00	4.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
2,4-Dimethylphenol	1.70E + 02	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.5
2-Methylphenol	375.93	---	---	---	---	---
4-Methylphenol	427.24	---	---	---	---	---
Acenaphthene	1.0E + 04	---	---	---	---	---
Anthracene	1.00E + 04	---	---	---	---	---
Benzo (a) anthracene	103.8	---	---	---	---	---
Benzo (b) pyrene	69.85	---	---	---	---	---
Benzo (b) fluoranthene	354.98	---	---	---	---	---
Benzo (k) fluoranthene	3759.12	---	---	---	---	---
Benzo (ghi) perylene	---	---	---	---	---	---
Bis (2-ethylhexyl) phthalate	1406	---	---	---	---	---
Carbazole	1.00E + 04	---	---	---	---	---
Chrysene	1.00E + 04	---	---	---	---	---
Di-n-butylphthalate	1.00E + 04	---	---	---	---	---
Fluoranthene	10000	---	---	---	---	---
Fluorene	1.00E + 04	---	---	---	---	---
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25
Phenanthrene	1.00E + 04	---	---	---	---	---
Phenol	658.78	---	---	---	---	---
Pyrene	10000	---	---	---	---	---
Sum of Concentrations	---	0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	11GP005	11GP006	11GP006	11GP006	11GP007	
	SAMPLE ID	11PS00512	11PS00604	11PS00608	11PS00612	11PS00708	
	DATE	1996 VRP	10/04/96	10/04/96	10/04/96	10/05/96	
	DEPTH (ft)	Tier II	12.00	4.00	8.00	12.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
2,4-Dimethylphenol		1.70E+02	---	---	---	---	
2-Methylnaphthalene		10000	<0.5	<0.5	<0.5	<0.5	
2-Methylphenol		375.93	---	---	---	---	
4-Methylphenol		427.24	---	---	---	---	
Acenaphthene		1.0E+04	---	---	---	---	
Anthracene		1.00E+04	---	---	---	---	
Benzo (a) anthracene		103.8	---	---	---	---	
Benzo (b) pyrene		69.85	---	---	---	---	
Benzo (b) fluoranthene		354.98	---	---	---	---	
Benzo (k) fluoranthene		3759.12	---	---	---	---	
Benzo (ghi) perylene		---	---	---	---	---	
Bis (2-ethylhexyl) phthalate		1406	---	---	---	---	
Carbazole		1.00E+04	---	---	---	---	
Chrysene		1.00E+04	---	---	---	---	
Di-n-butylphthalate		1.00E+04	---	---	---	---	
Fluoranthene		10000	---	---	---	---	
Fluorene		1.00E+04	---	---	---	---	
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25	
Phenanthrene		1.00E+04	---	---	---	---	
Phenol		658.78	---	---	---	---	
Pyrene		10000	---	---	---	---	
Sum of Concentrations			0.00	0.00	0.00	0.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	11GP007	11GP007	11GP008	11GP008	11GP008
	SAMPLE ID	11PS00712	11PS00715	11PS00804	11PS00808	11PS00812
DATE	1996 VRP	10/05/96	10/05/96	10/16/96	10/16/96	10/16/96
DEPTH (ft)	Tier II	12.00	15.00	4.00	8.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
2,4-Dimethylphenol	1.70E+02	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.5
2-Methylphenol	375.93	---	---	---	---	---
4-Methylphenol	427.24	---	---	---	---	---
Acenaphthene	1.0E+04	---	---	---	---	---
Anthracene	1.00E+04	---	---	---	---	---
Benzo (a) anthracene	103.8	---	---	---	---	---
Benzo (b) pyrene	69.85	---	---	---	---	---
Benzo (b) fluoranthene	354.98	---	---	---	---	---
Benzo (k) fluoranthene	3759.12	---	---	---	---	---
Benzo (ghi) perylene		---	---	---	---	---
Bis (2-ethylhexyl) phthalate	1406	---	---	---	---	---
Carbazole	1.00E+04	---	---	---	---	---
Chrysene	1.00E+04	---	---	---	---	---
Di-n-butylphthalate	1.00E+04	---	---	---	---	---
Fluoranthene	10000	---	---	---	---	---
Fluorene	1.00E+04	---	---	---	---	---
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25
Phenanthrene	1.00E+04	---	---	---	---	---
Phenol	658.78	---	---	---	---	---
Pyrene	10000	---	---	---	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	11GP009	11GP009	11GP009	11GP010	11GP010	
	SAMPLE ID	11PS00904	11PS00910	11PS00912	11PS01004	11PS01008	
	DATE	1996 VRP	11/13/96	11/13/96	11/13/96	12/17/96	12/17/96
	DEPTH (ft)	Tier II	4.00	10.00	12.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
2,4-Dimethylphenol		1.70E+02	---	---	---	---	---
2-Methylnaphthalene		10000	<0.5	<0.5	<0.5	<0.5	<0.5
2-Methylphenol		375.93	---	---	---	---	---
4-Methylphenol		427.24	---	---	---	---	---
Acenaphthene		1.0E+04	---	---	---	---	---
Anthracene		1.00E+04	---	---	---	---	---
Benzo (a) anthracene		103.8	---	---	---	---	---
Benzo (b) pyrene		69.85	---	---	---	---	---
Benzo (b) fluoranthene		354.98	---	---	---	---	---
Benzo (k) fluoranthene		3769.12	---	---	---	---	---
Benzo (ghi) perylene			---	---	---	---	---
Bis (2-ethylhexyl) phthalate		1406	---	---	---	---	---
Carbazole		1.00E+04	---	---	---	---	---
Chrysene		1.00E+04	---	---	---	---	---
Di-n-butylphthalate		1.00E+04	---	---	---	---	---
Fluoranthene		10000	---	---	---	---	---
Fluorene		1.00E+04	---	---	---	---	---
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25	<0.25
Phenanthrene		1.00E+04	---	---	---	---	---
Phenol		658.78	---	---	---	---	---
Pyrene		10000	---	---	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - SVOCs in Soils
 Area 3/11- Alleged Former Disposal Area/Carbon Brake Exp.
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

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Date: 09/28/99

CONSTITUENT	(Units in mg/kg)	SITE	11GP010
		SAMPLE ID	11PS01012
		DATE	1996 VRP 12/17/96
		DEPTH (ft)	Tier II 12.00
		RESULT TYPE	Non-Residential Primary
2,4-Dimethylphenol		1.70E+02	---
2-Methylnaphthalene		10000	<0.5
2-Methylphenol		375.93	---
4-Methylphenol		427.24	---
Acenaphthene		1.0E+04	---
Anthracene		1.00E+04	---
Benzo (a) anthracene		103.8	---
Benzo (b) pyrene		69.85	---
Benzo (b) fluoranthene		354.98	---
Benzo (k) fluoranthene		3759.12	---
Benzo (ghi) perylene			---
Bis (2-ethylhexyl) phthalate		1406	---
Carbazole		1.00E+04	---
Chrysene		1.00E+04	---
Di-n-butylphthalate		1.00E+04	---
Fluoranthene		10000	---
Fluorene		1.00E+04	---
Naphthalene		10000	<0.25
Phenanthrene		1.00E+04	---
Phenol		658.78	---
Pyrene		10000	---
Sum of Concentrations			0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following qualifier(s) exist: *

For RCL SVOC

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - TPH/DROs in Soils
Area 3/11 - Alleged Former Disposal Area/Carbon Brake Exp.
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO (mg/kg)
1996 VRPTier II Non-Residential				6000
03GP001	09/30/96	4.00	Prim	[6400] PI
03GP001	09/30/96	8.00	Prim	[6000] PI
03GP001	09/30/96	12.00	Prim	58
03GP002	09/30/96	2.00	Prim	157 PI
03GP002	09/30/96	8.00	Prim	< 10
03GP002	09/30/96	12.00	Prim	< 10
03GP003	09/30/96	4.00	Prim	13
03GP003	09/30/96	6.00	Prim	< 10
03GP004	09/30/96	2.00	Prim	3300 PI
03GP004	09/30/96	10.00	Prim	3100 PI
03GP005	10/01/96	4.00	Prim	< 10
03GP005	10/01/96	8.00	Prim	< 10
03GP005	10/01/96	12.00	Prim	< 10
03GP006	10/01/96	6.00	Prim	3800 PI
03GP006	10/01/96	10.00	Prim	29
03GP006	10/01/96	18.00	Prim	1100 PI
03GP007	10/01/96	4.00	Prim	12
03GP007	10/01/96	8.00	Prim	< 10
03GP007	10/01/96	14.00	Prim	[6700] PI
03GP008	10/01/96	2.00	Prim	270 PI
03GP008	10/01/96	6.00	Prim	< 10
03GP008	10/01/96	8.00	Prim	< 10
03GP008	10/01/96	8.00	Dup 1	< 10
03GP009	10/02/96	4.00	Prim	< 10
03GP009	10/02/96	8.00	Prim	< 10
03GP009	10/02/96	10.00	Prim	< 10
03GP010	10/02/96	4.00	Prim	< 10
03GP010	10/02/96	6.00	Prim	< 10
03GP010	10/02/96	12.00	Prim	< 10
03GP011	10/02/96	6.00	Prim	770 PI
03GP011	10/02/96	14.00	Prim	250 PI
03GP011	10/02/96	22.00	Prim	190 PI
03GP012	10/02/96	8.00	Prim	5500 PI

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL TPH/DRO

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - TPH/DROs in Soils
 Area 3/11 - Alleged Former Disposal Area/Carbon Brake Exp.
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO (mg/kg)
1996 VRPTier II Non-Residential				6000
03GP012	10/02/96	16.00	Prim	<10
03GP012	10/02/96	20.00	Prim	<10
03GP013	10/02/96	8.00	Prim	<10
03GP013	10/02/96	12.00	Prim	<10
03GP013	10/02/96	18.00	Prim	<10
03GP014	10/03/96	8.00	Prim	360 PI
03GP014	10/03/96	12.00	Prim	890 PI
03GP014	10/03/96	16.00	Prim	24
03GP015	10/03/96	8.00	Prim	24
03GP015	10/03/96	12.00	Prim	<10
03GP015	10/03/96	14.00	Prim	28
03GP015	10/03/96	14.00	Dup 1	<10
03GP016	10/03/96	4.00	Prim	10
03GP016	10/03/96	8.00	Prim	11
03GP016	10/03/96	14.00	Prim	<10
03GP017	10/04/96	8.00	Prim	22
03GP017	10/04/96	12.00	Prim	44 J
03GP017	10/04/96	12.00	Dup 1	540
03GP017	10/04/96	15.00	Prim	73
03GP018	10/25/96	8.00	Prim	<10
03GP018	10/25/96	12.00	Prim	<10
03GP019	10/28/96	4.00	Prim	36
03GP019	10/28/96	8.00	Prim	<10
03GP019	10/28/96	12.00	Prim	<10
03GP020	10/28/96	4.00	Prim	74
03GP020	10/28/96	8.00	Prim	<10
03GP020	10/28/96	14.00	Prim	24
03GP021	10/28/96	4.00	Prim	14
03GP021	10/28/96	8.00	Prim	22
03GP022	10/28/96	4.00	Prim	<10
03GP022	10/28/96	8.00	Prim	<10
03GP022	10/28/96	12.00	Prim	<10
03GP022	10/28/96	12.00	Dup 1	<10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit -- = Not analyzed

For RCL TPH/DRO
 Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - TPH/DROs in Soils
Area 3/11 - Alleged Former Disposal Area/Carbon Brake Exp.
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO (mg/kg)
1996 VRPTier II Non-Residential				6000
08GP004	10/08/96	8.00	Prim	<10
08GP004	10/08/96	12.00	Prim	<10
08GP004	10/08/96	16.00	Prim	<10
11GP001	10/03/96	4.00	Prim	<10
11GP001	10/03/96	8.00	Prim	<10
11GP002	10/03/96	4.00	Prim	<10
11GP002	10/03/96	8.00	Prim	<10
11GP003	10/04/96	4.00	Prim	<10
11GP003	10/04/96	8.00	Prim	<10
11GP003	10/04/96	12.00	Prim	<10
11GP004	10/04/96	4.00	Prim	<10
11GP004	10/04/96	9.00	Prim	<10
11GP005	10/04/96	4.00	Prim	<10
11GP005	10/04/96	8.00	Prim	<10
11GP005	10/04/96	12.00	Prim	<10
11GP006	10/04/96	4.00	Prim	<10
11GP006	10/04/96	8.00	Prim	17
11GP006	10/04/96	12.00	Prim	<10
11GP007	10/05/96	8.00	Prim	<10
11GP007	10/05/96	12.00	Prim	<10
11GP007	10/05/96	15.00	Prim	740
11GP008	10/16/96	4.00	Prim	<10
11GP008	10/16/96	8.00	Prim	<10
11GP008	10/16/96	12.00	Prim	<10
11GP009	11/13/96	4.00	Prim	15
11GP009	11/13/96	10.00	Prim	12
11GP009	11/13/96	12.00	Prim	<10
11GP010	12/17/96	4.00	Prim	<10
11GP010	12/17/96	8.00	Prim	<10
11GP010	12/17/96	12.00	Prim	<10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following qualifier(s) exist: P, I, J

For RCL TPH/DRO

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - PCBs in Soils
 Area 3/11- Alleged Former Disposal Area/Carbon Brake Exp.
 Voluntary Site Investigation
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 South Bend, Indiana

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CONSTITUENT (Units in mg/kg)	SITE	03GP001	03GP004	03GP006	03GP011	03GP012	
	SAMPLE ID	03PS0106	03PS0408	03GP00601	03PS1108	03GP01201	
	DATE	1996 VRP	09/30/96	09/30/96	11/06/97	10/02/96	11/08/97
	DEPTH (ft)	Tier II	6.00	8.00	1.00	8.00	1.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
PCB-1254		3.05E+00	<9.6 PI	<0.33	2.9	<0.33	[12]
PCB-1248		1.28E+00	[260] PI	[1.5]	[5.0]	<0.33	[36]
Sum of Concentrations			260.00	1.50	7.90	0.00	48.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL PCB

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - PCBs in Soils
 Area 3/11- Alleged Former Disposal Area/Carbon Brake Exp.
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CONSTITUENT (Units in mg/kg)	SITE	03GP014	03GP014	03GP014	03GP015	03GP015
	SAMPLE ID	03PS01404	03PS01401	03GP014	03GP01501	03GP01501
	DATE	1996 VRP 10/03/96	07/17/97	11/06/97	07/17/97	11/06/97
	DEPTH (ft)	Tier II 4.00	1.00	1.00	1.00	1.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
PCB-1254		3.05E+00	0.97	<0.33	<0.33	<0.33
PCB-1248		1.28E+00	0.73	[3.9]	<0.33	<0.33
Sum of Concentrations			1.70	3.90	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

|| = Greater than Action Level

For RCL PCB

Indiana Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - PCBs in Soils
 Area 3/11- Alleged Former Disposal Area/Carbon Brake Exp.
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	03GP042	03GP043	03GP044	03GP044	03GP044	
	SAMPLE ID	03PS04204	03PS04304	03PS04402	03PS04401	03PS04401	
	DATE	1996 VRP 06/07/97	06/07/97	06/07/97	06/07/97	07/14/97	07/17/97
	DEPTH (ft)	Tier II 4.00	4.00	2.00	1.00	1.00	1.00
	RESULT TYPE	Non-Residential Primary	Primary	Primary	Primary	Primary	Primary
PCB-1254		3.05E+00	<0.33	<0.33	<0.33	<0.40	<0.86
PCB-1248		1.28E+00	[240]	[2.8]	[15]	[6.4]	[9.1]
Sum of Concentrations			240.00	2.80	15.00	6.40	9.10

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[] = Greater than Action Level

For RCL PCB

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Soils
 Area 3/11- Alleged Former Disposal Area/Carbon Brake Exp.
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CONSTITUENT (Units in mg/kg)	SITE	03GP001	03GP001	03GP001	03GP001	03GP002	
	SAMPLE ID	03PS0104	03PS0106	03PS0108	03PS0112	03PS0202	
	DATE	1996 VRP	09/30/96	09/30/96	09/30/96	09/30/96	
	DEPTH (ft)	Tier II	4.00	6.00	8.00	12.00	2.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total		438	7.2	3.8 J	1.4	1.5	7.7
Barium, Total		10000	119	24	8.9	3.8	33
Cadmium, Total		730.0	<1	<1	<1	<1	<1
Chromium, Total			10	12	<5	<5	57
Copper, Total		1700	14	11	3.9	3.6	19
Lead, Total		400	19	8.9	<5	<5	36
Mercury, Total		87.60	0.15	<0.1	<0.1	<0.1	0.7
Nickel, Total		10000	13	13	5.2	2.3	7.8
Selenium, Total		7300	0.77	<0.5 J	0.51	<0.5	<0.5
Silver, Total		7300	1.2	2.4	<1	<1	1
Zinc, Total		10000	77	36	16	13	43
Cyanide, total		10000	---	<0.5	---	---	---
Sum of Concentrations			261.32	111.10	35.91	24.20	205.20

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Analytical Summary - Inorganics in Soils
 Area 3/11- Alleged Former Disposal Area/Carbon Brake Exp.
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CONSTITUENT	(Units in mg/kg)	SITE	03GP002	03GP002	03GP003	03GP003	03GP004
		SAMPLE ID	03PS0208	03PS0212	03PS0304	03PS0306	03PS0402
		DATE	1996 VRP	09/30/96	09/30/96	09/30/96	09/30/96
		DEPTH (ft)	Tier II	8.00	12.00	4.00	6.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Arsenic, Total		438	4	1	2.7	1.3	6.8
Barium, Total		10000	14	5.3	15	4.2	41
Cadmium, Total		730.0	<1	<1	<1	<1	<1
Chromium, Total			5.7	<5	5.5	<5	10
Copper, Total		1700	8.2	2.9	11	3	15
Lead, Total		400	<5	<5	6	<5	26
Mercury, Total		87.60	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, Total		10000	4.9	3.9	7.3	2.4	5.1
Selenium, Total		7300	<0.5	<0.5	<0.5	<0.5	1
Silver, Total		7300	<1	<1	<1	<1	3.2
Zinc, Total		10000	10	11	26	12	31
Cyanide, total		10000	---	---	---	---	---
Sum of Concentrations			46.80	24.10	73.50	22.90	139.10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Soils
 Area 3/11- Alleged Former Disposal Area/Carbon Brake Exp.
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	03GP004	03GP004	03GP005	03GP005	03GP005	
	SAMPLE ID	03PS0408	03PS0410	03PS0504	03PS0508	03PS0512	
	DATE	1996 VRP	09/30/96	09/30/96	10/01/96	10/01/96	10/01/96
	DEPTH (ft)	Tier II	8.00	10.00	4.00	8.00	12.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total		438	4	1.7	2.8	3.3	1.5
Barium, Total		10000	8.6	6.6	13	39	4
Cadmium, Total		730.0	<1	1.4	<1	1.8	<1
Chromium, Total			<5	<5	<5	7.6	<5
Copper, Total		1700	13	9.6	3	9.8	3.6
Lead, Total		400	<5	<5	<5	<5	<5
Mercury, Total		87.60	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, Total		10000	6.4	6.6	2.2	28	3.4
Selenium, Total		7300	<0.5	<0.5	<0.5	<0.5	<0.5
Silver, Total		7300	<1	<1	1.3	1.4	<1
Zinc, Total		10000	19	37	7.4	154	20
Cyanide, total		10000	<0.5	---	---	---	---
Sum of Concentrations			50.90	60.70	29.70	244.70	32.60

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Analytical Summary - Inorganics in Soils
Area 3/11- Alleged Former Disposal Area/Carbon Brake Exp.
Voluntary Site Investigation
AlliedSignal Industrial Complex
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CONSTITUENT	(Units in mg/kg)	SITE	03GP006	03GP006	03GP006	03GP006	03GP007	
		SAMPLE ID	03PS0606	03PS0610	03PS0618	03GP00601	03PS0704	
		DATE	1996 VRP	10/01/96	10/01/96	10/01/96	11/06/97	10/01/96
		DEPTH (ft)	Tier: II	6.00	10.00	18.00	1.00	4.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total		438	2.8	1.1	2	3.5	1.4	
Barium, Total		10000	29	5.4	36	61	26	
Cadmium, Total		730.0	<1	<1	<1	1.9	<1	
Chromium, Total			<5	8.3	13	26	6.5	
Copper, Total		1700	18	7.4	11	35	6.9	
Lead, Total		400	<5	<5	6.4	36	6.1	
Mercury, Total		87.60	<0.1	<0.1	<0.1	0.26	<0.1	
Nickel, Total		10000	3.6	6.2	12	12	5.2	
Selenium, Total		7300	0.75	<0.5	<0.5	<0.5?	<0.5	
Silver, Total		7300	2.3	1.7	1.8	<1?	1.1	
Zinc, Total		10000	12	17	45	63?	18	
Cyanide, total		10000	---	---	---	<0.5?	---	
Sum of Concentrations			68.45	47.10	127.20	238.66	71.20	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

? = Duplicate records found, Data review required.

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Soils
 Area 3/11- Alleged Former Disposal Area/Carbon Brake Exp.
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	03GP007	03GP007	03GP008	03GP008	03GP008	
		SAMPLE ID	03PS0708	03PS0714	03PS0802	03PS0806	03PS0808	
		DATE	1996 VRP	10/01/96	10/01/96	10/01/96	10/01/96	10/01/96
		DEPTH (ft)	Tier II	8.00	14.00	2.00	6.00	8.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total		438	1	1.9	4.5	0.76	0.55	
Barium, Total		10000	5.1	8.1	30	4.3	4.7	
Cadmium, Total		730.0	<1	<1	<1	<1	<1	
Chromium, Total			<5	9	53	<5	<5	
Copper, Total		1700	5.7	6	15	3.9	2.9	
Lead, Total		400	<5	<5	27	<5	<5	
Mercury, Total		87.60	<0.1	<0.1	0.16	<0.1	<0.1	
Nickel, Total		10000	4.3	4.5	7.2	7.2	12	
Selenium, Total		7300	<0.5	<0.5	<0.5	<0.5	<0.5	
Silver, Total		7300	<1	1.1	1.4	<1	<1	
Zinc, Total		10000	17	20	41	53	29	
Cyanide, total		10000	---	---	---	---	---	
Sum of Concentrations			33.10	50.60	179.26	69.16	49.15	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Soils
 Area 3/11- Alleged Former Disposal Area/Carbon Brake Exp.
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CONSTITUENT (Units in mg/kg)	SITE	03GP008	03GP009	03GP009	03GP009	03GP010
	SAMPLE ID	03QD0808	03PS0904	03PS0908	03PS0910	03PS1004
DATE	1996 VRP	10/01/96	10/02/96	10/02/96	10/02/96	10/02/96
DEPTH (ft)	Tier II	8.00	4.00	8.00	10.00	4.00
RESULT TYPE	Non-Residential	Duplicate 1	Primary	Primary	Primary	Primary
Arsenic, Total	438	0.52	0.75	1.7	4	0.82
Barium, Total	10000	4.3	4.3	4.8	61	4.1
Cadmium, Total	730.0	<1	<1	<1	<1	<1
Chromium, Total		<5	<5	<5	12	<5
Copper, Total	1700	2.6	3.7	3.8	23	3.1
Lead, Total	400	<5	<5	<5	8	<5
Mercury, Total	87.60	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, Total	10000	16	3.7	2.7	19	2.6
Selenium, Total	7300	<0.5	<0.5	<0.5	<0.5	<0.5
Silver, Total	7300	<1	<1	<1	<1	<1
Zinc, Total	10000	44	9.8	12	52	9.1
Cyanide, total	10000	---	---	---	---	---
Sum of Concentrations		67.42	22.25	25.00	179.00	19.72

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Soils
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CONSTITUENT (Units in mg/kg)	SITE	03GP010	03GP010	03GP011	03GP011	03GP011
	SAMPLE ID	03PS1006	03PS1012	03PS1106	03PS1108	03PS1114
DATE	1996 VRP	10/02/96	10/02/96	10/02/96	10/02/96	10/02/96
DEPTH (ft)	Tier II	6.00	12.00	6.00	8.00	14.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438	0.65	4.9	4.1	5.8	2.3
Barium, Total	10000	3.3	7.7	42	21	8.4
Cadmium, Total	730.0	<1	<1	<1	<1	<1
Chromium, Total		<5	<5	17	7.2	5.1
Copper, Total	1700	2.4	3.6	22	6.8	5.1
Lead, Total	400	<5	<5	18	13	<5
Mercury, Total	87.60	<0.1	<0.1	0.2	<0.1	<0.1
Nickel, Total	10000	1.9	3	6.5	3.5	8.3
Selenium, Total	7300	<0.5	<0.5	<0.5	0.57	<0.5
Silver, Total	7300	<1	<1	<1	2.6	<1
Zinc, Total	10000	7.3	10	37	14	43
Cyanide, total	10000	---	---	---	<0.5	---
Sum of Concentrations		15.55	29.20	146.80	74.47	72.20

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	03GP011	03GP012	03GP012	03GP012	03GP012	
	SAMPLE ID	03PS1122	03PS1208	03PS1218	03PS1220	03GP01201	
	DATE	1996 VRP	10/02/96	10/02/96	10/02/96	10/02/96	11/06/97
	DEPTH (ft)	Tier II	22.00	8:00	16.00	20.00	1.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438	3.2	5.6	1.4	1.9	16	
Barium, Total	10000	12	72	5.3	11	71	
Cadmium, Total	730.0	<1	<1	<1	<1	5.4	
Chromium, Total		13	18	<5	31	44	
Copper, Total	1700	7.6	30	4.1	4.8	42	
Lead, Total	400	<5	79	<5	<5	79	
Mercury, Total	87.60	<0.1	0.15	<0.1	<0.1	0.54	
Nickel, Total	10000	12	9.5	3.9	3.6	15	
Selenium, Total	7300	<0.5	<0.5	<0.5	<0.5	<0.57	
Silver, Total	7300	<1	<1	<1	<1	<17	
Zinc, Total	10000	45	71	12	15	1457	
Cyanide, total	10000	---	---	---	---	0.867	
Sum of Concentrations		92.80	285.25	26.70	67.30	417.80	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
? = Duplicate records found, Data review required.

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	03GP013	03GP013	03GP013	03GP014	03GP014	
	SAMPLE ID	03PS1308	03PS1312	03PS1318	03PS01404	03PS01408	
	DATE	1996 VRP	10/02/96	10/02/96	10/02/96	10/03/96	10/03/96
	DEPTH (ft)	Tier II	8.00	12.00	18.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438	2.2	0.51	1.4	2.4	1.2	
Barium, Total	10000	10	4	6	28	40	
Cadmium, Total	730.0	<1	<1	<1	<1	<1	
Chromium, Total		<5	<5	12	10	7.2	
Copper, Total	1700	4.1	2.4	4.4	35	4.8	
Lead, Total	400	<5	<5	<5	21	5	
Mercury, Total	87.60	<0.1	<0.1	<0.1	<0.1	<0.1	
Nickel, Total	10000	3.1	1.6	3.1	6.4	4.4	
Selenium, Total	7300	<0.5	<0.5	<0.5	<0.5?	<0.5	
Silver, Total	7300	<1	<1	<1	1.0?	<1	
Zinc, Total	10000	8.3	7.2	12	51? J	11	
Cyanide, total	10000	---	---	---	<0.5?	---	
Sum of Concentrations		27.70	15.71	38.90	154.80	73.60	

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CONSTITUENT (Units in mg/kg)	SITE	03GP014	03GP014	03GP014	03GP015	03GP015	
	SAMPLE ID	03PS01412	03PS01416	03GP014	03PS01508	03PS01512	
	DATE	1996 VRP	10/03/96	10/03/96	11/06/97	10/03/96	10/03/96
	DEPTH (ft)	Tier II	12.00	16.00	1.00	8.00	12.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438	0.79	2.2	8.9	3.4	0.88	
Barium, Total	10000	3.6	12	145	60	5.1	
Cadmium, Total	730.0	<1	<1	6.4	1	<1	
Chromium, Total		<5	<5	36	9.1	<5	
Copper, Total	1700	2.4	5.2	72	28	2.3	
Lead, Total	400	<5	<5	46	84	<5	
Mercury, Total	87.60	<0.1	<0.1	0.15	<0.1	<0.1	
Nickel, Total	10000	2.3	5.2	11	11	2.3	
Selenium, Total	7300	<0.5	<0.5	<0.5?	1.1	<0.5	
Silver, Total	7300	<1	1	<1?	1.2	<1	
Zinc, Total	10000	9.3	18	137?	48	8.8	
Cyanide, total	10000	---	---	1.0?	---	---	
Sum of Concentrations		18.39	43.60	463.45	246.80	19.38	

Values represent total concentrations unless noted < =Not detected at indicated reporting limit --- =Not analyzed
 ? =Duplicate records found, Data review required.

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	03GP015	03GP015	03GP015	03GP016	03GP016
	SAMPLE ID	03PS01514	03QD01514	03GP01501	03PS01604	03PS01608
DATE	1996 VRP	10/03/96	10/03/96	11/06/97	10/03/96	10/03/96
DEPTH (ft)	Tier II	14.00	14.00	1.00	4.00	8.00
RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary	Primary
Arsenic, Total	438	2.5	1.3	7.5	5.1	4.5
Barium, Total	10000	5.1	4.8	28	35	38
Cadmium, Total	730.0	<1	<1	2.7	<1	<1
Chromium, Total		<5	<5	13	5.1	7.6
Copper, Total	1700	2.9	2.6	17	20	8.7
Lead, Total	400	<5	<5	16	24	6.5
Mercury, Total	87.60	<0.1	<0.1	0.13	<0.1	<0.1
Nickel, Total	10000	3.2	3	9.7	6	8.1
Selenium, Total	7300	<0.5	<0.5	<0.5?	<0.5	<0.5
Silver, Total	7300	<1	<1	<1?	1.7	1.3
Zinc, Total	10000	11	13	44?	36	30
Cyanide, total	10000	---	---	<0.5?	---	---
Sum of Concentrations		24.70	24.70	138.03	132.90	104.70

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CONSTITUENT (Units in mg/kg)	SITE	03GP016	03GP017	03GP017	03GP017	03GP017
	SAMPLE ID	03PS01614	03PS01708	03PS01712	03QD01712	03PS01715
DATE	1996 VRP	10/03/96	10/04/96	10/04/96	10/04/96	10/04/96
DEPTH (ft)	Tier II	14.00	8.00	12.00	12.00	15.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1	Primary
Arsenic, Total	438	2.6	2.7	3.3 J	1.4	3.5
Barium, Total	10000	20	17	5	5.1	15
Cadmium, Total	730.0	<1	<1	<1	<1	<1
Chromium, Total		15	<5	<5	<5	<5
Copper, Total	1700	5.7	4.6	5.5	5.1	7.5
Lead, Total	400	<5	<5	<5	<5	<5
Mercury, Total	87.60	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, Total	10000	5.3	5.6	4.4	3.7	6.5
Selenium, Total	7300	<0.5	<0.5	<0.5	<0.5	<0.5
Silver, Total	7300	1	<1	<1	<1	1.3
Zinc, Total	10000	21	16	15	12	24
Cyanide, total	10000	---	---	---	---	---
Sum of Concentrations		70.60	45.90	33.20	27.30	57.80

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CONSTITUENT	(Units in mg/kg)	SITE	03GP018	03GP018	03GP019	03GP019	03GP019
		SAMPLE ID	03PS01808	03PS01812	03PS01904	03PS01908	03PS01912
		DATE	1996 VRP	10/25/96	10/25/96	10/28/96	10/28/96
		DEPTH (ft)	Tier II	8.00	12.00	4.00	8.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Arsenic, Total		438	1.7	1.6	5.3	4.6	0.84
Barium, Total		10000	13	7.1	16	50	4.3
Cadmium, Total		730.0	<1	<1	<1	<1	<1
Chromium, Total			<5	<5	5.4	9.8	<5
Copper, Total		1700	2.9	3.9	6.3	9.1	3
Lead, Total		400	<5	<5	6.6	<5	<5
Mercury, Total		87.60	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, Total		10000	5.2	4.3	3.9	15	4.2
Selenium, Total		7300	<0.5	<0.5	<0.5	<0.5	<0.5
Silver, Total		7300	<1	<1	2	1.4	<1
Zinc, Total		10000	23	24	12	70	12
Cyanide, total		10000	---	---	---	---	---
Sum of Concentrations			45.80	40.90	57.50	159.90	24.34

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CONSTITUENT	(Units in mg/kg)	SITE	03GP020	03GP020	03GP020	03GP021	03GP021
		SAMPLE ID	03PS02004	03PS02008	03PS02014	03PS02104	03PS02108
		DATE	1996 VRP	10/28/96	10/28/96	10/28/96	10/28/96
		DEPTH (ft)	Tier II	4.00	8.00	14.00	4.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Arsenic, Total		438	2.2	4.3	2.8	1.7	3.8
Barium, Total		10000	12	9.1	8.6	4.2	11
Cadmium, Total		730.0	< 1	< 1	< 1	< 1	< 1
Chromium, Total			< 5	< 5	8.1	< 5	< 5
Copper, Total		1700	11	4.3	5.2	4.6	6.3
Lead, Total		400	< 5	< 5	< 5	< 5	< 5
Mercury, Total		87.60	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Nickel, Total		10000	8.5	1.9	7.2	4.8	5.7
Selenium, Total		7300	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Silver, Total		7300	1.6	< 1	< 1	< 1	< 1
Zinc, Total		10000	52	< 5	21	11	16
Cyanide, total		10000	---	---	---	---	---
Sum of Concentrations			87.30	19.60	52.90	26.30	42.80

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CONSTITUENT (Units in mg/kg)	SITE	03GP022	03GP022	03GP022	03GP022	08GP004	
	SAMPLE ID	03PS02204	03PS02208	03PS02212	03QD02212	08PS00408	
	DATE	1996 VRP	10/28/96	10/28/96	10/28/96	10/08/96	
	DEPTH (ft)	Tier II	4.00	8.00	12.00	12.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1	Primary
Arsenic, Total		438	0.63	2.4	4.3	1.9	6.4
Barium, Total		10000	19	38	2.8	2.8	29
Cadmium, Total		730.0	<1	<1	<1	<1	<1
Chromium, Total			<5	7.3	<5	<5	<5
Copper, Total		1700	3.9	7.7	3	2.7	5.1
Lead, Total		400	5	<5	<5	<5	<5
Mercury, Total		87.60	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, Total		10000	3.8	9.1	2.8	2.7	8.3
Selenium, Total		7300	<0.5	<0.5	<0.5	<0.5	0.53
Silver, Total		7300	<1	1.4	<1	<1	<1
Zinc, Total		10000	14	22	9.3	9.4	84
Cyanide, total		10000	---	---	---	---	---
Sum of Concentrations			46.33	87.90	22.20	19.50	133.33

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CONSTITUENT	(Units in mg/kg)	SITE	08GP004	08GP004	11GP001	11GP001	11GP002	
		SAMPLE ID	08PS00412	08PS00416	11PS00104	11PS00108	11PS00204	
		DATE	1996 VRP	10/08/96	10/08/96	10/03/96	10/03/96	10/03/96
		DEPTH (ft)	Tier II	12.00	16.00	4.00	8.00	4.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total		438	1.9	0.7	1.8	0.85	2.2	
Barium, Total		10000	24	6	6	4.6	6.6	
Cadmium, Total		730.0	< 1	7.6	< 1	< 1	< 1	
Chromium, Total			6.4	6.6	< 5	< 5	< 5	
Copper, Total		1700	6.9	9.3	5.3	2.6	3.9	
Lead, Total		400	< 5	< 5	6.2	< 5	< 5	
Mercury, Total		87.60	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	
Nickel, Total		10000	5.5	7.3	4.6	2.4	6.6	
Selenium, Total		7300	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
Silver, Total		7300	< 1	< 1	< 1	< 1	< 1	
Zinc, Total		10000	27	60	18	11	13	
Cyanide, total		10000	---	---	---	---	---	
Sum of Concentrations			71.70	95.50	40.90	21.45	30.20	

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CONSTITUENT (Units in mg/kg)	SITE	11GP002	11GP003	11GP003	11GP003	11GP004
	SAMPLE ID	11PS00208	11PS00304	11PS00308	11PS00312	11PS00404
DATE	1996 VRP	10/03/96	10/04/96	10/04/96	10/04/96	10/04/96
DEPTH (ft)	Tier II	8.00	4.00	8.00	12.00	4.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438	0.85	1.6	0.4	2.5	1
Barium, Total	10000	3.8	5.3	3	10	4.4
Cadmium, Total	730.0	<1	<1	<1	<1	<1
Chromium, Total		<5	<5	<5	5.5	<5
Copper, Total	1700	2.3	3.8	3	6.4	5.3
Lead, Total	400	<5	<5	<5	<5	<5
Mercury, Total	87.60	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, Total	10000	2.2	4.4	2.7	6.9	4.4
Selenium, Total	7300	<0.5	<0.5	<0.5	<0.5	<0.5
Silver, Total	7300	<1	<1	<1	2.2	<1
Zinc, Total	10000	10	12	6.9	22	13
Cyanide, total	10000	---	---	---	---	---
Sum of Concentrations		19.15	27.10	16.00	55.50	28.10

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CONSTITUENT	(Units in mg/kg)	SITE	11GP004	11GP005	11GP005	11GP005	11GP006
		SAMPLE ID	11PS00409	11PS00504	11PS00508	11PS00512	11PS00604
		DATE	1996 VRP	10/04/96	10/04/96	10/04/96	10/04/96
		DEPTH (ft)	Tier II	9.00	4.00	8.00	12.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Arsenic, Total		438	0.7	1.7	1.9	38	1.1
Barium, Total		10000	7.9	13	6.1	8.5	4.5
Cadmium, Total		730.0	<1	<1	<1	<1	<1
Chromium, Total			19	<5	<5	5.4	<5
Copper, Total		1700	5	5.5	3.4	5.8	3.3
Lead, Total		400	<5	<5	<5	6	<5
Mercury, Total		87.60	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, Total		10000	4.5	4	3.3	10	2.6
Selenium, Total		7300	<0.5	<0.5	<0.5	<0.5	<0.5
Silver, Total		7300	<1	<1	<1	1.4	<1
Zinc, Total		10000	15	16	12	20	11
Cyanide, total		10000	---	---	---	---	---
Sum of Concentrations			52.10	40.20	26.70	95.10	22.50

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CONSTITUENT (Units in mg/kg)	SITE	11GP006	11GP006	11GP007	11GP007	11GP007	
	SAMPLE ID	11PS00608	11PS00612	11PS00708	11PS00712	11PS00715	
	DATE	1996 VRP	10/04/96	10/04/96	10/05/96	10/05/96	10/05/96
	DEPTH (ft)	Tier II	8.00	12.00	8.00	12.00	15.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total		438	2	1.1	<0.25	0.92	1.5
Barium, Total		10000	6.1	4.4	3.7	6.6	5.9
Cadmium, Total		730.0	<1	<1	<1	<1	<1
Chromium, Total			<5	<5	<5	<5	<5
Copper, Total		1700	4.5	1.7	2.4	6	4.2
Lead, Total		400	<5	<5	<5	<5	<5
Mercury, Total		87.60	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, Total		10000	3.6	2.1	2.9	4.6	4.6
Selenium, Total		7300	<0.5	<0.5	<0.5	<0.5	<0.5
Silver, Total		7300	<1	<1	<1	<1	1
Zinc, Total		10000	17	6.8	8	16	18
Cyanide, total		10000	---	---	---	---	---
Sum of Concentrations			33.20	16.10	17.00	34.12	35.20

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CONSTITUENT	(Units in mg/kg)	SITE	11GP008	11GP008	11GP008	11GP009	11GP009	
		SAMPLE ID	11PS00804	11PS00808	11PS00812	11PS00904	11PS00910	
		DATE	1996 VRP	10/16/96	10/16/96	10/16/96	11/13/96	11/13/96
		DEPTH (ft)	Tier II	4.00	8.00	12.00	4.00	10.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total		438	0.66	1.2	1.2	0.73	1.3	
Barium, Total		10000	4	5.2	9.1	4.6	23	
Cadmium, Total		730.0	<1	<1	<1	<1	<1	
Chromium, Total			<5	<5	5	<5	9.9	
Copper, Total		1700	2.5	3.4	2.8	3.4	8.5	
Lead, Total		400	<5	<5	<5	<5	<5	
Mercury, Total		87.60	<0.1	<0.1	<0.1	<0.1	<0.1	
Nickel, Total		10000	2.8	3	4	3.2	8	
Selenium, Total		7300	<0.5	<0.5	<0.5	<0.5	<0.5	
Silver, Total		7300	<1	<1	<1	<1	1.2	
Zinc, Total		10000	9.1	13	10	11	23	
Cyanide, total		10000	---	---	---	---	---	
Sum of Concentrations			19.06	25.80	32.10	22.93	74.90	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	11GP009	11GP010	11GP010	11GP010	
	SAMPLE ID	11PS00912	11PS01004	11PS01008	11PS01012	
	DATE	1996 VRP	11/13/96	12/17/96	12/17/96	
	DEPTH (ft)	Tier II	12.00	4.00	8.00	
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	
Arsenic, Total		438	9.4	1	0.82	2.1
Barium, Total		10000	77	5.1	4.4	8.8
Cadmium, Total		730.0	<1	<1	<1	<1
Chromium, Total			16	<6	<6	<6
Copper, Total		1700	27	3.2	1.8	4.4
Lead, Total		400	11	<6	<6	<6
Mercury, Total		87.60	<0.1	<0.1	<0.1	<0.1
Nickel, Total		10000	24	4.4	2.4	4.7
Selenium, Total		7300	<0.5	<0.5	<0.5	<0.5
Silver, Total		7300	2.1	<1	<1	1.1
Zinc, Total		10000	64	15	8.7	18
Cyanide, total		10000	---	---	---	---
Sum of Concentrations			230.50	28.70	18.12	39.10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following qualifier(s) exist: J

Analytical Summary - VOCs in Groundwater
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CONSTITUENT (Units in ug/l)	SITE	1996 VRP	01CPT014	01CPT014	01CPT014	01CPT014	01CPT014
	SAMPLE ID	Tier II	01CPW01425	01CPW01435	01CQD01435	01CPW01445	01CPW01455
DATE	RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Primary	Primary
Vinyl chloride		10	<1	<1	<1	<1	<1
Ethylbenzene		10220	<1	<1	<1	<1	<1
Toluene		20440	1.3	<1	<1	<1	<1
Acetone		10220	62	<50	<50	<50	<50
Naphthalene		4088	---	---	---	---	---
1,1-Dichloroethane		10220	<1	<1	<1	<1	<1
1,2-Dichloroethane		31.4	<1	<1	<1	<1	<1
cis-1,2-Dichloroethane		1022	---	---	---	---	---
trans-1,2-Dichloroethane		2000	---	---	---	---	---
1,2-Dichloroethane (Total)			<2	<2	<2	<2	<2
1,1,1-Trichloroethane		9198	<1	<1	<1	<1	<1
Trichloroethane		260	<1	<1	<1	<1	<1
Sum of Concentrations			63.30	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
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CONSTITUENT	(Units in ug/l)	SITE	01CPT014	01CPT014	01CPT014	03GP006	03GP006	
		SAMPLE ID	1996 VRP	01CPW01465	01CPW01493	01CPW01478	03PW00521	03PW0620
		DATE	Tier II	07/24/97	07/24/97	07/24/97	10/25/96	10/01/96
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	<1	<1	<1	<10	<2	
Ethylbenzene		10220	<1	<1	<1	<5	<5	
Toluene		20440	<1	<1	<1	<5	<5	
Acetone		10220	<50	<50	<50	<100	---	
Naphthalene		4088	---	---	---	<5	<5	
1,1-Dichloroethane		10220	<1	<1	<1	<5	<5	
1,2-Dichloroethane		31.4	<1	<1	<1	<5	<5	
cis-1,2-Dichloroethane		1022	---	---	---	<5	<5	
trans-1,2-Dichloroethane		2000	---	---	---	<5	<5	
1,2-Dichloroethane (Total)			<2	<2	<2	---	---	
1,1,1-Trichloroethane		9198	<1	<1	<1	<5	<5	
Trichloroethane		260	<1	<1	<1	<5	180	
Sum of Concentrations			0.00	0.00	0.00	0.00	180.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in ug/l)	SITE	03GP011	03GP012	08GP004	11GP001	11GP003
	SAMPLE ID	03PW1125	03PW1223	08PW00422	11PW0115	11PW00316
	DATE	10/02/96	10/02/96	10/08/96	10/03/96	10/04/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
	1996 VRP					
	Tier II					
	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride	10	< 2	< 2	< 10	< 100	< 10
Ethylbenzene	10220	< 5	< 5	< 5	< 250	6.4
Toluene	20440	< 5	< 5	< 5	< 250	< 5
Acetone	10220	---	---	< 100	---	< 100
Naphthalene	4088	< 5	< 5	< 5	< 250	< 5
1,1-Dichloroethane	10220	< 5	< 5	< 5	< 250	7.7
1,2-Dichloroethane	31.4	< 5	< 5	< 5	< 250	< 5
cis-1,2-Dichloroethene	1022	< 5	100	< 5	[2500]	< 5
trans-1,2-Dichloroethene	2000	< 5	< 5	< 5	< 250	< 5
1,2-Dichloroethene (Total)		---	---	---	---	---
1,1,1-Trichloroethane	9198	< 5	17	< 5	440	< 5
Trichloroethene	260	< 5	< 5	< 5	< 250	< 5
Sum of Concentrations		0.00	117.00	0.00	2940.00	14.10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

|| = Greater Action Level

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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 Area 3/11 - Alleged Former Disposal Area/Carbon Brake Exp.
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CONSTITUENT	(Units in ug/l)	SITE	MW-2	MW-2	MW-2	MW-2	MW-3	
		SAMPLE ID	1996 VRP	MW-2	MW-2	MW-2	MW-2	MW-3
		DATE	Tier II	03/18/97	06/05/97	09/26/97	12/09/97	12/20/96
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 250	< 2	[70]	[83]	< 2	
Ethylbenzene		10220	< 130	< 5	< 25	< 10	< 5	
Toluene		20440	< 130	< 5	< 25	< 10	< 5	
Acetone		10220	< 2500	< 100	< 500	< 200	< 100	
Naphthalene		4088	---	---	---	---	< 5	
1,1-Dichloroethane		10220	< 130	260	190	110	< 5	
1,2-Dichloroethane		31.4	< 130	< 5	[49]	< 10	< 5	
cis-1,2-Dichloroethene		1022	[2400]	[3500]	[2600]	950	75	
trans-1,2-Dichloroethene		2000	< 130	< 5	< 25	14	< 5	
1,2-Dichloroethene (Total)			---	---	---	---	---	
1,1,1-Trichloroethane		9198	880	960	500	240	9.3	
Trichloroethene		260	170	< 5	36	19	6.8	
Sum of Concentrations			3450.00	4720.00	3445.00	1418.00	91.10	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
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CONSTITUENT (Units in ug/l)	SITE	1996 VRP	MW-3	MW-3	MW-3	MW-3	MW-3
	SAMPLE ID	Tier II	MW-3	MW-3	MW-3	MW-3	MW-3
	DATE	Non-Residential	03/18/97	03/18/97	06/05/97	09/26/97	12/10/97
	RESULT TYPE	Primary	Duplicate 1	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 10	< 10	< 2	< 10	< 10
Ethylbenzene	10220	< 5	< 5	< 5	< 5.0	< 5.0	< 5.0
Toluene	20440	< 5	< 5	< 5	< 5.0	< 5.0	< 5.0
Acetone	10220	< 100	< 100	< 100	< 100	< 100	< 100
Naphthalene	4088	---	---	---	---	---	---
1,1-Dichloroethane	10220	< 5	< 5	< 5	5.0	5.1	5.1
1,2-Dichloroethane	31.4	< 5	< 5	< 5	< 5.0	< 5.0	< 5.0
cis-1,2-Dichloroethane	1022	38	39	50	57	60	60
trans-1,2-Dichloroethane	2000	< 5	< 5	< 5	< 5.0	< 5.0	< 5.0
1,2-Dichloroethane (Total)		---	---	---	---	---	---
1,1,1-Trichloroethane	9198	< 5	< 5	7.6	8.6	6.9	6.9
Trichloroethane	260	6.2	6	6.0	8.4	5.7	5.7
Sum of Concentrations			44.20	45.00	63.60	79.00	77.70

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Area 3/11 - Alleged Former Disposal Area/Carbon Brake Exp.
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CONSTITUENT (Units in ug/l)	SITE		MW:3
	SAMPLE ID	1996 VRP	
	DATE	Tier II	12/10/97
	RESULT TYPE	Non-Residential	Duplicate 1
Vinyl chloride		10	< 10
Ethylbenzene		10220	< 5.0
Toluene		20440	< 5.0
Acetone		10220	< 100
Naphthalene		4088	---
1,1-Dichloroethane		10220	5.2
1,2-Dichloroethane		31.4	< 5.0
cis-1,2-Dichloroethane		1022	62
trans-1,2-Dichloroethane		2000	< 5.0
1,2-Dichloroethane (Total)			
1,1,1-Trichloroethane		9198	7.1
Trichloroethane		260	5.8
Sum of Concentrations			80.10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Groundwater
 Area 3/11 - Alleged Former Disposal Area/Carbon Brake Exp.
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	03GP005	03GP006	03GP011	03GP012	11GP001
	SAMPLE ID	03PW00521	03PW0620	03PW1125	03PW1223	11PW0115
	DATE	10/25/96	10/01/96	10/02/96	10/02/96	10/03/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
	1996 VRP					
Cyanide	2044	---	---	---	---	---
Barium, Dissolved (Filtered)	7154	28	63	100	89.8	130
Cadmium, Dissolved (Filtered)	51.1	<0.2	<0.2	<0.2	<0.2	<0.2
Copper, Dissolved (Filtered)	3800	12	<10	<10	<10	<10
Chromium, Total		---	---	---	---	---
Lead, Total		---	---	---	---	---
Sum of Concentrations		40.00	63.00	100.00	89.00	130.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Groundwater
 Area 3/11 - Alleged Former Disposal Area/Carbon Brake Exp.
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CONSTITUENT (Units in ug/l)	SITE	11GP003	11GP006	7-25	7-25	7-25	
	SAMPLE ID	1996 VRP	11PW00316	11PW00617	7-25	7-25	
	DATE	Tier II	10/04/96	10/04/96	12/20/96	03/18/97	
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	
Cyanide		2044	---	---	ND	< 5	< 5
Barium, Dissolved (Filtered)		7154	61	140	55	---	---
Cadmium, Dissolved (Filtered)		51.1	<0.2	<0.2	0.7	---	---
Copper, Dissolved (Filtered)		3800	<10	<10	<10	---	---
Chromium, Total			---	---	---	7	---
Lead, Total			---	---	---	27	---
Sum of Concentrations			61.00	140.00	55.70	34.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Groundwater
 Area 3/11 - Alleged Former Disposal Area/Carbon Brake Exp.
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	1996 VRP	MW-2	MW-2	MW-2	MW-3	MW-3
	SAMPLE ID		MW-2	MW-2	MW-2	MW-3	MW-3
	DATE	Tier II	12/20/96	03/18/97	09/26/97	12/20/96	03/18/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Cyanide		2044	ND	< 5	< 5	ND	< 5
Barium, Dissolved (Filtered)		7164	150	---	---	100	---
Cadmium, Dissolved (Filtered)		51.1	< 0.2	---	---	< 0.2	---
Copper, Dissolved (Filtered)		3800	< 10	---	---	< 10	---
Chromium, Total			---	< 5	---	---	9.8
Lead, Total			---	12	---	---	3.6
Sum of Concentrations			150.00	12.00	0.00	100.00	13.40

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Groundwater
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CONSTITUENT (Units in ug/l)	SITE	MW-3	MW-3
	SAMPLE ID	MW-3	MW-3
	DATE	03/18/97	09/26/97
	RESULT TYPE	Duplicate 1	Primary
Cyanide	1996 VRP Tier II Non-Residential	2044	< 5
Barium, Dissolved (Filtered)		7154	---
Cadmium, Dissolved (Filtered)		51.1	---
Copper, Dissolved (Filtered)		3800	---
Chromium, Total			20
Lead, Total			19
Sum of Concentrations			39.00
			0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following qualifier(s) exist: B

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Soils
 Area 4/16 - I-Beam Building Area
 Voluntary Site Investigation
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CONSTITUENT (Units in mg/kg)	SITE	04GP001	04GP001	04GP001	04GP001	04GP002
	SAMPLE ID	04PS00104	04PS00108	04PS00111	04PS00116	04PS00208
	DATE	1996 VRP	10/22/96	10/22/96	10/22/96	10/23/96
	DEPTH (ft)	Tier II	4.00	8.00	11.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Toluene		1000	<0.25	<0.05	<0.25	<0.25
Ethyl benzene		1000	<0.25	<0.05	<0.25	<0.25
Xylene (total)		1000	<0.25	<0.1	<0.25	<0.25
Isopropylbenzene		1.0E+03	<0.25	<0.01	<0.25	<0.25
n-Propylbenzene		1.00E+03	<0.25	<0.01	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.25	<0.01	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.25	0.12	<0.25	<0.25
Naphthalene		10000	<0.25	<0.05#	1	1.4
Acenaphthene		1.0E+04	---	0.41	---	---
2-Methylnaphthalene		10000	<0.5	1.2#	0.73	1
Tetrachloroethene		8.01	<0.1	<0.05	<0.1	<0.1
Trichloroethene		25.73	<0.1	<0.05	<0.1	<0.1
Sum of Concentrations			0.00	1.73	1.73	2.40

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent analyzed by more than one test method, highest result reported.

Analytical Summary - VOCs in Soils
 Area 4/16 - I-Beam Building Area
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CONSTITUENT (Units in mg/kg)	SITE	04GP002	04GP002	04GP002	04GP003	04GP003	
	SAMPLE ID	04PS00212	04QD00212	04PS00215	04PS00304	04PS00308	
	DATE	1996 VRP	10/23/96	10/23/96	10/23/96	10/23/96	
	DEPTH (ft)	Tier II	12.00	12.00	15.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary	Primary
Toluene		1000	<0.25	<0.25	<0.25	<0.25	<0.25
Ethyl benzene		1000	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)		1000	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene		1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene		1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25	<0.25
Acenaphthene		1.0E+04	---	---	---	---	---
2-Methylnaphthalene		10000	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachloroethene		8.01	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene		25.73	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Area 4/16 - I-Beam Building Area
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CONSTITUENT (Units in mg/kg)	SITE	04GP003	04GP003	04GP004	04GP004	04GP004
	SAMPLE ID	04PS00312	04PS00315	04PS00406	04PS00412	04PS00417
DATE	1996 VRP	10/23/96	10/23/96	10/23/96	10/23/96	10/23/96
DEPTH (ft)	Tier II	12.00	15.00	6.00	12.00	17.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.05	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.25	<0.05	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	<0.1	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.01	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.01	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.01	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.01	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	<0.05#	<0.25	<0.25	<0.25
Acenaphthene	1.0E+04	---	<0.33	---	---	---
2-Methylnaphthalene	10000	<0.5	<0.1#	<0.5	<0.5	<0.5
Tetrachloroethene	8.01	<0.1	<0.05	<0.1	<0.1	<0.1
Trichloroethene	25.73	<0.1	<0.05	<0.1	<0.1	0.19
Sum of Concentrations		0.00	0.00	0.00	0.00	0.19

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent analyzed more than one test method, highest result reported.

Analytical Summary - VOCs in Soils
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CONSTITUENT (Units in mg/kg)	SITE	04GP005	04GP005	04GP005	07GP009	08GP009	
	SAMPLE ID	04PS00504	04PS00508	04PS00513		08PS00904	
	DATE	1996 VRP	10/23/96	10/23/96	10/23/96	12/17/96	10/21/96
	DEPTH (ft)	Tier II	4.00	8.00	13.00	12.00	4.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	<0.25	<0.25	<0.33#	<0.25	<0.25
Acenaphthene	1.0E+04	---	---	---	<0.33	---	---
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.33#	<0.5	<0.5
Tetrachloroethene	8.01	<0.1	<0.1	0.14	0.10	<0.1	<0.1
Trichloroethene	25.73	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1
Sum of Concentrations		0.00	0.00	0.14	0.10	0.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	08GP009	08GP009	08GP009	08GP009	08GP012
	SAMPLE ID	08PS00908	08PS00912	08QD00912	08QD00912	08PS01204
DATE	1996 VRP	10/21/96	10/21/96	10/21/96	10/21/96	10/22/96
DEPTH (ft)	Tier II	8.00	12.00	12.00	12.00	4.00
RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Duplicate 2	Primary
Toluene	1000	<0.25	<0.05	---	---	<0.25
Ethyl benzene	1000	<0.25	<0.05	---	---	<0.25
Xylene (total)	1000	<0.25	<0.1	---	---	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.01	---	---	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.01	---	---	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.01	---	---	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.01	---	---	<0.25
Naphthalene	10000	<0.25	<0.05#	<0.33	<0.33	<0.25
Acenaphthene	1.0E+04	---	<0.33	<0.33	<0.33	---
2-Methylnaphthalene	10000	<0.5	<0.1	---	<0.33	<0.5
Tetrachloroethene	8.01	<0.1	<0.05	---	---	<0.1
Trichloroethene	25.73	<0.1	<0.05	---	---	<0.1
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent more than one test method, highest result reported.

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CONSTITUENT (Units in mg/kg)	SITE	08GP012	08GP012	08GP012	16GP001	16GP001	
	SAMPLE ID	08PS01206	08PS01208	08PS01212	16PS00104	16PS00108	
	DATE	1996 VRP	10/22/96	10/22/96	10/22/96	10/18/96	10/18/96
	DEPTH (ft)	Tier II	6.00	8.00	12.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene		1000	<0.25	<0.05	<0.25	<0.25	<0.25
Ethyl benzene		1000	<0.25	<0.05	<0.25	<0.25	<0.25
Xylene (total)		1000	<0.25	<0.1	<0.25	<0.25	<0.25
Isopropylbenzene		1.0E+03	<0.25	<0.01	<0.25	<0.25	<0.25
n-Propylbenzene		1.00E+03	<0.25	<0.01	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.25	<0.01	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.25	<0.01	<0.25	<0.25	<0.25
Naphthalene		10000	<0.25	<0.05#	<0.25	<0.25	<0.25
Acenaphthene		1.0E+04	---	<0.33	---	---	---
2-Methylnaphthalene		10000	<0.5	<0.1	<0.5	<0.5	<0.5
Tetrachloroethene		8.01	<0.1	<0.05	<0.1	<0.1	<0.1
Trichloroethene		25.73	<0.1	<0.05	<0.1	<0.1	<0.1
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT	(Units in mg/kg)	SITE	16GP001	16GP001	16GP002	16GP002	16GP002
		SAMPLE ID	16PS00112	16PS00114	16PS00204	16PS00208	16PS00210
		DATE	1996 VRP	10/18/96	10/18/96	10/18/96	10/18/96
		DEPTH (ft)	Tier II	12.00	14.00	4.00	8.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Toluene		1000	<0.05	<0.25	<0.25	<0.25	<0.25
Ethyl benzene		1000	<0.05	<0.25	<0.25	<0.25	<0.25
Xylene (total)		1000	<0.1	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene		1.0E+03	<0.01	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene		1.00E+03	<0.01	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.01	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.01	<0.25	<0.25	<0.25	<0.25
Naphthalene		10000	<0.05#	<0.25	<0.25	<0.25	<0.25
Acenaphthene		1.0E+04	<0.33	---	---	---	---
2-Methylnaphthalene		10000	<0.1	<0.5	<0.5	<0.5	<0.5
Tetrachloroethene		8.01	<0.05	<0.1	<0.1	<0.1	<0.1
Trichloroethene		25.73	<0.05	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent more than one test method, highest result reported.

For BCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT	(Units in mg/kg)	SITE	16GP003	16GP003	16GP003	16GP004	16GP004	
		SAMPLE ID	16PS00304	16PS00308	16PS00314	16PS00404	16PS00408	
		DATE	1996 VRP	10/18/96	10/18/96	10/18/96	10/21/96	10/21/96
		DEPTH (ft)	Tier II	4.00	8.00	14.00	4.00	8.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene		1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Ethyl benzene		1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)		1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene		1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene		1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Acenaphthene		1.0E+04	---	---	---	---	---	---
2-Methylnaphthalene		10000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachloroethene		8.01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene		25.73	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
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CONSTITUENT	(Units in mg/kg)	SITE	16GP004	16GP004	16GP005	16GP005	16GP005
		SAMPLE ID	16PS00415	16QD00415	08PS00804	08PS00812	08PS00816
		DATE	1996 VRP	10/21/96	10/21/96	10/14/96	10/14/96
		DEPTH (ft)	Tier II	15.00	15.00	4.00	12.00
		RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary
Toluene		1000	0.31 J	0.9	<0.25	<0.25	<0.25
Ethyl benzene		1000	1.2 J	2.6	<0.25	<0.25	3.3
Xylene (total)		1000	7.5	12	<0.25	<0.25	1.4
Isopropylbenzene		1.0E+03	<0.25 UJ	1	<0.25	<0.25	3.5
n-Propylbenzene		1.00E+03	0.34 J	0.84	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	0.88 J	1.9	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	1.5 J	3	<0.25	<0.25	2.7
Naphthalene		10000	0.37 J	0.91	<0.25	<0.25	<0.25
Acenaphthene		1.0E+04	---	---	---	---	---
2-Methylnaphthalene		10000	1.5	2.4	<0.5	<0.5	<0.5
Tetrachloroethene		8.01	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene		25.73	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations			13.60	25.55	0.00	0.00	10.90

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Analytical Summary - VOCs in Soils
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CONSTITUENT	(Units in mg/kg)	SITE	16GP005	16GP005	16GP005
		SAMPLE ID	16PS00508	16PS00512	16PS00515
		DATE	1996 VRP	10/21/96	10/21/96
		DEPTH (ft)	Tier II	4.00	12.00
		RESULT TYPE	Non-Residential	Primary	Primary
Toluene		1000	<0.25	<0.25	<0.25
Ethyl benzene		1000	<0.25	<0.25	<0.25
Xylene (total)		1000	<0.25	<0.25	<0.25
Isopropylbenzene		1.0E+03	<0.25	<0.25	<0.25
n-Propylbenzene		1.00E+03	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.25	<0.25	<0.25
Naphthalene		10000	<0.25	<0.25	<0.25
Acenaphthene		1.0E+04	---	---	---
2-Methylnaphthalene		10000	<0.5	<0.5	<0.5
Tetrachloroethene		8.01	<0.1	<0.1	<0.1
Trichloroethene		25.73	<0.1	<0.1	<0.1
Sum of Concentrations			0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following qualifier(s) exist: J, U

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	04GP001	04GP001	04GP001	04GP001	04GP002
	SAMPLE ID	04PS00104	04PS00108	04PS00111	04PS00116	04PS00208
DATE	1996 VRP	10/22/96	10/22/96	10/22/96	10/22/96	10/23/96
DEPTH (ft)	Tier II	4.00	8.00	11.00	16.00	8.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
2-Methylnaphthalene	10000	< 0.5	1.2#	0.73	1	< 0.5
Acanaphthene	1.0E + 04	---	0.41	---	---	---
Anthracene	1.00E + 04	---	0.9	---	---	---
Benzo (a) anthracene	---	---	0.46	---	---	---
Chrysene	1.00E + 04	---	0.44	---	---	---
Fluoranthene	10000	---	0.87	---	---	---
Fluorene	1.00E + 04	---	0.66	---	---	---
Naphthalene	10000	< 0.25	< 0.05#	1	1.4	< 0.25
Phenanthrene	1.00E + 04	---	2.3	---	---	---
Pyrene	10000	---	1.5	---	---	---
Sum of Concentrations		0.00	8.74	1.73	2.40	0.00

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= Constituent more than one test method, highest result reported.

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CONSTITUENT (Units in mg/kg)	SITE	04GP002	04GP002	04GP002	04GP003	04GP003
	SAMPLE ID	04PS00212	04QD00212	04PS00215	04PS00304	04PS00308
DATE	1996 VRP	10/23/96	10/23/96	10/23/96	10/23/96	10/23/96
DEPTH (ft)	Tier II	12.00	12.00	15.00	4.00	8.00
RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary	Primary
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	1.0E+04	---	---	---	---	---
Anthracene	1.00E+04	---	---	---	---	---
Benzo (a) anthracene		---	---	---	---	---
Chrysene	1.00E+04	---	---	---	---	---
Fluoranthene	10000	---	---	---	---	---
Fluorene	1.00E+04	---	---	---	---	---
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25
Phenanthrene	1.00E+04	---	---	---	---	---
Pyrene	10000	---	---	---	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - SVOCs in Soils
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CONSTITUENT (Units in mg/kg)	SITE	04GP003	04GP003	04GP004	04GP004	04GP004
	SAMPLE ID	04PS00312	04PS00315	04PS00406	04PS00412	04PS00417
	DATE	1996 VRP	10/23/96	10/23/96	10/23/96	10/23/96
	DEPTH (ft)	Tier II	12.00	15.00	6.00	12.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
2-Methylnaphthalene		10000	<0.5	<0.1#	<0.5	<0.5
Acenaphthene		1.0E+04	---	<0.33	---	---
Anthracene		1.00E+04	---	<0.33	---	---
Benzo (a) anthracene			---	<0.33	---	---
Chrysene		1.00E+04	---	<0.33	---	---
Fluoranthene		10000	---	<0.33	---	---
Fluorene		1.00E+04	---	<0.33	---	---
Naphthalene		10000	<0.25	<0.05#	<0.25	<0.25
Phenanthrene		1.00E+04	---	<0.33	---	---
Pyrene		10000	---	<0.33	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < =Not detected at indicated reporting limit --- =Not analyzed

= Constituent in more than one test method, highest result reported.

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CONSTITUENT (Units in mg/kg)	SITE	04GP005	04GP005	04GP005	07GP009	08GP009	
	SAMPLE ID	04PS00504	04PS00508	04PS00513		08PS00904	
	DATE	1996 VRP	10/23/96	10/23/96	10/23/96	12/17/96	10/21/96
	DEPTH (ft)	Tier II	4.00	8.00	13.00	12.00	4.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
2-Methylnaphthalene		10000	<0.5	<0.5	<0.5	<0.33#	<0.5
Acenaphthene		1.0E+04	---	---	---	<0.33	---
Anthracene		1.00E+04	---	---	---	<0.33	---
Benzo (a) anthracene			---	---	---	<0.33	---
Chrysene		1.00E+04	---	---	---	<0.33	---
Fluoranthene		10000	---	---	---	<0.33	---
Fluorene		1.00E+04	---	---	---	<0.33	---
Naphthalene		10000	<0.25	<0.25	<0.25	<0.33#	<0.25
Phenanthrene		1.00E+04	---	---	---	<0.33	---
Pyrene		10000	---	---	---	<0.33	---
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

For RCL SVOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	08GP009	08GP009	08GP009	08GP009	08GP012	
	SAMPLE ID	08PS00908	08PS00912	08QD00912	08QD00912	08PS01204	
	DATE	1996 VRP	10/21/96	10/21/96	10/21/96	10/22/96	
	DEPTH (ft)	Tier II	8.00	12.00	12.00	4.00	
	RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Duplicate 2	Primary
2-Methylnaphthalene		10000	<0.5	<0.1	---	<0.33	<0.5
Acenaphthene		1.0E+04	---	<0.33	<0.33	<0.33	---
Anthracene		1.00E+04	---	<0.33	<0.33	<0.33	---
Benzo (a) anthracene			---	<0.33	<0.33	<0.33	---
Chrysene		1.00E+04	---	<0.33	<0.33	<0.33	---
Fluoranthene		10000	---	<0.33	<0.33	<0.33	---
Fluorene		1.00E+04	---	<0.33	<0.33	<0.33	---
Naphthalene		10000	<0.25	<0.05#	<0.33	<0.33	<0.25
Phenanthrene		1.00E+04	---	<0.33	<0.33	<0.33	---
Pyrene		10000	---	<0.33	<0.33	<0.33	---
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

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CONSTITUENT (Units in mg/kg)	SITE	08GP012	08GP012	08GP012	16GP001	16GP001	
	SAMPLE ID	08PS01206	08PS01208	08PS01212	16PS00104	16PS00108	
	DATE	1996 VRP	10/22/96	10/22/96	10/22/96	10/18/96	10/18/96
	DEPTH (ft)	Tier II	6.00	8.00	12.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
2-Methylnaphthalene		10000	<0.5	<0.1	<0.5	<0.5	<0.5
Acenaphthene		1.0E+04	---	<0.33	---	---	---
Anthracene		1.00E+04	---	<0.33	---	---	---
Benzo (a) anthracene			---	<0.33	---	---	---
Chrysene		1.00E+04	---	<0.33	---	---	---
Fluoranthene		10000	---	<0.33	---	---	---
Fluorene		1.00E+04	---	<0.33	---	---	---
Naphthalene		10000	<0.25	<0.05#	<0.25	<0.25	<0.25
Phenanthrene		1.00E+04	---	<0.33	---	---	---
Pyrene		10000	---	<0.33	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < =Not detected at indicated reporting limit --- =Not analyzed
 # = Constituent in more than one test method, highest result reported.

For RCL SVOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	16GP001	16GP001	16GP002	16GP002	16GP002
	SAMPLE ID	16PS00112	16PS00114	16PS00204	16PS00208	16PS00210
	DATE	1996 VRP	10/18/96	10/18/96	10/18/96	10/18/96
	DEPTH (ft)	Tier II	12.00	14.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
2-Methylnaphthalene		10000	<0.1	<0.5	<0.5	<0.5
Acenaphthene		1.0E+04	<0.33	---	---	---
Anthracene		1.00E+04	<0.33	---	---	---
Benzo (a) anthracene			<0.33	---	---	---
Chrysene		1.00E+04	<0.33	---	---	---
Fluoranthene		10000	<0.33	---	---	---
Fluorene		1.00E+04	<0.33	---	---	---
Naphthalene		10000	<0.05#	<0.25	<0.25	<0.25
Phenanthrene		1.00E+04	<0.33	---	---	---
Pyrene		10000	<0.33	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < =Not detected at indicated reporting limit --- =Not analyzed
 # = Constituent in more than one test method, highest result reported.

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CONSTITUENT (Units in mg/kg)	SITE	16GP003	16GP003	16GP003	16GP004	16GP004	
	SAMPLE ID	16PS00304	16PS00308	16PS00314	16PS00404	16PS00408	
	DATE	1996 VRP	10/18/96	10/18/96	10/18/96	10/21/96	10/21/96
	DEPTH (ft)	Tier II	4.00	8.00	14.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
2-Methylnaphthalene		10000	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene		1.0E+04	---	---	---	---	---
Anthracene		1.00E+04	---	---	---	---	---
Benzo (a) anthracene			---	---	---	---	---
Chrysene		1.00E+04	---	---	---	---	---
Fluoranthene		10000	---	---	---	---	---
Fluorene		1.00E+04	---	---	---	---	---
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25	<0.25
Phenanthrene		1.00E+04	---	---	---	---	---
Pyrene		10000	---	---	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < =Not detected at indicated reporting limit --- =Not analyzed

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 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	16GP004	16GP004	16GP005	16GP005	16GP005	
	SAMPLE ID	16PS00415	16QD00415	08PS00804	08PS00812	08PS00816	
	DATE	1996 VRP	10/21/96	10/21/96	10/14/96	10/14/96	
	DEPTH (ft)	Tier: II	15.00	15.00	4.00	12.00	
	RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary	
2-Methylnaphthalene		10000	1.5	2.4	<0.5	<0.5	<0.5
Acenaphthene		1.0E+04	---	---	---	---	---
Anthracene		1.00E+04	---	---	---	---	---
Benzo (a) anthracene			---	---	---	---	---
Chrysene		1.00E+04	---	---	---	---	---
Fluoranthene		10000	---	---	---	---	---
Fluorene		1.00E+04	---	---	---	---	---
Naphthalene		10000	0.37 J	0.91	<0.25	<0.25	<0.25
Phenanthrene		1.00E+04	---	---	---	---	---
Pyrene		10000	---	---	---	---	---
Sum of Concentrations			1.87	3.31	0.00	0.00	0.00

Values represent total concentrations unless noted < =Not detected at indicated reporting limit --- =Not analyzed

Analytical Summary - TPH/DROs in Soils
Area 4/16 - I-Beam Building Area
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO (mg/kg)
1996 VRPTier II Non-Residential				6000
04GP001	10/22/96	4.00	Prim	4900
04GP001	10/22/96	11.00	Prim	[7900]
04GP001	10/22/96	11.00	Dup 1	[10400]
04GP001	10/22/96	16.00	Prim	[6800]
04GP002	10/23/96	8.00	Prim	1500 PI
04GP002	10/23/96	12.00	Prim	2500 PI
04GP002	10/23/96	15.00	Prim	4500 PI
04GP002	10/23/96	15.00	Dup 1	5300
04GP003	10/23/96	4.00	Prim	< 10
04GP003	10/23/96	8.00	Prim	< 10
04GP003	10/23/96	12.00	Prim	< 10
04GP004	10/23/96	6.00	Prim	< 10
04GP004	10/23/96	12.00	Prim	< 10
04GP004	10/23/96	17.00	Prim	< 10
04GP005	10/23/96	4.00	Prim	22
04GP005	10/23/96	8.00	Prim	< 10
04GP005	10/23/96	13.00	Prim	< 10
07GP009	12/17/96	4.00	Prim	420 PI
07GP009	12/17/96	8.00	Prim	< 10
07GP009	12/17/96	14.00	Prim	< 10
08GP009	10/21/96	4.00	Prim	84 PI
08GP009	10/21/96	8.00	Prim	1100 PI
08GP012	10/22/96	4.00	Prim	130 PI
08GP012	10/22/96	6.00	Prim	510 PI
08GP012	10/22/96	12.00	Prim	< 10
16GP001	10/18/96	4.00	Prim	50
16GP001	10/18/96	8.00	Prim	< 10
16GP001	10/18/96	14.00	Prim	13
16GP002	10/18/96	4.00	Prim	11
16GP002	10/18/96	8.00	Prim	< 10
16GP002	10/18/96	10.00	Prim	< 10
16GP003	10/18/96	4.00	Prim	1500 PI
16GP003	10/18/96	8.00	Prim	720 PI

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL TPH/DRO

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - TPH/DROs in Soils
 Area 4/16 - I-Beam Building Area
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO (mg/kg)
1996 VRPTier II Non-Residential				6000
16GP003	10/18/96	14.00	Prim	<10
16GP004	10/21/96	4.00	Prim	<10
16GP004	10/21/96	8.00	Prim	3600 PI
16GP004	10/21/96	15.00	Prim	2600 JPI
16GP004	10/21/96	15.00	Dup 1	5010
16GP005	10/14/96	4.00	Prim	10
16GP005	10/14/96	12.00	Prim	<10
16GP005	10/14/96	16.00	Prim	[6400]
16GP005	10/21/96	4.00	Prim	650 PI
16GP005	10/21/96	12.00	Prim	<10
16GP005	10/21/96	15.00	Prim	<10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level The following qualifier(s) exist: P, I, J

For RCL TPH/DRO

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Soils
 Area 4/16 - I-Beam Building Area
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	04GP001	04GP001	04GP001	04GP001	04GP002
	SAMPLE ID	04PS00104	04PS00108	04PS00111	04PS00116	04PS00208
	DATE	1996 VRP	10/22/96	10/22/96	10/22/96	10/23/96
	DEPTH (ft)	Tier II	4.00	8.00	11.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Arsenic, Total		438	3.1	2.3	0.57	1.3
Barium, Total		10000	16	30	5.1	1.1
Cadmium, Total		730.0	<1	<1	<1	<1
Chromium, Total			9.8	7.6	<5	<5
Copper, Total		1700	17	7.5	3.7	5.3
Lead, Total		400	9.8	<5	<5	<5
Mercury, Total		87.60	<0.1	<0.1	<0.1	<0.1
Nickel, Total		10000	6.8	10	3.8	4.5
Selenium, Total		7300	0.6	<0.5	<0.5	<0.5
Silver, Total		7300	1.3	1.2	<1	<1
Zinc, Total		10000	22	49	13	17
Sum of Concentrations			85.20	107.60	26.17	39.10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Soils
 Area 4/16 - I-Beam Building Area
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
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CONSTITUENT (Units in mg/kg)	SITE	04GP002	04GP002	04GP003	04GP003	04GP003
	SAMPLE ID	04PS00212	04PS00215	04PS00304	04PS00308	04PS00312
	DATE	1996 VRP 10/23/96	10/23/96	10/23/96	10/23/96	10/23/96
	DEPTH (ft)	Tier II 12:00	15:00	4:00	8:00	12:00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Arsenic, Total	438	2.4	1.4	1.9	0.95	1.3
Barium, Total	10000	28	15	21	5	6.3
Cadmium, Total	730.0	1	<1	<1	<1	<1
Chromium, Total		8.5	6.2	<5	<5	<5
Copper, Total	1700	10	8.3	3.2	3.5	4.2
Lead, Total	400	9.8	<5	<5	<5	<5
Mercury, Total	87.60	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, Total	10000	7.2	6.2	2.8	3.5	3.7
Selenium, Total	7300	<0.5	<0.5	<0.5	<0.5	<0.5
Silver, Total	7300	1	<1	<1	<1	<1
Zinc, Total	10000	30	21	9	11	11
Sum of Concentrations		97.90	58.10	37.90	23.95	26.50

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Soils
 Area 4/16 - I-Beam Building Area
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	04GP003	04GP004	04GP004	04GP004	04GP005
	SAMPLE ID	04PS00315	04PS00406	04PS00412	04PS00417	04PS00504
	DATE	1996 VRP	10/23/96	10/23/96	10/23/96	10/23/96
	DEPTH (ft)	Tier II	15.00	6.00	12.00	17.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Arsenic, Total	438	0.93	6.9	0.48	0.72	4.5
Barium, Total	10000	5.9	8.4	7.6	7.3	48
Cadmium, Total	730.0	<1	<1	1.5	<1	1.1
Chromium, Total		<5	8.7	<5	<5	12
Copper, Total	1700	4.3 B	2.9	3.4	3.4	19
Lead, Total	400	<5	<5	<5	<5	13
Mercury, Total	87.60	<0.1	<0.1	<0.1	<0.1	0.32
Nickel, Total	10000	4.9	2	5.2	5.2	6.2
Selenium, Total	7300	<0.5	<0.5	<0.5	<0.5	<0.5
Silver, Total	7300	<1	1.8	<1	<1	1.7
Zinc, Total	10000	14	8.8	34	20	39
Sum of Concentrations		30.03	39.50	52.18	36.62	144.82

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Soils
 Area 4/16 - I-Beam Building Area
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

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CONSTITUENT (Units in mg/kg)	SITE	04GP005	04GP005	07GP009	
	SAMPLE ID	04PS00508	04PS00513		
	DATE	1996 VRP	10/23/96	10/23/96	12/17/96
	DEPTH (ft)	Tier II	8.00	13.00	12.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary
Arsenic, Total	438	1.6	0.6	0.53	
Barium, Total	10000	2.9	7.9	7.6	
Cadmium, Total	730.0	<1	<1	<1	
Chromium, Total		<5	<5	<5	
Copper, Total	1700	3.3	3.7	3.6	
Lead, Total	400	<5	<5	<5	
Mercury, Total	87.60	<0.1	<0.1	<0.1	
Nickel, Total	10000	3.5	3	4.2	
Selenium, Total	7300	<0.5	<0.5	<0.5?	
Silver, Total	7300	<1	<1	<1?	
Zinc, Total	10000	14	9.1	11?	
Sum of Concentrations		25.30	24.30	26.83	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

? = Duplicate records found, Data review required. The following qualifier(s) exist: B

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Area 4/16 - I-Beam Building Area
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

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CONSTITUENT (Units in ug/l)	SITE	04GP001	04GP004	08GP009	08GP012	08GP012	
	SAMPLE ID	1996 VRP	04PW00120	04PS00421	08PW00920	08PW01219	08QD01219
	DATE	Tier II	10/22/96	10/23/96	10/21/96	10/22/96	10/22/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Duplicate 1
Vinyl chloride		10	< 10	< 10	< 2	< 2	< 2
Ethylbenzene		10220	< 5	190 J	< 5	< 5	< 5
Xylene (total)		204400	< 10	190 J	< 5	< 5	< 5
Isopropylbenzene		1.02E+4	< 1	110 J	< 5	< 5	< 5
2-Methylnaphthalene		2040.00	< 10	< 10	13	< 10	< 10
Naphthalene		4088	< 5	< 5	14	< 5	< 5
1,2,4-Trimethylbenzene		5.11E+3	< 1	< 1	5.1	< 5	< 5
1,3,5-Trimethylbenzene		5.11E+3	< 1	4 J	< 5	< 5	< 5
1,2-Dichloroethane		31.4	< 5	10 J	< 5	< 5	< 5
cis-1,2-Dichloroethene		1022	< 5	< 5	8.8	< 5	< 5
1,1,1-Trichloroethane		9198	< 5	< 5	< 5	< 5	< 5
Tetrachloroethene		56.1	< 5	< 5	< 5	< 5	< 5
Trichloroethene		260	< 5	< 5	< 5	< 5	< 5
Sum of Concentrations			0.00	504.00	40.90	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Area 4/16 - I-Beam Building Area
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

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CONSTITUENT (Units in ug/l)	SITE SAMPLE ID	MW-5 1996 VRP	MW-5 01QD0522	MW-5 MW-5	MW-5 MW-5	MW-5 MW-5	
	DATE	Tier II	12/20/96	12/20/96	03/18/97	06/05/97	09/26/97
	RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary	Primary
Vinyl chloride		10	[13]	[19]	[13]	[12]	[13]
Ethylbenzene		10220	<5	<5	<5	<5	<5.0
Xylene (total)		204400	<5	<5	<10	<5	<10
Isopropylbenzene		1.02E+4	<5	<5	---	<5	---
2-Methylnaphthalene		2040.00	<5#	<5#	---	<10	---
Naphthalene		4088	ND#	ND#	---	---	---
1,2,4-Trimethylbenzene		5.11E+3	<400	<400	---	---	---
1,3,5-Trimethylbenzene		5.11E+3	<5	<5	---	<5	---
1,2-Dichloroethane		31.4	<5	<5	<5	<5	<5.0
cis-1,2-Dichloroethene		1022	14	13	9.8	11	11
1,1,1-Trichloroethane		9198	12	11	9	11	16
Tetrachloroethene		56.1	<5	<5	5.8	8.4	13
Trichloroethene		260	29	29	24	28	42
Sum of Concentrations			68.00	72.00	61.60	70.40	95.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 # = Constituent in more than one test method, highest result reported. [] = Greater than Action Level ND = Not Detected

Analytical Summary - VOCs in Groundwater
 Area 4/16 - I-Beam Building Area
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

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CONSTITUENT (Units in ug/l)	SITE		MW-5	
	SAMPLE ID	1996 VRP		
	DATE	Tier II	12/10/97	
	RESULT TYPE	Non-Residential	Primary	
Vinyl chloride		10	< 10	
Ethylbenzene		10220	< 5.0	
Xylene (total)		204400	< 10	
Isopropylbenzene		1.02E+4	---	
2-Methylnaphthalene		2040.00	---	
Naphthalene		4088	---	
1,2,4-Trimethylbenzene		5.11E+3	---	
1,3,5-Trimethylbenzene		5.11E+3	---	
1,2-Dichloroethane		31.4	< 5.0	
cis-1,2-Dichloroethane		1022	11	
1,1,1-Trichloroethane		9198	33	
Tetrachloroethane		56.1	8.8	
Trichloroethane		260	18	
Sum of Concentrations			70.80	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following qualifier(s) exist: J

For RCL VOCs

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Groundwater
 Area 4/16 - I-Beam Building Area
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

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CONSTITUENT (Units in ug/l)	SITE	04GP001	04GP004	MW-5	MW-5	MW-5
	SAMPLE ID	04PW00120	04PS00421		01QD0522	MW-5
	DATE	10/22/96	10/23/96	12/20/96	12/20/96	03/18/97
	RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Primary
Cyanide	2044	---	---	9	---	<5
Arsenic, Dissolved (Filtered)	50	<1	<1	1.6	1.5	---
Barium, Dissolved (Filtered)	7154	110	97	100	99	---
Lead, Dissolved (Filtered)	1.50E+1	<1	2.7	<1	<1	---
Chromium, Total		---	---	---	---	290
Lead, Total		---	---	---	---	152
Nickel, Total		---	---	---	---	92
Sum of Concentrations		110.00	99.70	110.60	100.50	534.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Groundwater
 Area 4/16 - I-Beam Building Area
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE		
	SAMPLE ID	1996 VRP	MW-5
	DATE	Tier II	09/26/97
	RESULT TYPE	Non-Residential	Primary
Cyanide		2044	< 5
Arsenic, Dissolved (Filtered)		50	---
Barium, Dissolved (Filtered)		7154	---
Lead, Dissolved (Filtered)		1.50E+1	---
Chromium, Total			---
Lead, Total			---
Nickel, Total			---
Sum of Concentrations			0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - TPH/DROs in Soils
Plant 1/9 - Former USTs
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO (mg/kg)
1996 VRPTier II Non-Residential				6000
05GP014	10/07/96	4.00	Prim	<10
05GP014	10/07/96	8.00	Prim	[9300] Quench Oil Tank - 10,000 mg/kg criteria
05GP014	10/07/96	14.00	Prim	<10
05GP015	10/07/96	4.00	Prim	17
05GP015	10/07/96	8.00	Prim	<10
05GP015	10/07/96	14.00	Prim	55
05GP016	10/07/96	6.00	Prim	<10
05GP016	10/07/96	10.00	Prim	<10
05GP016	10/07/96	14.00	Prim	<10
05GP017	10/07/96	4.00	Prim	60
05GP017	10/07/96	8.00	Prim	15
05GP017	10/07/96	12.00	Prim	<10
05GP018	10/07/96	4.00	Prim	30
05GP018	10/07/96	8.00	Prim	24
05GP018	10/07/96	8.00	Dup 1	19
05GP018	10/07/96	14.00	Prim	<10
05GP061	11/15/96	4.00	Prim	<10
05GP061	11/15/96	8.00	Prim	<10
05GP061	11/15/96	16.00	Prim	<10
05GP071	12/09/96	8.00	Prim	<10
05GP071	12/09/96	12.00	Prim	<10
05GP071	12/09/96	16.00	Prim	<10
05GP072	12/12/96	4.00	Prim	<10
05GP072	12/12/96	8.00	Prim	<10
05GP072	12/12/96	12.00	Prim	<10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL TPH/DRO

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Soils
 Plant 6/16 - Former USTs
 Voluntary Site Investigation
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CONSTITUENT (Units in mg/kg)	SITE	01CPT016	05GP001	05GP001	05GP001	05GP001
	SAMPLE ID	01CPS01617	05PS00104	05PS00112	05PS00116	05GP00101
DATE	1996 VRP	07/25/97	10/05/96	10/05/96	10/05/96	11/06/97
DEPTH (ft)	Tier II	17.00	4.00	12.00	16.00	1.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Benzene	4.77	<0.05	<0.1 E	<0.1	<0.1	<0.05
Toluene	1000	<0.05	<0.25 E	<2.7	<5.4	<0.05
Ethyl benzene	1000	<0.05	<0.25 E	40	62	<0.05
Xylene (total)	1000	<0.05	<0.25 E	22	35	<0.05
Isopropylbenzene	1.0E+03	<0.05	<0.25 E	78	110	<0.05
n-Propylbenzene	1.00E+03	<0.05	<0.25 E	<2.7	<5.4	<0.05
1,3,5-Trimethylbenzene	1.00E+03	<0.05	<0.25 E	55	81	<0.05
1,2,4-Trimethylbenzene	1.00E+3	<0.05	<0.25 E	49	59	<0.05
Naphthalene	10000	<0.05	<0.25 E	2.8	<5.4	1.67#
Acenaphthene	1.0E+04	---	---	---	---	1.1?
2-Methylnaphthalene	10000	<0.1	<0.5 E	<5.3	<11	<0.1
1,1-Dichloroethene	0.08	<0.05	<0.1 E	<0.1	<0.1	<0.05
cis-1,2-Dichloroethene	102.49	<0.05	<0.1 E	<0.1	<0.1	<0.05
1,1,1-Trichloroethane	1000	<0.05	<0.1 E	<0.1	<0.1	<0.05
Tetrachloroethene	8.01	<0.05	<0.1 E	<0.1	<0.1	<0.05
Trichloroethene	25.73	0.58	<0.1 E	<0.1	<0.1	<0.05
Sum of Concentrations		0.58	0.00	246.80	347.00	12.60

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 # = Constituent in more than one test method, highest result reported. ? = Duplicate records found, Data review required.

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Soils
 Plant 6/16 - Former USTs
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	05GP002	05GP002	05GP002	05GP003	05GP003
		SAMPLE ID	05PS00208	05PS00212	05PS00216	05PS00304	05PS00312
		DATE	1996 VRP	10/05/96	10/05/96	10/05/96	10/05/96
		DEPTH (ft)	Tier II	8.00	12.00	16.00	4.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Benzene		4.77	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene		1000	<2.8	<2.6	<5.3	<0.25	<0.25
Ethyl benzene		1000	17	57	66	2	0.61
Xylene (total)		1000	<2.8	<2.6	<5.3	0.6	<0.25
Isopropylbenzene		1.0E+03	31	110	130	2.8	1.6
n-Propylbenzene		1.00E+03	<2.8	<2.6	<5.3	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<2.8	<2.6	<5.3	0.67	<0.25
1,2,4-Trimethylbenzene		1.00E+3	6.5	23	16	0.62	0.82
Naphthalene		10000	<2.8	<2.6	<5.3	<0.25	<0.25
Acenaphthene		1.0E+04	---	---	---	---	---
2-Methylnaphthalene		10000	<5.6	<5.3	<11	<0.5	<0.5
1,1-Dichloroethene		0.08	<0.1	<0.1	<0.1	[0.17]	<0.1
cis-1,2-Dichloroethene		102.49	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane		1000	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene		8.01	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene		25.73	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations			54.50	190.00	212.00	6.76	3.03

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[I] = Greater Action Level

For RCL VOC

Criteria Comparison: 1996 VRP Tier II Non-Residential

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CONSTITUENT	(Units in mg/kg)	SITE	05GP003	05GP003	05GP004	05GP004	05GP004	
		SAMPLE ID	05PS00316	05GP00301	05PS00408	05PS00412	05PS00416	
		DATE	1996 VRP	10/05/96	11/06/97	10/05/96	10/05/96	10/05/96
		DEPTH (ft)	Tier II	16.00	1.00	8.00	12.00	16.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Benzene			4.77	<0.1	<0.05	<0.1	<0.1	<0.1
Toluene			1000	<0.52	<0.05	<3.1	<0.25	<5.3
Ethyl benzene			1000	7.2	<0.05	39	4.9	92
Xylenes (total)			1000	1.3	<0.05	<3.1	<0.25	<5.3
Isopropylbenzene			1.0E+03	18	<0.05	32	1.6	26
n-Propylbenzene			1.00E+03	<0.52	<0.05	<3.1	<0.25	<5.3
1,3,5-Trimethylbenzene			1.00E+03	<0.52	<0.05	<3.1	<0.25	<5.3
1,2,4-Trimethylbenzene			1.00E+3	7	<0.05	5.7	0.56	6.6
Naphthalene			10000	<0.52	<0.33?#	<3.1	<0.25	<5.3
Acenaphthene			1.0E+04	---	<0.33?	---	---	---
2-Methylnaphthalene			10000	<1	<0.1	<6.3	<0.5	<11
1,1-Dichloroethene			0.08	<0.1	<0.05	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene			102.49	<0.1	<0.05	<0.1	<0.1	<0.1
1,1,1-Trichloroethane			1000	<0.1	<0.05	<0.1	<0.1	<0.1
Tetrachloroethene			8.01	<0.1	<0.05	<0.1	<0.1	<0.1
Trichloroethene			25.73	<0.1	<0.05	<0.1	<0.1	<0.1
Sum of Concentrations				33.50	0.00	76.70	7.05	124.60

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 # = Constituent in more than one test method, highest result reported. ? = Duplicate records found, Data review required.

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	1996 VRP	05GP005	05GP005	05GP005	05GP005	05GP006
	SAMPLE ID		05PS00508	05PS00512	05PS00516	05GP00501	05PS00604
	DATE		10/05/96	10/05/96	10/05/96	11/06/97	10/05/96
	DEPTH (ft)	Tier II	8.00	12.00	16.00	1.00	4.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Benzene		4.77	<0.1	<0.1	<0.1	<0.05	<0.1
Toluene		1000	<1.4	<27	<5.4	<0.05	<5.5
Ethyl benzene		1000	21	230	150	<0.05	72
Xylene (total)		1000	<1.4	<27	<5.4	<0.05	<5.5
Isopropylbenzene		1.0E+03	13	77	150	<0.05	100
n-Propylbenzene		1.00E+03	<1.4	<27	<5.4	<0.05	<5.5
1,3,5-Trimethylbenzene		1.00E+03	<1.4	<27	<5.4	<0.05	<5.5
1,2,4-Trimethylbenzene		1.00E+3	<1.4	<27	18	<0.05	<5.5
Naphthalene		10000	<1.4	<27	<5.4	<0.33#	<5.5
Acenaphthene		1.0E+04	---	---	---	<0.33	---
2-Methylnaphthalene		10000	<2.9	<54	<11	<0.1	<11
1,1-Dichloroethene		0.08	<0.1	<0.1	<0.1	<0.05	<0.1
cis-1,2-Dichloroethene		102.49	<0.1	<0.1	<0.1	<0.05	<0.1
1,1,1-Trichloroethene		1000	<0.1	<0.1	<0.1	<0.05	<0.1
Tetrachloroethene		8.01	<0.1	<0.1	<0.1	<0.05	<0.1
Trichloroethene		25.73	<0.1	<0.1	<0.1	<0.05	<0.1
Sum of Concentrations			34.00	307.00	318.00	0.00	172.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

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CONSTITUENT (Units in mg/kg)	SITE	05GP006	05GP006	05GP007	05GP007	05GP007
	SAMPLE ID	05PS00608	05PS00612	05PS00708	05PS00712	05PS00716
DATE	1996 VRP	10/05/96	10/05/96	10/05/96	10/05/96	10/05/96
DEPTH (ft)	Tier II	8.00	12.00	8.00	12.00	16.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Benzene	4.77	<0.1	0.17	<0.1	<0.1	<0.1
Toluene	1000	<0.25	0.36	<0.25	<0.25	<0.57
Ethyl benzene	1000	3.3	1.4	1.5	0.42	19
Xylene (total)	1000	<0.25	2.2	<0.25	<0.25	<0.57
Isopropylbenzene	1.0E + 03	5.2	1.7	2.6	0.64	20
n-Propylbenzene	1.00E + 03	<0.25	<0.25	<0.25	<0.25	<0.57
1,3,5-Trimethylbenzene	1.00E + 03	<0.25	<0.25	<0.25 J	<0.25	<0.57
1,2,4-Trimethylbenzene	1.00E + 3	<0.25	<0.25	<0.25	<0.25	<0.57
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	0.84
Acenaphthene	1.0E + 04	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	0.91	<0.5	<0.5	<1.1
1,1-Dichloroethene	0.08	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene	25.73	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations		8.50	6.74	4.10	1.06	39.84

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT	(Units in mg/kg)	SITE	05GP007	05GP008	05GP008	05GP008	05GP009
		SAMPLE ID	05GP00701	05PS00808	05PS00812	05PS00813.5	05PS00904
		DATE	1996 VRP	11/06/97	10/06/96	10/06/96	10/06/96
		DEPTH (ft)	Tier II	1.00	8.00	12.00	13.50
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Benzene		4.77	<0.05	0.79	2	<0.1	<0.1
Toluene		1000	<0.05	<0.6	<3	<0.25	<0.25
Ethyl benzene		1000	<0.05	25	54	1.9	<0.25
Xylene (total)		1000	<0.05	4.5	<3	0.25	<0.25
Isopropylbenzene		1.0E+03	<0.05	6.2	8	1.5	<0.25
n-Propylbenzene		1.00E+03	<0.05	2.5	3.4	0.36	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.05	<0.6	<3	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.05	1.2	<3	0.73	<0.25
Naphthalene		10000	<0.33#	<0.6	<3	<0.25	<0.25
Acenaphthene		1.0E+04	<0.33	---	---	---	---
2-Methylnaphthalene		10000	<0.1	<1.2	<5.9	<0.5	<0.5
1,1-Dichloroethene		0.08	<0.05	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene		102.49	<0.05	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane		1000	<0.05	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene		8.01	<0.05	<0.1	<0.1	<0.1	<0.1
Trichloroethene		25.73	<0.05	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations			0.00	40.19	67.40	4.74	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 # = Constituent in more than one test method, highest result reported.

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CONSTITUENT (Units in mg/kg)	SITE	05GP009	05GP009	05GP009	05GP011	05GP013
	SAMPLE ID	05PS00908	05QD00908	05PS00916	05PS01115	05PS01304
DATE	1996 VRP	10/06/96	10/06/96	10/06/96	10/06/96	10/06/96
DEPTH (ft)	Tier II	8.00	8.00	16.00	15.00	4.00
RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary	Primary
Benzene	4.77	< 0.1 UJ	0.3	[5]	< 13	< 0.1
Toluene	1000	< 0.25	< 0.25	< 2.7	< 13	< 0.25
Ethyl benzene	1000	4.4	3.8	120	47	< 0.25
Xylene (total)	1000	< 0.25	< 0.25	< 2.7	58	< 0.25
Isopropylbenzene	1.0E+03	0.99 J	5.9	19	< 13	< 0.25
n-Propylbenzene	1.00E+03	< 0.25	< 0.25	5.6	23	< 0.25
1,3,5-Trimethylbenzene	1.00E+03	< 0.25	< 0.25	< 2.7	15	< 0.25
1,2,4-Trimethylbenzene	1.00E+3	< 0.25	< 0.25	6	34	< 0.25
Naphthalene	10000	< 0.25	< 0.25	< 2.7	0.74#	< 0.25
Acenaphthene	1.0E+04	---	---	---	< 0.33	---
2-Methylnaphthalene	10000	< 0.5	< 0.5	< 5.5	< 13	< 0.5
1,1-Dichloroethene	0.08	< 0.1	< 0.1	< 0.1	< 13	< 0.1
cis-1,2-Dichloroethene	102.49	< 0.1	< 0.1	< 0.1	< 13	< 0.1
1,1,1-Trichloroethane	1000	< 0.1	< 0.1	< 0.1	< 13	< 0.1
Tetrachloroethene	8.01	< 0.1	< 0.1	< 0.1	< 13	< 0.1
Trichloroethene	25.73	< 0.1	< 0.1	< 0.1	< 13	< 0.1
Sum of Concentrations		5.39	10.00	155.60	177.74	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported. [] = Greater than Action Level

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	05GP013	05GP013	05GP028	05GP028	05GP028
	SAMPLE ID	05PS01312	05PS01315	05PS02804	05PS02812	05QD02812
DATE	1996 VRP	10/06/96	10/06/96	10/15/96	10/15/96	10/15/96
DEPTH (ft)	Tier II	12.00	15.00	4.00	12.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Duplicate 1
Benzene	4.77	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	1000	<0.25	<0.53	<0.25	30	41
Ethyl benzene	1000	<0.25	23	<0.25	20	26
Xylene (total)	1000	<0.25	3.4	<0.25	7.3	8.7
Isopropylbenzene	1.0E+03	<0.25	16	<0.25	<1.3 UJ	6.4
n-Propylbenzene	1.00E+03	<0.25	4	<0.25	7.2	7.7
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.53	<0.25	<1.3	<1.3
1,2,4-Trimethylbenzene	1.00E+3	<0.25	4.8	<0.25	6.4	6.5
Naphthalene	10000	<0.25	<0.53	<0.25	<1.3	<1.3
Acenaphthene	1.0E+04	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	<1.1	<0.5	<2.6	<2.6
1,1-Dichloroethene	0.08	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene	25.73	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations		0.00	51.20	0.00	70.90	96.30

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT	(Units in mg/kg)	SITE	05GP028	05GP029	05GP029	05GP029	05GP029
		SAMPLE ID	05PS02815	05PS02908	05PS02910	05PS02912	05QD02912
DATE	1996 VRP	10/15/96	10/16/96	10/16/96	10/16/96	10/16/96	10/16/96
DEPTH (ft)	Tier II	15.00	8.00	10.00	12.00	12.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary	Duplicate 1
Benzene	4.77	<0.1	<0.1	<0.1	<0.13 INE	<0.05	
Toluene	1000	35	<0.25	<0.25	<0.13 INE	<0.05	
Ethyl benzene	1000	26	<0.25	0.63	<0.13 INE	<0.05	
Xylene (total)	1000	8.4	<0.25	1	0.5 JIN	<0.1	
Isopropylbenzene	1.0E+03	6.1	<0.25	<0.25	<0.13 INE	<0.01	
n-Propylbenzene	1.00E+03	6.6	<0.25	<0.25	0.34 JIN	<0.01	
1,3,5-Trimethylbenzene	1.00E+03	6.4	<0.25	0.37	0.55 JIN	0.1	
1,2,4-Trimethylbenzene	1.00E+3	6.3	<0.25	0.77	1.1 JIN	0.21	
Naphthalene	10000	<0.25	<0.25	<0.25	1.1#	<0.05	
Acenaphthene	1.0E+04	---	---	---	<0.33	---	
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<1.3 INE	<0.5	
1,1-Dichloroethene	0.08	<0.1	<0.1	<0.1	<0.13 INE	<0.05	
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.13 INE	<0.05	
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.13 INE	<0.05	
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.13 INE	<0.05	
Trichloroethene	25.73	<0.1	<0.1	<0.1	<0.13 INE	<0.05	
Sum of Concentrations		94.80	0.00	2.77	3.59	0.31	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 # = Constituent in more than one test method, highest result reported.

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT	(Units in mg/kg)	SITE	05GP029	05GP029	05GP031	05GP031	05GP031
		SAMPLE ID	05QD02912	05PS02915	05PS03108	05PS03112	05QD03112
DATE	1996 VRP	10/16/96	10/16/96	10/16/96	10/16/96	10/16/96	
DEPTH (ft)	Tier II	12.00	15.00	8.00	12.00	12.00	
RESULT TYPE	Non-Residential	Duplicate 2	Primary	Primary	Primary	Duplicate 1	
Benzene	4.77	<0.05	<0.1	<0.1	<0.1 *	<0.1	
Toluene	1000	<0.05	<0.25	<7.8	30 *	5.6	
Ethyl benzene	1000	<0.05	<0.25	14	40 *	10	
Xylene (total)	1000	<0.05	<0.25	86	310 *	83	
Isopropylbenzene	1.0E+03	<0.05	<0.25	<7.8	42 *	12	
n-Propylbenzene	1.00E+03	<0.05	<0.25	<7.8	12 *	<5.2	
1,3,5-Trimethylbenzene	1.00E+03	0.21 J	<0.25	60	81 *	26	
1,2,4-Trimethylbenzene	1.00E+3	0.10 J	<0.25	120	280 *	88	
Naphthalene	10000	<0.05	<0.25	20	30 *	9.7	
Acenaphthene	1.0E+04	---	---	---	---	---	
2-Methylnaphthalene	10000	<0.1	<0.5	19	<21 *	<10	
1,1-Dichloroethene	0.08	<0.05	<0.1	<0.1	<0.1 *	<0.1	
cis-1,2-Dichloroethene	102.49	<0.05	<0.1	<0.1	<0.1 *	<0.1	
1,1,1-Trichloroethane	1000	<0.05	<0.1	<0.1	<0.1 *	<0.1	
Tetrachloroethene	8.01	<0.05	<0.1	<0.1	<0.1 *	<0.1	
Trichloroethene	25.73	<0.05	<0.1	<0.1	<0.1 *	<0.1	
Sum of Concentrations		0.31	0.00	319.00	825.00	234.20	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT	(Units in mg/kg)	SITE	05GP031	05GP034	05GP034	05GP034	05GP046	
		SAMPLE ID	05PS03116	05PS03404	05PS03412	05PS03416	05PS04608	
		DATE	1996 VRP	10/16/96	10/16/96	10/16/96	10/16/96	11/11/96
		DEPTH (ft)	Tier II	16.00	4.00	12.00	16.00	8.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Benzene		4.77	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene		1000	3.8	<0.25	<0.25	<0.25	<0.25	<0.25
Ethyl benzene		1000	2.8	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)		1000	14	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene		1.0E+03	5.9	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene		1.00E+03	<2.6	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	11	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	28	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene		10000	3.1	<0.25	<0.25	<0.25	<0.25	<0.25
Acenaphthene		1.0E+04	---	---	---	---	---	---
2-Methylnaphthalene		10000	<5.2	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene		0.08	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene		102.49	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane		1000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene		8.01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene		25.73	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations			68.60	0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	05GP046	05GP046	05GP047	05GP047	05GP047
	SAMPLE ID	05PS04612	05PS04615	05PS04704	05PS04708	05PS04712
DATE	1996 VRP	11/11/96	11/11/96	11/11/96	11/11/96	11/11/96
DEPTH (ft)	Tier II	12.00	15.00	4.00	8.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Benzene	4.77	<0.1	<0.1	<0.1 E	<0.05	<0.1
Toluene	1000	<0.25	<0.25	<0.25 E	<0.05	<0.25
Ethyl benzene	1000	<0.25	<0.25	<0.25 E	<0.05	<0.25
Xylene (total)	1000	<0.25	<0.25	<0.25 E	<0.1	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25 E	<0.01	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25 E	<0.01	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25 E	<0.01	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25 E	<0.01	<0.25
Naphthalene	10000	<0.25	<0.25	<0.25 E	<0.05#	<0.25
Acenaphthene	1.0E+04	--	--	--	<0.33	--
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5 E	<0.1	<0.5
1,1-Dichloroethene	0.08	<0.1	<0.1	<0.1 E	<0.05	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1 E	<0.05	<0.1
1,1,1-Trichloroethene	1000	<0.1	<0.1	<0.1 E	<0.05	<0.1
Tetrachloroethene	8.01	<0.1	<0.1	<0.1 E	<0.05	<0.1
Trichloroethene	25.73	<0.1	<0.1	<0.1 E	<0.05	<0.1
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent analyzed in more than one test method, highest result reported.

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CONSTITUENT	(Units in mg/kg)	SITE	05GP047	05GP048	05GP048	05GP048	05GP048
		SAMPLE ID	05PS04715	05PS04804	05PS04808	05PS04811	05PS04814
DATE	1996 VRP	11/11/96	11/11/96	11/11/96	11/11/96	11/11/96	11/11/96
DEPTH (ft)	Tier II	15.00	4.00	8.00	11.00	14.00	
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary	Primary
Benzene	4.77	<0.1	<0.29	<0.21	<0.05	<45	
Toluene	1000	<0.25	<0.74	1 J	0.17	[1200]	
Ethyl benzene	1000	<0.25	<0.74	0.77 J	0.15	600	
Xylene (total)	1000	<0.25	1.7	2.6 J	0.6	[2500]	
Isopropylbenzene	1.0E+03	<0.25	<0.74	<0.53	<0.01	150	
n-Propylbenzene	1.00E+03	<0.25	<0.74	<0.53	<0.01	<110	
1,3,5-Trimethylbenzene	1.00E+03	<0.25	2.8	<0.53	0.14	580	
1,2,4-Trimethylbenzene	1.00E+3	<0.25	1.4	<0.53	0.14	870	
Naphthalene	10000	<0.25	<0.74	<0.53	<0.05#	<110	
Acenaphthene	1.0E+04	---	---	---	<0.33	---	
2-Methylnaphthalene	10000	<0.5	<1.5	<1.1	<0.1	<220	
1,1-Dichloroethene	0.08	<0.1	<0.29	<0.21	<0.05	<45	
cis-1,2-Dichloroethene	102.49	<0.1	15	<0.21	0.1	[190]	
1,1,1-Trichloroethane	1000	<0.1	<0.29	<0.21	<0.05	<45	
Tetrachloroethene	8.01	<0.1	<0.29	<0.21	<0.05	<45	
Trichloroethene	25.73	<0.1	7.6	<0.21	<0.05	<45	
Sum of Concentrations		0.00	28.50	4.37	1.30	6090.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported. [] = Greater than Action Level

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	05GP049	05GP049	05GP049	05GP049	05GP050	
	SAMPLE ID	05PS04904	05PS04908	05PS04912	05PS04915	05PS05004	
	DATE	1996 VRP	11/12/96	11/12/96	11/12/96	11/12/96	
	DEPTH (ft)	Tier II	4.00	8.00	12.00	15.00	
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	
Benzene		4.77	<0.1	<0.1	<0.05	<0.1	<0.1
Toluene		1000	<0.25	<0.25	<0.05	<0.25	<0.25
Ethyl benzene		1000	<0.25	<0.25	<0.05	<0.25	<0.25
Xylene (total)		1000	<0.25	<0.25	<0.1	<0.25	<0.25
Isopropylbenzene		1.0E+03	<0.25	<0.25	<0.01	<0.25	<0.25
n-Propylbenzene		1.00E+03	<0.25	<0.25	<0.01	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.25	<0.25	<0.01	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.25	<0.25	<0.01	<0.25	<0.25
Naphthalene		10000	<0.25	<0.25	<0.05#	<0.25	<0.25
Acenaphthene		1.0E+04	---	---	<0.33	---	---
2-Methylnaphthalene		10000	<0.5	<0.5	<0.1	<0.5	<0.5
1,1-Dichloroethene		0.08	<0.1	<0.1	<0.05	<0.1	<0.1
cis-1,2-Dichloroethene		102.49	<0.1	<0.1	<0.05	<0.1	<0.1
1,1,1-Trichloroethane		1000	<0.1	<0.1	<0.05	<0.1	<0.1
Tetrachloroethene		8.01	<0.1	<0.1	<0.05	<0.1	<0.1
Trichloroethene		25.73	<0.1	<0.1	<0.05	<0.1	<0.1
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 # = Constituent analyzed by more than one test method, highest result reported.

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CONSTITUENT	(Units in mg/kg)	SITE	05GP050	05GP050	05GP050	05GP051	05GP051	
		SAMPLE ID	05PS05008	05PS05012	05PS05016	05PS05104	05PS05108	
		DATE	1996 VRP	11/12/96	11/12/96	11/12/96	11/12/96	11/12/96
		DEPTH (ft)	Tier II	8.00	12.00	16.00	4.00	8.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Benzene		4.77	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1
Toluene		1000	<0.25	0.068	<0.25	<0.25	<0.25	<0.25
Ethyl benzene		1000	<0.25	<0.05	<0.25	<0.25	<0.25	<0.25
Xylene (total)		1000	<0.25	<0.1	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene		1.0E+03	<0.25	<0.01	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene		1.00E+03	<0.25	<0.01	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.25	<0.01	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.25	<0.01	<0.25	<0.25	<0.25	<0.25
Naphthalene		10000	<0.25	<0.05#	<0.25	<0.25	<0.25	<0.25
Acenaphthene		1.0E+04	---	<0.33	---	---	---	---
2-Methylnaphthalene		10000	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene		0.08	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene		102.49	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane		1000	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene		8.01	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1
Trichloroethene		25.73	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations			0.00	0.17	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT	(Units in mg/kg)	SITE	05GP051	05GP051	05GP052	05GP052	05GP052
		SAMPLE ID	05PS05112	05PS05115	05PS05204	05PS05208	05QD05208
		DATE	1996 VRP	11/12/96	11/12/96	11/12/96	11/12/96
		DEPTH (ft)	Tier II	12.00	15.00	4.00	8.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
							Duplicate 1
Benzene		4.77	<0.05	<0.1	<0.1	<0.1	<0.1
Toluene		1000	<0.05	<0.25	<0.25	<0.25	<0.25
Ethyl benzene		1000	<0.05	<0.25	<0.25	<0.25	<0.25
Xylene (total)		1000	<0.1	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene		1.0E+03	<0.01	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene		1.00E+03	<0.01	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.01	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.01	<0.25	<0.25	<0.25	<0.25
Naphthalene		10000	<0.05#	<0.25	<0.25	<0.25	<0.25
Acenaphthene		1.0E+04	<0.33	---	---	---	---
2-Methylnaphthalene		10000	<0.1	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene		0.08	<0.05	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene		102.49	0.061	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane		1000	<0.05	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene		8.01	<0.05	<0.1	<0.1	<0.1	<0.1
Trichloroethane		25.73	<0.05	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations			0.06	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent analyzed by more than one test method, highest result reported.

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CONSTITUENT (Units in mg/kg)	SITE	05GP052	05GP052	05GP053	05GP053	05GP053
	SAMPLE ID	05PS05212	05PS05215	05PS05304	05PS05308	05PS05312
DATE	1996 VRP	11/12/96	11/12/96	11/12/96	11/12/96	11/12/96
DEPTH (ft)	Tier II	12.00	15.00	4.00	8.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Benzene	4.77	<0.1	<0.05	<0.1	<0.05	<0.1
Toluene	1000	<0.25	<0.05	<0.25	<0.05	<0.25
Ethyl benzene	1000	<0.25	<0.05	<0.25	<0.05	<0.25
Xylene (total)	1000	<0.25	<0.1	<0.25	<0.1	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.01	<0.25	<0.01	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.01	<0.25	<0.01	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.01	<0.25	<0.01	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.01	<0.25	<0.01	<0.25
Naphthalene	10000	<0.25	<0.05#	<0.25	<0.05#	<0.25
Acenaphthene	1.0E+04	---	<0.33	---	<0.33	---
2-Methylnaphthalene	10000	<0.5	<0.1	<0.5	<0.1	<0.5
1,1-Dichloroethene	0.08	<0.1	<0.05	<0.1	<0.05	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	0.06 J	<0.1	<0.05	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.05	<0.1	<0.05	<0.1
Tetrachloroethene	8.01	<0.1	<0.05	<0.1	<0.05	<0.1
Trichloroethene	25.73	<0.1	<0.05	<0.1	<0.05	<0.1
Sum of Concentrations		0.00	0.06	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT	(Units in mg/kg)	SITE	05GP064	05GP064	05GP064	05GP064	05GP064
		SAMPLE ID	05PS06404	05PS06408	05PS06412	05PS06416	05QD06416
		DATE	1996 VRP	11/16/96	11/16/96	11/16/96	11/16/96
		DEPTH (ft)	Tier II	4.00	8.00	12.00	16.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
							Duplicate 1
Benzene		4.77	<0.1	<0.05	<0.1	<0.1	<0.1
Toluene		1000	<0.25	<0.05	<0.25	<0.25	<0.25
Ethyl benzene		1000	<0.25	0.19	<0.25	<0.25	<0.25
Xylene (total)		1000	<0.25	0.26	<0.25	0.29	<0.25
Isopropylbenzene		1.0E+03	<0.25	<0.05	<0.25	<0.25	<0.25
n-Propylbenzene		1.00E+03	<0.25	<0.05	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.25	0.11	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.25	<0.05	<0.25	<0.25	<0.25
Naphthalene		10000	<0.25	<0.33#	<0.25	<0.25	<0.25
Acenaphthene		1.0E+04	---	<0.33	---	---	---
2-Methylnaphthalene		10000	<0.5	<0.33#	<0.5	<0.5	<0.5
1,1-Dichloroethene		0.08	<0.1	<0.05	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene		102.49	<0.1	<0.05	<0.1	<0.1	<0.1
1,1,1-Trichloroethane		1000	<0.1	<0.05	<0.1	<0.1	<0.1
Tetrachloroethene		8.01	<0.1	<0.05	<0.1	<0.1	<0.1
Trichloroethene		25.73	<0.1	<0.05	<0.1	<0.1	<0.1
Sum of Concentrations			0.00	0.56	0.00	0.29	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	06GP008	07GP005	07GP008	07GP008	07GP008
	SAMPLE ID	06PS00816	07PS00504	07PS00804	07PS00808	07PS00812
DATE	1996 VRP	12/16/96	11/14/96	11/17/96	11/17/96	11/17/96
DEPTH (ft)	Tier II	16.00	4.00	4.00	8.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Benzene	4.77	<0.05	<0.05	<0.1	<0.05	<0.1
Toluene	1000	<0.05	<0.05	<0.25	<0.05	<0.25
Ethyl benzene	1000	0.41	<0.05	<0.25	<0.05	<0.25
Xylene (total)	1000	<0.05	<0.1	<0.25	<0.05	<0.25
Isopropylbenzene	1.0E+03	<0.05	<0.01	<0.25	<0.05	<0.25
n-Propylbenzene	1.00E+03	<0.05	<0.01	<0.25	<0.05	<0.25
1,3,5-Trimethylbenzene	1.00E+03	0.38	<0.01	<0.25	<0.05	<0.25
1,2,4-Trimethylbenzene	1.00E+3	1.2	<0.01	<0.25	<0.05	<0.25
Naphthalene	10000	0.897#	<0.05#	<0.25	<0.05#	<0.25
Acenaphthene	1.0E+04	<0.33?	<0.33	---	<0.33	---
2-Methylnaphthalene	10000	<0.33#	<0.1	<0.5	<0.1#	<0.5
1,1-Dichloroethene	0.08	<0.05	<0.05	<0.1	<0.05	<0.1
cis-1,2-Dichloroethene	102.49	<0.05	<0.05	<0.1	<0.05	<0.1
1,1,1-Trichloroethane	1000	<0.05	<0.05	<0.1	<0.05	<0.1
Tetrachloroethene	8.01	<0.05	<0.05	<0.1	<0.05	<0.1
Trichloroethene	25.73	<0.05	<0.05	<0.1	<0.05	<0.1
Sum of Concentrations		2.88	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 # = Constituent analyzed by more than one test method, highest result reported. ? = Duplicate record found, Data review required.

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CONSTITUENT (Units in mg/kg)	SITE	09GP002	09GP002	09GP002	09GP003	09GP003	
	SAMPLE ID	09PS00208	09PS00212	09PS00218	09PS00304	09PS00308	
	DATE	1996 VRP	11/17/96	11/17/96	11/17/96	07/16/97	07/16/97
	DEPTH (ft)	Tier II	8.00	12.00	18.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Benzene	4.77	<0.1	<0.1	<0.1	<0.05	<0.05	
Toluene	1000	<0.25	<0.25	<0.25	<0.05	<0.05	
Ethyl benzene	1000	<0.25	<0.25	<0.25	<0.05	<0.05	
Xylene (total)	1000	<0.25	0.6	<0.25	<0.05	<0.05	
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25	<0.05	<0.05	
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.05	<0.05	
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.05	<0.05	
1,2,4-Trimethylbenzene	1.00E+3	<0.25	0.34	<0.25	<0.05	<0.05	
Naphthalene	10000	<0.25	<0.25	<0.25	<0.05	<0.05	
Acenaphthene	1.0E+04	---	---	---	---	---	
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.1	<0.1	
1,1-Dichloroethene	0.08	<0.1	<0.1	<0.1	<0.05	<0.05	
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.05	<0.05	
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.05	<0.05	
Tetrachloroethene	8.01	0.1	<0.1	<0.1	<0.05	<0.05	
Trichloroethene	25.73	<0.1	<0.1	<0.1	<0.05	<0.05	
Sum of Concentrations		0.10	0.94	0.00	0.00	0.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	09GP003	09GP003	09GP003	09GP004	09GP004
	SAMPLE ID	14PS00312	14QD00312	09PS00318	09PS00404	09PS00408
DATE	1996 VRP	07/16/97	07/16/97	07/16/97	07/16/97	07/16/97
DEPTH (ft)	Tier II	12.00	12.00	18.00	4.00	8.00
RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary	Primary
Benzene	4.77	<0.05	<0.05	<0.05	<0.05	<0.05
Toluene	1000	<0.05	<0.05	26	<0.05	<0.05
Ethyl benzene	1000	<0.05	<0.05	20	<0.05	<0.05
Xylene (total)	1000	<0.05 UJ	0.19 J	100	<0.05	<0.05
Isopropylbenzene	1.0E+03	<0.05	<0.05	14	<0.05	<0.05
n-Propylbenzene	1.00E+03	<0.05 UJ	<0.05 J	<0.05	<0.05	<0.05
1,3,5-Trimethylbenzene	1.00E+03	<0.05 J	0.054 J	9.7	<0.05	<0.05
1,2,4-Trimethylbenzene	1.00E+3	0.086 J	0.19 J	2.6	<0.05	<0.05
Naphthalene	10000	<0.05	<0.05	3.2	<0.05	<0.05
Acenaphthene	1.0E+04	---	---	---	---	---
2-Methylnaphthalene	10000	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethene	0.08	<0.05	<0.05	<0.05	<0.05	<0.05
cis-1,2-Dichloroethene	102.49	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,1-Trichloroethane	1000	<0.05	<0.05	<0.05	<0.05	<0.05
Tetrachloroethene	8.01	<0.05	<0.05	1.5	0.11	0.78
Trichloroethene	25.73	<0.05	<0.05	2.6	<0.05	0.67
Sum of Concentrations		0.11	0.45	179.40	0.11	1.35

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	09GP004	09GP004	09GP005	09GP005	09GP005
	SAMPLE ID	09PS00416	09QD00416	09PS00502	09PS00608	09PS00514
	DATE	1996 VRP	07/16/97	07/16/97	07/16/97	07/16/97
	DEPTH (ft)	Tier II	16.00	16.00	2.00	8.00
	RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary
Benzene		4.77	<0.05	<0.05	<0.05	<0.05
Toluene		1000	<0.05	<0.05	<0.05	<0.05
Ethyl benzene		1000	<0.05	<0.05	<0.05	<0.05
Xylene (total)		1000	<0.05	<0.05	<0.05	<0.05
Isopropylbenzene		1.0E + 03	<0.05	<0.05	<0.05	<0.05
n-Propylbenzene		1.00E + 03	<0.05	<0.05	<0.05	<0.05
1,3,5-Trimethylbenzene		1.00E + 03	<0.05	<0.05	<0.05	<0.05
1,2,4-Trimethylbenzene		1.00E + 3	<0.05	<0.05	<0.05	<0.05
Naphthalene		10000	<0.05	<0.05	<0.05	<0.05
Acenaphthene		1.0E + 04	---	---	---	---
2-Methylnaphthalene		10000	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethene		0.08	<0.05	<0.05	<0.05	<0.05
cis-1,2-Dichloroethene		102.49	<0.05	<0.05	<0.05	<0.05
1,1,1-Trichloroethane		1000	<0.05	<0.05	<0.05	<0.05
Tetrachloroethene		8.01	0.24	0.37	<0.05	<0.05
Trichloroethene		25.73	0.25	0.35	<0.05	<0.05
Sum of Concentrations			0.49	0.72	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT	(Units in mg/kg)	SITE	09GP005	09GP006	09GP006	09GP006	09GP006
		SAMPLE ID	09QD00514	09PS00604	09PS00610	09PS00618	09QD00618
		DATE	1996 VRP	07/16/97	07/17/97	07/17/97	07/17/97
		DEPTH (ft)	Tier II	14.00	4.00	10.00	18.00
		RESULT TYPE	Non-Residential	Duplicate 1	Primary	Primary	Primary
Benzene			4.77	<0.05	<0.05	<0.05	<0.05
Toluene			1000	<0.05	<0.05	<0.05	<0.05
Ethyl benzene			1000	<0.05	<0.05	<0.05	<0.05
Xylene (total)			1000	<0.05	<0.05	<0.05	<0.05
Isopropylbenzene			1.0E+03	<0.05	<0.05	<0.05	<0.05
n-Propylbenzene			1.00E+03	<0.05	<0.05	<0.05	<0.05
1,3,5-Trimethylbenzene			1.00E+03	<0.05	<0.05	<0.05	<0.05
1,2,4-Trimethylbenzene			1.00E+3	<0.05	<0.05	<0.05	<0.05
Naphthalene			10000	<0.05	<0.05	<0.05	<0.05
Acenaphthene			1.0E+04	---	---	---	---
2-Methylnaphthalene			10000	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethene			0.08	<0.05	<0.05	<0.05	<0.05
cis-1,2-Dichloroethene			102.49	<0.05	<0.05	<0.05	<0.05
1,1,1-Trichloroethane			1000	<0.05	<0.05	<0.05	<0.05
Tetrachloroethene			8.01	<0.05	<0.05	<0.05	<0.05
Trichloroethene			25.73	<0.05	<0.05	<0.05	<0.05
Sum of Concentrations				0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	09GP007	09GP007	09GP007	09GP007	09GP008	
	SAMPLE ID	09PS00704	09PS00708	09PS00712	09PS00717	09PS00808	
	DATE	1996 VRP	07/17/97	07/17/97	07/17/97	07/18/97	
	DEPTH (ft)	Tier II	4.00	8.00	12.00	17.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Benzene		4.77	<0.05	<0.05	<0.05	<0.05	<0.05
Toluene		1000	<0.05	<0.05	<0.05	<0.05	<0.05
Ethyl benzene		1000	<0.05	<0.05	<0.05	<0.05	<0.05
Xylene (total)		1000	<0.05	<0.05	<0.05	<0.05	<0.05
Isopropylbenzene		1.0E+03	<0.05	<0.05	<0.05	<0.05	<0.05
n-Propylbenzene		1.00E+03	<0.05	<0.05	<0.05	<0.05	<0.05
1,3,5-Trimethylbenzene		1.00E+03	<0.05	<0.05	<0.05	<0.05	<0.05
1,2,4-Trimethylbenzene		1.00E+3	<0.05	<0.05	<0.05	<0.05	<0.05
Naphthalene		10000	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene		1.0E+04	---	---	---	---	---
2-Methylnaphthalene		10000	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethene		0.08	<0.05	<0.05	<0.05	<0.05	<0.05
cis-1,2-Dichloroethene		102.49	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,1-Trichloroethane		1000	<0.05	<0.05	<0.05	0.51	<0.05
Tetrachloroethene		8.01	<0.05	<0.05	<0.05	<0.05	<0.05
Trichloroethene		25.73	<0.05	<0.05	<0.05	<0.05	0.92
Sum of Concentrations			0.00	0.00	0.00	0.51	0.92

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	09GP008	09GP008	09HA001	09HA001	09HA001	
	SAMPLE ID	09PS00812	09PS00816	09HA00104	01HA00107	09HA00109	
	DATE	1996 VRP	07/18/97	07/18/97	07/25/97	07/25/97	07/25/97
	DEPTH (ft)	Tier II	12.00	16.00	4.00	7.00	9.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Benzene	4.77	<0.05	<0.05	<0.10	<0.05	<0.10	
Toluene	1000	<0.05	<0.05	<0.25	<0.05	<0.25	
Ethyl benzene	1000	<0.05	<0.05	<0.10	<0.05	<0.25	
Xylene (total)	1000	0.69	<0.05	<2.50	<0.05	<0.25	
Isopropylbenzene	1.0E + 03	<0.05	<0.05	<0.10	<0.05	<0.25	
n-Propylbenzene	1.00E + 03	<0.05	<0.05	<0.25	<0.05	<0.25	
1,3,5-Trimethylbenzene	1.00E + 03	<0.05	<0.05	<0.25	<0.05	<0.25	
1,2,4-Trimethylbenzene	1.00E + 3	<0.05	<0.05	<0.25	<0.05	---	
Naphthalene	10000	<0.05	<0.05	<0.25	<0.05	<0.25	
Acenaphthene	1.0E + 04	---	---	---	---	<2.5	
2-Methylnaphthalene	10000	<0.1	<0.1	<0.5	<0.1	<0.5	
1,1-Dichloroethene	0.08	<0.05	<0.05	<0.25	<0.05	<0.10	
cis-1,2-Dichloroethene	102.49	0.1	0.30	<0.10	0.27	2.7	
1,1,1-Trichloroethane	1000	0.31	0.39	<0.25	<0.05	1.1	
Tetrachloroethene	8.01	0.15	0.16	<0.10	<0.05	0.23	
Trichloroethene	25.73	3.3	5.5	0.14	0.17	1.3	
Sum of Concentrations		4.55	6.35	0.14	0.44	5.33	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	17GP001	17GP001	17GP001	17GP001	17GP002
	SAMPLE ID	17PS00104	17PS00108	17PS00112	17PS00118	17PS00204
DATE	1996 VRP	11/12/96	11/12/96	11/12/96	11/12/96	12/13/96
DEPTH (ft)	Tier II	4.00	8.00	12.00	18.00	4.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Benzene	4.77	<0.1	<0.05	<0.1	[80]	<0.1
Toluene	1000	<0.25	<0.05	<0.25	700	<0.25
Ethyl benzene	1000	<0.25	<0.05	<0.25	280	<0.25
Xylene (total)	1000	<0.25	<0.1	<0.25	720	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.01	<0.25	<29	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.01	<0.25	<29	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.01	<0.25	<29	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.01	<0.25	<29	<0.25
Naphthalene	10000	<0.25	<0.05#	<0.25	<29	<0.25
Acenaphthene	1.0E+04	---	<0.33	---	---	---
2-Methylnaphthalene	10000	<0.5	<0.1#	<0.5	<58	<0.5
1,1-Dichloroethene	0.08	<0.1	<0.05	<0.1	<12	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<0.05	<0.1	<12	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.05	<0.1	<12	<0.1
Tetrachloroethene	8.01	<0.1	<0.05	<0.1	<12	<0.1
Trichloroethene	25.73	<0.1	<0.05	<0.1	<12	<0.1
Sum of Concentrations		0.00	0.00	0.00	1780.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent analyzed by more than one test method, highest result reported. || = Greater than Action Level

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CONSTITUENT	(Units in mg/kg)	SITE	17GP002	17GP002	17GP003	17GP003	17GP003
		SAMPLE ID	17PS00208	17PS00212	17PS00304	17PS00308	17PS00314
DATE	1996 VRP	12/13/96	12/13/96	12/16/96	12/16/96	12/16/96	
DEPTH (ft)	Tier II	8.00	12.00	4.00	8.00	14.00	
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary	
Benzene	4.77	<0.1	<0.05 E	<0.1	<0.1	<0.05	
Toluene	1000	<0.25	<0.05 E	<0.25	<0.25	<0.05	
Ethyl benzene	1000	<0.25	<0.05 E	<0.25	<0.25	<0.05	
Xylene (total)	1000	<0.25	<0.1 E	<0.25	<0.25	<0.05	
Isopropylbenzene	1.0E + 03	<0.25	<0.01 E	<0.25	<0.25	<0.05	
n-Propylbenzene	1.00E + 03	<0.25	<0.01 E	<0.25	<0.25	<0.05	
1,3,5-Trimethylbenzene	1.00E + 03	<0.25	<0.01 E	<0.25	<0.25	<0.05	
1,2,4-Trimethylbenzene	1.00E + 3	<0.25	0.065 J	<0.25	<0.25	<0.05	
Naphthalene	10000	<0.25	<0.05# E	<0.25	<0.25	<0.33#	
Acenaphthene	1.0E + 04	---	<0.33	---	---	<0.33	
2-Methylnaphthalene	10000	<0.5	<0.1# E	<0.5	<0.5	<0.33#	
1,1-Dichloroethene	0.08	<0.1	<0.05 E	<0.1	<0.1	<0.05	
cis-1,2-Dichloroethene	102.49	<0.1	<0.05 E	<0.1	<0.1	<0.05	
1,1,1-Trichloroethane	1000	<0.1	<0.05 E	<0.1	<0.1	<0.05	
Tetrachloroethene	8.01	<0.1	<0.05 E	<0.1	<0.1	<0.05	
Trichloroethene	25.73	<0.1	<0.05 E	<0.1	<0.1	<0.05	
Sum of Concentrations		0.00	0.07	0.00	0.00	0.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 # = Constituent in more than one test method, highest result reported. The following qualifier(s) exist: E, J, U, I, N, *

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	01CPT016	05GP001	05GP001	05GP001	05GP001	
	SAMPLE ID	01CPS01617	05PS00104	05PS00112	05PS00116	05GP00101	
	DATE	1996 VRP	07/25/97	10/05/96	10/05/96	10/05/96	11/06/97
	DEPTH (ft)	Tier II	17.00	4.00	12.00	16.00	1.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene		1.0E+04	---	---	---	---	11
Acenaphthylene		<0.6	<2.5 E	<27	<54		2.3#
Anthracene		1.00E+04	---	---	---	---	2.8
Benzo (a) anthracene		103.8	---	---	---	---	5.6
Benzo (b) pyrene		69.85	---	---	---	---	6.5
Benzo (b) fluoranthene		354.98	---	---	---	---	7.7
Benzo (ghi) perylene			---	---	---	---	5.1
Benzo (k) fluoranthene		3759.12	---	---	---	---	3.8
Chrysene		1.00E+04	---	---	---	---	7.4
Dibenzo (a,h) anthracene		69.86	---	---	---	---	4.0
Fluoranthene		10000	---	---	---	---	21
Fluorene		1.00E+04	---	---	---	---	0.94
Indeno (1,2,3-cd) pyrene		629.17	---	---	---	---	5.2
Naphthalene		10000	<0.05	<0.25 E	2.8	<5.4	1.6#
Phenanthrene		1.00E+04	---	---	---	---	12
Pyrene		10000	---	---	---	---	15
Sum of Concentrations			0.00	0.00	2.80	0.00	111.94

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= Constituent in more than one test method, highest result reported.

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CONSTITUENT	(Units in mg/kg)	SITE	05GP002	05GP002	05GP002	05GP003	05GP003
		SAMPLE ID	05PS00208	05PS00212	05PS00216	05PS00304	05PS00312
		DATE	1996 VRP	10/05/96	10/05/96	10/05/96	10/05/96
		DEPTH (ft)	Tier II	8.00	12.00	16.00	4.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Acenaphthene			1.0E+04	---	---	---	---
Acenaphthylene				<28	<26	<53	<2.5
Anthracene			1.00E+04	---	---	---	---
Benzo (a) anthracene			103.8	---	---	---	---
Benzo (b) pyrene			69.85	---	---	---	---
Benzo (b) fluoranthene			354.98	---	---	---	---
Benzo (ghi) perylene				---	---	---	---
Benzo (k) fluoranthene			3759.12	---	---	---	---
Chrysene			1.00E+04	---	---	---	---
Dibenzo (a,h) anthracene			69.86	---	---	---	---
Fluoranthene			10000	---	---	---	---
Fluorene			1.00E+04	---	---	---	---
Indeno (1,2,3-cd) pyrene			629.17	---	---	---	---
Naphthalene			10000	<2.8	<2.6	<5.3	<0.25
Phenanthrene			1.00E+04	---	---	---	---
Pyrene			10000	---	---	---	---
Sum of Concentrations				0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	05GP003	05GP003	05GP004	05GP004	05GP004
	SAMPLE ID	05PS00316	05GP00301	05PS00408	05PS00412	05PS00416
DATE	1996 VRP	10/05/96	11/06/97	10/05/96	10/05/96	10/05/96
DEPTH (ft)	Tier II	16.00	1.00	8.00	12.00	16.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene	1.0E+04	---	<0.33	---	---	---
Acenaphthylene	<6.2	---	0.42#	<3.1	<2.5	<5.3
Anthracene	1.00E+04	---	<0.33	---	---	---
Benzo (a) anthracene	103.8	---	<0.33	---	---	---
Benzo (b) pyrene	69.85	---	<0.33	---	---	---
Benzo (b) fluoranthene	354.98	---	<0.33	---	---	---
Benzo (ghi) perylene	---	---	<0.33	---	---	---
Benzo (k) fluoranthene	3759.12	---	<0.33	---	---	---
Chrysene	1.00E+04	---	<0.33	---	---	---
Dibenzo (a,h) anthracene	69.86	---	<0.33	---	---	---
Fluoranthene	10000	---	<0.33	---	---	---
Fluorene	1.00E+04	---	<0.33	---	---	---
Indeno (1,2,3-cd) pyrene	629.17	---	<0.33	---	---	---
Naphthalene	10000	<0.52	<0.33#	<3.1	<0.25	<5.3
Phenanthrene	1.00E+04	---	<0.33	---	---	---
Pyrene	10000	---	<0.33	---	---	---
Sum of Concentrations		0.00	0.42	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

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CONSTITUENT (Units in mg/kg)	SITE	05GP005	05GP005	05GP005	05GP005	05GP006
	SAMPLE ID	05PS00508	05PS00512	05PS00516	05GP00501	05PS00604
DATE	1996 VRP	10/05/96	10/05/96	10/05/96	11/06/97	10/05/96
DEPTH (ft)	Tier II	8.00	12.00	16.00	1.00	4.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene	1.0E+04	---	---	---	<0.33	---
Acenaphthylene		<14	<270	<54	0.36#	<65
Anthracene	1.00E+04	---	---	---	<0.33	---
Benzo (a) anthracene	103.8	---	---	---	<0.33	---
Benzo (b) pyrene	69.85	---	---	---	<0.33	---
Benzo (b) fluoranthene	354.98	---	---	---	<0.33	---
Benzo (ghi) perylene		---	---	---	<0.33	---
Benzo (k) fluoranthene	3759.12	---	---	---	<0.33	---
Chrysene	1.00E+04	---	---	---	<0.33	---
Dibenzo (a,h) anthracene	69.86	---	---	---	<0.33	---
Fluoranthene	10000	---	---	---	<0.33	---
Fluorene	1.00E+04	---	---	---	<0.33	---
Indeno (1,2,3-cd) pyrene	629.17	---	---	---	<0.33	---
Naphthalene	10000	<1.4	<27	<5.4	<0.33#	<6.5
Phenanthrene	1.00E+04	---	---	---	<0.33	---
Pyrene	10000	---	---	---	<0.33	---
Sum of Concentrations		0.00	0.00	0.00	0.36	0.00

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= Constituent in more than one test method, highest result reported.

For RCL PNA

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	05GP006	05GP006	05GP007	05GP007	05GP007
	SAMPLE ID	05PS00608	05PS00612	05PS00708	05PS00712	05PS00715
DATE	1996 VRP	10/05/96	10/05/96	10/05/96	10/05/96	10/05/96
DEPTH (ft)	Tier II	8.00	12.00	8.00	12.00	15.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene	1.0E+04	---	---	---	---	---
Acenaphthylene		<2.5	<2.5	<2.5	<2.5	<6.7
Anthracene	1.00E+04	---	---	---	---	---
Benzo (a) anthracene	103.8	---	---	---	---	---
Benzo (b) pyrene	69.85	---	---	---	---	---
Benzo (b) fluoranthene	354.98	---	---	---	---	---
Benzo (ghi) perylene		---	---	---	---	---
Benzo (k) fluoranthene	3759.12	---	---	---	---	---
Chrysene	1.00E+04	---	---	---	---	---
Dibenzo (a,h) anthracene	69.86	---	---	---	---	---
Fluoranthene	10000	---	---	---	---	---
Fluorene	1.00E+04	---	---	---	---	---
Indeno (1,2,3-cd) pyrene	629.17	---	---	---	---	---
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	0.84
Phenanthrene	1.00E+04	---	---	---	---	---
Pyrene	10000	---	---	---	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.84

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CONSTITUENT	(Units in mg/kg)	SITE	05GP007	05GP008	05GP008	05GP008	05GP009
		SAMPLE ID	05GP00701	05PS00808	05PS00812	05PS00813.5	05PS00904
		DATE	1996 VRP	11/06/97	10/06/96	10/06/96	10/06/96
		DEPTH (ft)	Tier II	1.00	8.00	12.00	13.50
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Acenaphthene		1.0E+04	<0.33	---	---	---	---
Acenaphthylene			<0.33#	<6	<30	<2.5	<2.5
Anthracene		1.00E+04	<0.33	---	---	---	---
Benzo (a) anthracene		103.8	<0.33	---	---	---	---
Benzo (b) pyrene		69.85	<0.33	---	---	---	---
Benzo (b) fluoranthene		354.98	<0.33	---	---	---	---
Benzo (ghi) perylene			<0.33	---	---	---	---
Benzo (k) fluoranthene		3759.12	<0.33	---	---	---	---
Chrysene		1.00E+04	<0.33	---	---	---	---
Dibenzo (a,h) anthracene		69.86	<0.33	---	---	---	---
Fluoranthene		10000	0.43	---	---	---	---
Fluorene		1.00E+04	<0.33	---	---	---	---
Indeno (1,2,3-cd) pyrene		629.17	<0.33	---	---	---	---
Naphthalene		10000	<0.33#	<0.6	<3	<0.25	<0.25
Phenanthrene		1.00E+04	<0.33	---	---	---	---
Pyrene		10000	<0.33	---	---	---	---
Sum of Concentrations			0.43	0.00	0.00	0.00	0.00

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= Constituent in more than one test method, highest result reported.

For RCL PNA

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	05GP013	05GP013	05GP028	05GP028	05GP028
	SAMPLE ID	05PS01312	05PS01315	05PS02804	05PS02812	05QD02812
DATE	1996 VRP	10/06/96	10/06/96	10/15/96	10/15/96	10/15/96
DEPTH (ft)	Tier II	12.00	15.00	4.00	12.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Duplicate 1
Acenaphthene	1.0E + 04	---	---	---	---	---
Acenaphthylene		<2.5	<5.3	<2.5	<13	<13
Anthracene	1.00E + 04	---	---	---	---	---
Benzo (a) anthracene	103.8	---	---	---	---	---
Benzo (b) pyrene	69.85	---	---	---	---	---
Benzo (b) fluoranthene	354.98	---	---	---	---	---
Benzo (ghi) perylene		---	---	---	---	---
Benzo (k) fluoranthene	3759.12	---	---	---	---	---
Chrysene	1.00E + 04	---	---	---	---	---
Dibenzo (a,h) anthracene	69.86	---	---	---	---	---
Fluoranthene	10000	---	---	---	---	---
Fluorene	1.00E + 04	---	---	---	---	---
Indeno (1,2,3-cd) pyrene	629.17	---	---	---	---	---
Naphthalene	10000	<0.25	<0.53	<0.25	<1.3	<1.3
Phenanthrene	1.00E + 04	---	---	---	---	---
Pyrene	10000	---	---	---	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	05GP028	05GP029	05GP029	05GP029	05GP029
	SAMPLE ID	05PS02815	05PS02908	05PS02910	05PS02912	05QD02912
DATE	1996 VRP	10/15/96	10/16/96	10/16/96	10/16/96	10/16/96
DEPTH (ft)	Tier II	15.00	8.00	10.00	12.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Duplicate 1
Acenaphthene	1.0E+04	---	---	---	<0.33	---
Acenaphthylene	<2.5	<2.5	<2.5	<2.5	<63# INE	<2.5
Anthracene	1.00E+04	---	---	---	<0.33	---
Benzo (a) anthracene	103.8	---	---	---	<0.33	---
Benzo (b) pyrene	69.85	---	---	---	<0.33	---
Benzo (b) fluoranthene	354.98	---	---	---	<0.33	---
Benzo (ghi) perylene		---	---	---	<0.33	---
Benzo (k) fluoranthene	3759.12	---	---	---	<0.33	---
Chrysene	1.00E+04	---	---	---	<0.33	---
Dibenzo (a,h) anthracene	69.86	---	---	---	<0.33	---
Fluoranthene	10000	---	---	---	<0.33	---
Fluorene	1.00E+04	---	---	---	<0.33	---
Indeno (1,2,3-cd) pyrene	629.17	---	---	---	<0.33	---
Naphthalene	10000	<0.25	<0.25	<0.25	1.1#	<0.05
Phenanthrene	1.00E+04	---	---	---	<0.33	---
Pyrene	10000	---	---	---	<0.33	---
Sum of Concentrations		0.00	0.00	0.00	1.10	0.00

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CONSTITUENT	(Units in mg/kg)	SITE	05GP029	05GP029	05GP031	05GP031	05GP031	
		SAMPLE ID	05QD02912	05PS02915	05PS03108	05PS03112	05QD03112	
		DATE	1996 VRP	10/16/96	10/16/96	10/16/96	10/16/96	10/16/96
		DEPTH (ft)	Tier II	12.00	15.00	8.00	12.00	12.00
		RESULT TYPE	Non-Residential	Duplicate 2	Primary	Primary	Primary	Duplicate 1
Acenaphthene			1.0E+04	---	---	---	---	---
Acenaphthylene				<0.5	<2.5	<78	<110 *	<52
Anthracene			1.00E+04	---	---	---	---	---
Benzo (a) anthracene			103.8	---	---	---	---	---
Benzo (b) pyrene			69.85	---	---	---	---	---
Benzo (b) fluoranthene			354.98	---	---	---	---	---
Benzo (ghi) perylene				---	---	---	---	---
Benzo (k) fluoranthene			3759.12	---	---	---	---	---
Chrysene			1.00E+04	---	---	---	---	---
Dibenzo (a,h) anthracene			69.86	---	---	---	---	---
Fluoranthene			10000	---	---	---	---	---
Fluorene			1.00E+04	---	---	---	---	---
Indeno (1,2,3-cd) pyrene			629.17	---	---	---	---	---
Naphthalene			10000	<0.05	<0.25	20	30 *	9.7
Phenanthrene			1.00E+04	---	---	---	---	---
Pyrene			10000	---	---	---	---	---
Sum of Concentrations				0.00	0.00	20.00	30.00	9.70

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CONSTITUENT (Units in mg/kg)	SITE	05GP031	05GP034	05GP034	05GP034	05GP046
	SAMPLE ID	05PS03116	05PS03404	06PS03412	06PS03416	06PS04608
DATE	1996 VRP	10/16/96	10/16/96	10/16/96	10/16/96	11/11/96
DEPTH (ft)	Tier II	16.00	4.00	12.00	16.00	8.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene	1.0E+04	---	---	---	---	---
Acenaphthylene	<26	<2.5	<2.5	<2.5	<2.5	<2.5
Anthracene	1.00E+04	---	---	---	---	---
Benzo (a) anthracene	103.8	---	---	---	---	---
Benzo (b) pyrene	69.85	---	---	---	---	---
Benzo (b) fluoranthene	354.98	---	---	---	---	---
Benzo (ghi) perylene	---	---	---	---	---	---
Benzo (k) fluoranthene	3759.12	---	---	---	---	---
Chrysene	1.00E+04	---	---	---	---	---
Dibenzo (a,h) anthracene	69.86	---	---	---	---	---
Fluoranthene	10000	---	---	---	---	---
Fluorene	1.00E+04	---	---	---	---	---
Indeno (1,2,3-cd) pyrene	629.17	---	---	---	---	---
Naphthalene	10000	3.1	<0.25	<0.25	<0.25	<0.25
Phenanthrene	1.00E+04	---	---	---	---	---
Pyrene	10000	---	---	---	---	---
Sum of Concentrations		3.10	0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	05GP046	05GP046	05GP047	05GP047	05GP047
	SAMPLE ID	05PS04612	05PS04615	05PS04704	05PS04708	05PS04712
	DATE	1996 VRP	11/11/96	11/11/96	11/11/96	11/11/96
	DEPTH (ft)	Tier II	12.00	15.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Acenaphthene		1.0E+04	---	---	---	<0.33
Acenaphthylene			<2.5	<2.5	<2.5 E	<0.5#
Anthracene		1.00E+04	---	---	---	<0.33
Benzo (a) anthracene		103.8	---	---	---	<0.33
Benzo (b) pyrene		69.85	---	---	---	<0.33
Benzo (b) fluoranthene		354.98	---	---	---	<0.33
Benzo (ghi) perylene			---	---	---	<0.33
Benzo (k) fluoranthene		3759.12	---	---	---	<0.33
Chrysene		1.00E+04	---	---	---	<0.33
Dibenzo (a,h) anthracene		69.86	---	---	---	<0.33
Fluoranthene		10000	---	---	---	<0.33
Fluorene		1.00E+04	---	---	---	<0.33
Indeno (1,2,3-cd) pyrene		629.17	---	---	---	<0.33
Naphthalene		10000	<0.25	<0.25	<0.25 E	<0.05#
Phenanthrene		1.00E+04	---	---	---	<0.33
Pyrene		10000	---	---	---	<0.33
Sum of Concentrations			0.00	0.00	0.00	0.00

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For RCL PNA

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	05GP047	05GP048	05GP048	05GP048	05GP048
	SAMPLE ID	05PS04715	05PS04804	05PS04808	05PS04811	05PS04814
DATE	1996 VRP	11/11/96	11/11/96	11/11/96	11/11/96	11/11/96
DEPTH (ft)	Tier II	15.00	4.00	8.00	11.00	14.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene	1.0E+04	---	---	---	<0.33	---
Acenaphthylene	<2.5	<7.4	<6.3	<0.6#	<1100	
Anthracene	1.00E+04	---	---	---	<0.33	---
Benzo (a) anthracene	103.8	---	---	---	<0.33	---
Benzo (b) pyrene	69.85	---	---	---	<0.33	---
Benzo (b) fluoranthene	354.98	---	---	---	<0.33	---
Benzo (ghi) perylene		---	---	---	<0.33	---
Benzo (k) fluoranthene	3759.12	---	---	---	<0.33	---
Chrysene	1.00E+04	---	---	---	<0.33	---
Dibenzo (a,h) anthracene	69.86	---	---	---	<0.33	---
Fluoranthene	10000	---	---	---	<0.33	---
Fluorene	1.00E+04	---	---	---	<0.33	---
Indeno (1,2,3-cd) pyrene	629.17	---	---	---	<0.33	---
Naphthalene	10000	<0.25	<0.74	<0.63	<0.05#	<110
Phenanthrene	1.00E+04	---	---	---	<0.33	---
Pyrene	10000	---	---	---	<0.33	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	05GP049	05GP049	05GP049	05GP049	05GP050
	SAMPLE ID	05PS04904	05PS04908	05PS04912	05PS04915	05PS05004
	DATE	1996 VRP	11/12/96	11/12/96	11/12/96	11/12/96
	DEPTH (ft)	Tier II	4.00	8.00	12.00	15.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Acenaphthene		1.0E + 04	---	---	< 0.33	---
Acenaphthylene			< 2.5	< 2.5	< 0.5#	< 2.5
Anthracene		1.00E + 04	---	---	< 0.33	---
Benzo (a) anthracene		103.8	---	---	< 0.33	---
Benzo (b) pyrene		69.85	---	---	< 0.33	---
Benzo (b) fluoranthene		354.98	---	---	< 0.33	---
Benzo (ghi) perylene			---	---	< 0.33	---
Benzo (k) fluoranthene		3759.12	---	---	< 0.33	---
Chrysene		1.00E + 04	---	---	< 0.33	---
Dibenzo (a,h) anthracene		69.86	---	---	< 0.33	---
Fluoranthene		10000	---	---	< 0.33	---
Fluorene		1.00E + 04	---	---	< 0.33	---
Indeno (1,2,3-cd) pyrene		629.17	---	---	< 0.33	---
Naphthalene		10000	< 0.25	< 0.25	< 0.05#	< 0.25
Phenanthrene		1.00E + 04	---	---	< 0.33	---
Pyrene		10000	---	---	< 0.33	---
Sum of Concentrations			0.00	0.00	0.00	0.00

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For RCL PNA

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	05GP050	05GP050	05GP050	05GP051	05GP051	
	SAMPLE ID	05PS05008	05PS05012	05PS05016	05PS05104	05PS05108	
	DATE	1996 VRP	11/12/96	11/12/96	11/12/96	11/12/96	
	DEPTH (ft)	Tier II	8.00	12.00	16.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene		1.0E + 04	---	<0.33	---	---	---
Acenaphthylene			<2.5	<0.5#	<2.5	<2.5	<2.5
Anthracene		1.00E + 04	---	<0.33	---	---	---
Benzo (a) anthracene		103.8	---	<0.33	---	---	---
Benzo (b) pyrene		69.85	---	<0.33	---	---	---
Benzo (b) fluoranthene		354.98	---	<0.33	---	---	---
Benzo (ghi) perylene			---	<0.33	---	---	---
Benzo (k) fluoranthene		3759.12	---	<0.33	---	---	---
Chrysene		1.00E + 04	---	<0.33	---	---	---
Dibenzo (a,h) anthracene		69.86	---	<0.33	---	---	---
Fluoranthene		10000	---	<0.33	---	---	---
Fluorene		1.00E + 04	---	<0.33	---	---	---
Indeno (1,2,3-cd) pyrene		629.17	---	<0.33	---	---	---
Naphthalene		10000	<0.25	<0.05#	<0.25	<0.25	<0.25
Phenanthrene		1.00E + 04	---	<0.33	---	---	---
Pyrene		10000	---	<0.33	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	05GP051	05GP051	05GP052	05GP052	05GP052
	SAMPLE ID	05PS05112	05PS05115	05PS05204	05PS05208	05QD05208
DATE	1996 VRP	11/12/96	11/12/96	11/12/96	11/12/96	11/12/96
DEPTH (ft)	Tier II	12.00	15.00	4.00	8.00	8.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Duplicate 1
Acenaphthene	1.0E+04	<0.33	---	---	---	---
Acanaphthylene		<0.5#	<2.5	<2.5	<2.5	<2.5
Anthracene	1.00E+04	<0.33	---	---	---	---
Benzo (a) anthracene	103.8	<0.33	---	---	---	---
Benzo (b) pyrene	69.85	<0.33	---	---	---	---
Benzo (b) fluoranthene	354.98	<0.33	---	---	---	---
Benzo (ghi) perylene		<0.33	---	---	---	---
Benzo (k) fluoranthene	3759.12	<0.33	---	---	---	---
Chrysene	1.00E+04	<0.33	---	---	---	---
Dibenzo (a,h) anthracene	69.86	<0.33	---	---	---	---
Fluoranthene	10000	<0.33	---	---	---	---
Fluorene	1.00E+04	<0.33	---	---	---	---
Indeno (1,2,3-cd) pyrene	629.17	<0.33	---	---	---	---
Naphthalene	10000	<0.05#	<0.25	<0.25	<0.25	<0.25
Phenanthrene	1.00E+04	<0.33	---	---	---	---
Pyrene	10000	<0.33	---	---	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

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For RCL PNA

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	05GP052	05GP052	05GP053	05GP053	05GP053
	SAMPLE ID	05PS05212	05PS05215	05PS05304	05PS05308	05PS05312
DATE	1996 VRP	11/12/96	11/12/96	11/12/96	11/12/96	11/12/96
DEPTH (ft)	Tier II	12.00	15.00	4.00	8.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene	1.0E+04	---	<0.33	---	<0.33	---
Acenaphthylene		<2.5	<0.5#	<2.5	<0.5#	<2.5
Anthracene	1.00E+04	---	<0.33	---	<0.33	---
Benzo (a) anthracene	103.8	---	<0.33	---	<0.33	---
Benzo (b) pyrene	69.85	---	<0.33	---	<0.33	---
Benzo (b) fluoranthene	354.98	---	<0.33	---	<0.33	---
Benzo (ghi) perylene		---	<0.33	---	<0.33	---
Benzo (k) fluoranthene	3759.12	---	<0.33	---	<0.33	---
Chrysene	1.00E+04	---	<0.33	---	<0.33	---
Dibenzo (a,h) anthracene	69.86	---	<0.33	---	<0.33	---
Fluoranthene	10000	---	<0.33	---	<0.33	---
Fluorene	1.00E+04	---	<0.33	---	<0.33	---
Indeno (1,2,3-cd) pyrene	629.17	---	<0.33	---	<0.33	---
Naphthalene	10000	<0.25	<0.05#	<0.25	<0.05#	<0.25
Phenanthrene	1.00E+04	---	<0.33	---	<0.33	---
Pyrene	10000	---	<0.33	---	<0.33	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < =Not detected at indicated reporting limit --- =Not analyzed

= Constituent analyzed by more than one test method, highest result reported.

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CONSTITUENT	(Units in mg/kg)	SITE	05GP053	05GP062	05GP062	05GP062	05GP063
		SAMPLE ID	05PS05316	05PS06204	05PS06208	05PS06216	
		DATE	1996 VRP 11/12/96	11/15/96	11/15/96	11/15/96	11/15/96
		DEPTH (ft)	Tier II 16.00	4.00	8.00	16.00	12.00
		RESULT TYPE	Non-Residential Primary	Primary	Primary	Primary	Primary
Acenaphthene			1.0E+04	---	---	---	<0.33
Acenaphthylene				<2.5	<2.5	<2.5	<0.33#
Anthracene			1.00E+04	---	---	---	<0.33
Benzo (a) anthracene			103.8	---	---	---	<0.33
Benzo (b) pyrene			69.85	---	---	---	<0.33
Benzo (b) fluoranthene			354.98	---	---	---	<0.33?
Benzo (ghi) perylene				---	---	---	<0.33
Benzo (k) fluoranthene			3759.12	---	---	---	<0.33?
Chrysene			1.00E+04	---	---	---	<0.33
Dibenzo (a,h) anthracene			69.86	---	---	---	<0.33
Fluoranthene			10000	---	---	---	<0.33
Fluorene			1.00E+04	---	---	---	<0.33
Indeno (1,2,3-cd) pyrene			629.17	---	---	---	<0.33
Naphthalene			10000	<0.25	<0.25	<0.25	<0.33#
Phenanthrene			1.00E+04	---	---	---	<0.33
Pyrene			10000	---	---	---	<0.33
Sum of Concentrations				0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported. ? = Duplicate records found, Data review required.

For RCL PNA

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	05GP064	05GP064	05GP064	05GP064	05GP064
	SAMPLE ID	05PS06404	05PS06408	05PS06412	05PS06416	05QD06416
DATE	1996 VRP	11/16/96	11/16/96	11/16/96	11/16/96	11/16/96
DEPTH (ft)	Tier II	4.00	8.00	12.00	16.00	16.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Duplicate 1
Acenaphthene	1.0E+04	---	<0.33	---	---	---
Acenaphthylene		<2.5	<0.33#	<2.5	<2.5	<2.5
Anthracene	1.00E+04	---	<0.33	---	---	---
Benzo (a) anthracene	103.8	---	<0.33	---	---	---
Benzo (b) pyrene	69.85	---	<0.33	---	---	---
Benzo (b) fluoranthene	354.98	---	<0.33?	---	---	---
Benzo (ghi) perylene		---	<0.33	---	---	---
Benzo (k) fluoranthene	3759.12	---	<0.33?	---	---	---
Chrysene	1.00E+04	---	<0.33	---	---	---
Dibenzo (a,h) anthracene	69.86	---	<0.33	---	---	---
Fluoranthene	10000	---	<0.33	---	---	---
Fluorene	1.00E+04	---	<0.33	---	---	---
Indeno (1,2,3-cd) pyrene	629.17	---	<0.33	---	---	---
Naphthalene	10000	<0.25	<0.33#	<0.25	<0.25	<0.25
Phenanthrene	1.00E+04	---	<0.33	---	---	---
Pyrene	10000	---	<0.33?	---	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 # = Constituent found in more than one test method, highest result reported. ? = Duplicate results found, Data review required.
 For RCL PNA Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	06GP008	07GP005	07GP008	07GP008	07GP008
	SAMPLE ID	06PS00816	07PS00504	07PS00804	07PS00808	07PS00812
DATE	1996 VRP	12/16/96	11/14/96	11/17/96	11/17/96	11/17/96
DEPTH (ft)	Tier II	16.00	4.00	4.00	8.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene	1.0E+04	<0.33	<0.33	---	<0.33	---
Acenaphthylene		<0.33#	<0.5#	<2.5	<0.5#	<2.5
Anthracene	1.00E+04	<0.33	<0.33	---	<0.33	---
Benzo (a) anthracene	103.8	<0.33	<0.33	---	<0.33	---
Benzo (b) pyrene	69.85	<0.33	<0.33	---	<0.33	---
Benzo (b) fluoranthene	354.98	<0.33?	<0.33	---	<0.33?	---
Benzo (ghi) perylene		<0.33	<0.33	---	<0.33	---
Benzo (k) fluoranthene	3759.12	<0.33?	<0.33	---	<0.33?	---
Chrysene	1.00E+04	<0.33	<0.33	---	<0.33	---
Dibenzo (a,h) anthracene	69.86	<0.33	<0.33	---	<0.33	---
Fluoranthene	10000	0.45	<0.33	---	<0.33	---
Fluorene	1.00E+04	<0.33	<0.33	---	<0.33	---
Indeno (1,2,3-cd) pyrene	629.17	<0.33	<0.33	---	<0.33	---
Naphthalene	10000	0.89#	<0.05#	<0.25	<0.05#	<0.25
Phenanthrene	1.00E+04	<0.33	<0.33	---	<0.33	---
Pyrene	10000	<0.33	<0.33	---	<0.33	---
Sum of Concentrations		1.34	0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	07GP008	09GP001	09GP001	09GP001	09GP002
	SAMPLE ID	07PS00819	09PS00104	09PS00108	09PS00118	09PS00204
	DATE	1996 VRP	11/17/96	11/15/96	11/15/96	11/17/96
	DEPTH (ft)	Tier II	19.00	4.00	8.00	4.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Acenaphthene		1.0E+04	---	---	---	---
Acenaphthylene			<2.5	<2.5	<2.5	<0.5
Anthracene		1.00E+04	---	---	---	---
Benzo (a) anthracene		103.8	---	---	---	---
Benzo (b) pyrene		69.85	---	---	---	---
Benzo (b) fluoranthene		354.98	---	---	---	---
Benzo (ghi) perylene			---	---	---	---
Benzo (k) fluoranthene		3759.12	---	---	---	---
Chrysene		1.00E+04	---	---	---	---
Dibenzo (a,h) anthracene		69.86	---	---	---	---
Fluoranthene		10000	---	---	---	---
Fluorene		1.00E+04	---	---	---	---
Indeno (1,2,3-cd) pyrene		629.17	---	---	---	---
Naphthalene		10000	<0.25	<0.25	<0.25	0.25
Phenanthrene		1.00E+04	---	---	---	---
Pyrene		10000	---	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.25
						0.00

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CONSTITUENT (Units in mg/kg)	SITE	09GP002	09GP002	09GP002	09GP003	09GP003
	SAMPLE ID	09PS00208	09PS00212	09PS00218	09PS00304	09PS00308
DATE	1996 VRP	11/17/96	11/17/96	11/17/96	07/16/97	07/16/97
DEPTH (ft)	Tier II	8.00	12.00	18.00	4.00	8.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene	1.0E + 04	---	---	---	---	---
Acenaphthylene	<2.5	<2.5	<2.5	<2.5	<0.5	<0.5
Anthracene	1.00E + 04	---	---	---	---	---
Benzo (a) anthracene	103.8	---	---	---	---	---
Benzo (b) pyrene	69.85	---	---	---	---	---
Benzo (b) fluoranthene	354.98	---	---	---	---	---
Benzo (ghi) perylene		---	---	---	---	---
Benzo (k) fluoranthene	3759.12	---	---	---	---	---
Chrysene	1.00E + 04	---	---	---	---	---
Dibenzo (a,h) anthracene	69.86	---	---	---	---	---
Fluoranthene	10000	---	---	---	---	---
Fluorene	1.00E + 04	---	---	---	---	---
Indeno (1,2,3-cd) pyrene	629.17	---	---	---	---	---
Naphthalene	10000	<0.25	<0.25	<0.25	<0.05	<0.05
Phenanthrene	1.00E + 04	---	---	---	---	---
Pyrene	10000	---	---	---	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	09GP003	09GP003	09GP003	09GP004	09GP004	
	SAMPLE ID	14PS00312	14QD00312	09PS00318	09PS00404	09PS00408	
	DATE	1996 VRP	07/16/97	07/16/97	07/16/97	07/16/97	
	DEPTH (ft)	Tier II	12.00	12.00	18.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary	Primary
Acenaphthene		1.0E+04	---	---	---	---	
Acenaphthylene		<0.5	<0.5	<0.5	<0.5	<0.5	
Anthracene		1.00E+04	---	---	---	---	
Benzo (a) anthracene		103.8	---	---	---	---	
Benzo (b) pyrene		69.85	---	---	---	---	
Benzo (b) fluoranthene		354.98	---	---	---	---	
Benzo (ghi) perylene			---	---	---	---	
Benzo (k) fluoranthene		3759.12	---	---	---	---	
Chrysene		1.00E+04	---	---	---	---	
Dibenzo (a,h) anthracene		69.86	---	---	---	---	
Fluoranthene		10000	---	---	---	---	
Fluorene		1.00E+04	---	---	---	---	
Indeno (1,2,3-cd) pyrene		629.17	---	---	---	---	
Naphthalene		10000	<0.05	<0.05	3.2	<0.05	<0.05
Phenanthrene		1.00E+04	---	---	---	---	
Pyrene		10000	---	---	---	---	
Sum of Concentrations			0.00	0.00	3.20	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	09GP004	09GP004	09GP005	09GP005	09GP005
	SAMPLE ID	09PS00416	09QD00416	09PS00502	09PS00508	09PS00514
DATE	1996 VRP	07/16/97	07/16/97	07/16/97	07/16/97	07/16/97
DEPTH (ft)	Tier II	16.00	16.00	2.00	8.00	14.00
RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary	Primary
Acenaphthene	1.0E + 04	---	---	---	---	---
Acenaphthylene		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	1.00E + 04	---	---	---	---	---
Benzo (a) anthracene	103.8	---	---	---	---	---
Benzo (b) pyrene	69.85	---	---	---	---	---
Benzo (b) fluoranthene	354.98	---	---	---	---	---
Benzo (ghi) perylene		---	---	---	---	---
Benzo (k) fluoranthene	3759.12	---	---	---	---	---
Chrysene	1.00E + 04	---	---	---	---	---
Dibenzo (a,h) anthracene	69.86	---	---	---	---	---
Fluoranthene	10000	---	---	---	---	---
Fluorene	1.00E + 04	---	---	---	---	---
Indeno (1,2,3-cd) pyrene	629.17	---	---	---	---	---
Naphthalene	10000	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	1.00E + 04	---	---	---	---	---
Pyrene	10000	---	---	---	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	09GP005	09GP006	09GP006	09GP006	09GP006
	SAMPLE ID	09QD00514	09PS00604	09PS00610	09PS00618	09QD00618
	DATE	1996 VRP 07/16/97	07/17/97	07/17/97	07/17/97	07/17/97
	DEPTH (ft)	Tier II 14.00	4.00	10.00	18.00	18.00
	RESULT TYPE	Non-Residential Duplicate 1	Primary	Primary	Primary	Duplicate 1
Acenaphthene		1.0E+04	---	---	---	---
Acenaphthylene		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene		1.00E+04	---	---	---	---
Benzo (a) anthracene		103.8	---	---	---	---
Benzo (b) pyrene		69.85	---	---	---	---
Benzo (b) fluoranthene		354.98	---	---	---	---
Benzo (ghi) perylene			---	---	---	---
Benzo (k) fluoranthene		3759.12	---	---	---	---
Chrysene		1.00E+04	---	---	---	---
Dibenzo (a,h) anthracene		69.86	---	---	---	---
Fluoranthene		10000	---	---	---	---
Fluorene		1.00E+04	---	---	---	---
Indeno (1,2,3-cd) pyrene		629.17	---	---	---	---
Naphthalene		10000	<0.05	<0.05	<0.05	<0.05
Phenanthrene		1.00E+04	---	---	---	---
Pyrene		10000	---	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00

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CONSTITUENT	(Units in mg/kg)	SITE	09GP007	09GP007	09GP007	09GP007	09GP008
		SAMPLE ID	09PS00704	09PS00708	09PS00712	09PS00717	09PS00808
DATE	1996 VRP	07/17/97	07/17/97	07/17/97	07/17/97	07/18/97	
DEPTH (ft)	Tier II	4.00	8.00	12.00	17.00	8.00	
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary	
Acenaphthene	1.0E + 04	---	---	---	---	---	
Acanaphthylene		<0.5	<0.5	<0.5	<0.5	<0.5	
Anthracene	1.00E + 04	---	---	---	---	---	
Benzo (a) anthracene	103.8	---	---	---	---	---	
Benzo (b) pyrene	69.85	---	---	---	---	---	
Benzo (b) fluoranthene	354.98	---	---	---	---	---	
Benzo (ghi) perylene		---	---	---	---	---	
Benzo (k) fluoranthene	3759.12	---	---	---	---	---	
Chrysene	1.00E + 04	---	---	---	---	---	
Dibenzo (a,h) anthracene	69.86	---	---	---	---	---	
Fluoranthene	10000	---	---	---	---	---	
Fluorene	1.00E + 04	---	---	---	---	---	
Indeno (1,2,3-cd) pyrene	629.17	---	---	---	---	---	
Naphthalene	10000	<0.05	<0.05	<0.05	<0.05	<0.05	
Phenanthrene	1.00E + 04	---	---	---	---	---	
Pyrene	10000	---	---	---	---	---	
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00	

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CONSTITUENT	(Units in mg/kg)	SITE	09GP008	09GP008	09HA001	09HA001	09HA001	
		SAMPLE ID	09PS00812	09PS00816	09HA00104	01HA00107	09HA00109	
		DATE	1996 VRP	07/18/97	07/18/97	07/25/97	07/25/97	07/25/97
		DEPTH (ft)	Tier II	12.00	16.00	4.00	7.00	9.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene	1.0E+04		---	---	---	---	---	<2.5
Acenaphthylene			<0.5	<0.5	<0.25	<0.5	---	---
Anthracene	1.00E+04		---	---	---	---	---	---
Benzo (a) anthracene	103.8		---	---	---	---	---	---
Benzo (b) pyrene	69.85		---	---	---	---	---	---
Benzo (b) fluoranthene	354.98		---	---	---	---	---	---
Benzo (ghi) perylene			---	---	---	---	---	---
Benzo (k) fluoranthene	3759.12		---	---	---	---	---	---
Chrysene	1.00E+04		---	---	---	---	---	---
Dibenzo (a,h) anthracene	69.86		---	---	---	---	---	---
Fluoranthene	10000		---	---	---	---	---	---
Fluorene	1.00E+04		---	---	---	---	---	---
Indeno (1,2,3-cd) pyrene	629.17		---	---	---	---	---	---
Naphthalene	10000		<0.05	<0.05	<0.25	<0.05	<0.25	<0.25
Phenanthrene	1.00E+04		---	---	---	---	---	---
Pyrene	10000		---	---	---	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	17GP001	17GP001	17GP001	17GP001	17GP002
	SAMPLE ID	17PS00104	17PS00108	17PS00112	17PS00118	17PS00204
DATE	1996 VRP	11/12/96	11/12/96	11/12/96	11/12/96	12/13/96
DEPTH (ft)	Tier II	4.00	8.00	12.00	18.00	4.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene	1.0E + 04	---	<0.33	---	---	---
Acenaphthylene		<2.5	<0.5#	<2.5	<290	<2.5
Anthracene	1.00E + 04	---	<0.33	---	---	---
Benzo (a) anthracene	103.8	---	<0.33	---	---	---
Benzo (b) pyrene	69.85	---	<0.33	---	---	---
Benzo (b) fluoranthene	354.98	---	<0.33	---	---	---
Benzo (ghi) perylene		---	<0.33	---	---	---
Benzo (k) fluoranthene	3759.12	---	<0.33	---	---	---
Chrysene	1.00E + 04	---	<0.33	---	---	---
Dibenzo (a,h) anthracene	69.86	---	<0.33	---	---	---
Fluoranthene	10000	---	<0.33	---	---	---
Fluorene	1.00E + 04	---	<0.33	---	---	---
Indeno (1,2,3-cd) pyrene	629.17	---	<0.33	---	---	---
Naphthalene	10000	<0.25	<0.05#	<0.25	<29	<0.25
Phenanthrene	1.00E + 04	---	<0.33	---	---	---
Pyrene	10000	---	<0.33	---	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 # = Constituent in more than one test method, highest result reported.

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CONSTITUENT (Units in mg/kg)	SITE	17GP002	17GP002	17GP003	17GP003	17GP003	
	SAMPLE ID	17PS00208	17PS00212	17PS00304	17PS00308	17PS00314	
	DATE	1996 VRP	12/13/96	12/13/96	12/16/96	12/16/96	12/16/96
	DEPTH (ft)	Tier II	8.00	12.00	4.00	8.00	14.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene		1.0E+04	---	<0.33	---	---	<0.33
Acenaphthylene			<2.5	<0.5# E	<2.5	<2.5	<0.33#
Anthracene		1.00E+04	---	<0.33	---	---	<0.33
Benzo (a) anthracene		103.8	---	<0.33	---	---	<0.33
Benzo (b) pyrene		69.85	---	<0.33	---	---	<0.33
Benzo (b) fluoranthene		354.98	---	<0.33	---	---	<0.33?
Benzo (ghi) perylene			---	<0.33	---	---	<0.33
Benzo (k) fluoranthene		3759.12	---	<0.33	---	---	<0.33?
Chrysene		1.00E+04	---	<0.33	---	---	<0.33
Dibenzo (a,h) anthracene		69.86	---	<0.33	---	---	<0.33
Fluoranthene		10000	---	<0.33	---	---	<0.33
Fluorene		1.00E+04	---	<0.33	---	---	<0.33
Indeno (1,2,3-cd) pyrene		629.17	---	<0.33	---	---	<0.33
Naphthalene		10000	<0.25	<0.05# E	<0.25	<0.25	<0.33#
Phenanthrene		1.00E+04	---	<0.33	---	---	<0.33
Pyrene		10000	---	<0.33	---	---	<0.33
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent analyzed by more than one test method, highest result reported. ? = Duplicate record found, Data review required. The following qualifier(s) exist: E, I, N, *

Analytical Summary - TPH/DROs in Soils
 Plant 6/16 - Former USTs
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO (mg/kg)	
1996 VRPTier II Non-Residential				6000	
05GP005	10/05/96	8.00	Prim	24	24.00
05GP005	10/05/96	12.00	Prim	140	140.00
05GP005	10/05/96	16.00	Prim	220	220.00
05GP006	10/05/96	4.00	Prim	1100	1100.00
05GP006	10/05/96	8.00	Prim	310	310.00
05GP006	10/05/96	12.00	Prim	50	50.00
05GP008	10/06/96	8.00	Prim	280 PI	280.00
05GP008	10/06/96	12.00	Prim	132 PI	132.00
05GP008	10/06/96	13.50	Prim	160 PI	160.00
05GP010	10/06/96	4.00	Prim	300 JPI	300.00
05GP010	10/06/96	4.00	Dup 1	117	117.00
05GP010	10/06/96	12.00	Prim	270 PI	270.00
05GP010	10/06/96	16.00	Prim	170 PI	170.00
05GP011	10/06/96	4.00	Prim	260C PI	2600.00
05GP011	10/06/96	8.00	Prim	120 PI	120.00
05GP011	10/06/96	12.00	Prim	45 J	45.00
05GP012	10/06/96	4.00	Prim	< 10	0.00
05GP012	10/06/96	10.00	Prim	1900 PI	1900.00
05GP012	10/06/96	15.00	Prim	74	74.00
05GP027	10/15/96	4.00	Prim	94	94.00
05GP027	10/15/96	8.00	Prim	< 10	0.00
05GP027	10/15/96	8.00	Dup 1	< 10	0.00
05GP027	10/15/96	16.00	Prim	480 PI	480.00
05GP030	10/16/96	8.00	Prim	190 PI	190.00
05GP030	10/16/96	12.00	Prim	22	22.00
05GP030	10/16/96	16.00	Prim	410 PI	410.00
05GP032	10/16/96	8.00	Prim	< 10	0.00
05GP032	10/16/96	12.00	Prim	980 PI	980.00
05GP032	10/16/96	12.00	Dup 1	890	890.00
05GP032	10/16/96	16.00	Prim	430 PI	430.00
05GP033	10/16/96	8.00	Prim	65	65.00
05GP033	10/16/96	12.00	Prim	1900 PI	1900.00
05GP033	10/16/96	16.00	Prim	330 PI	330.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

For RCL TPH/DRO

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - TPH/DROs in Soils
 Plant 6/16 - Former USTs
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO (mg/kg)
1996 VRPTier IINon-Residential				6000
05GP034	10/16/96	4.00	Prim	56
05GP034	10/16/96	12.00	Prim	300 PI
05GP034	10/16/96	16.00	Prim	<10
05GP046	11/11/96	8.00	Prim	<10
05GP046	11/11/96	12.00	Prim	<10
05GP046	11/11/96	15.00	Prim	<10
05GP047	11/11/96	4.00	Prim	83
05GP047	11/11/96	12.00	Prim	<10
05GP047	11/11/96	15.00	Prim	<10
05GP048	11/11/96	4.00	Prim	1100 PI
05GP048	11/11/96	8.00	Prim	730 PI
05GP048	11/11/96	14.00	Prim	4300 PI
05GP049	11/12/96	4.00	Prim	1030 PI
05GP049	11/12/96	8.00	Prim	<10
05GP049	11/12/96	15.00	Prim	<10
05GP050	11/12/96	4.00	Prim	210 PI
05GP050	11/12/96	8.00	Prim	79 PI
05GP050	11/12/96	16.00	Prim	11
05GP051	11/12/96	4.00	Prim	67 PI
05GP051	11/12/96	8.00	Prim	<10
05GP051	11/12/96	15.00	Prim	<10
05GP052	11/12/96	4.00	Prim	68
05GP052	11/12/96	8.00	Prim	<10
05GP052	11/12/96	8.00	Dup 1	<10
05GP052	11/12/96	12.00	Prim	<10
05GP053	11/12/96	4.00	Prim	76 PI
05GP053	11/12/96	12.00	Prim	<10
05GP053	11/12/96	16.00	Prim	<10
05GP062	11/15/96	4.00	Prim	<10
05GP062	11/15/96	8.00	Prim	<10
05GP062	11/15/96	16.00	Prim	<10
05GP063	11/15/96	4.00	Prim	<10
05GP063	11/15/96	8.00	Prim	<10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit -- = Not analyzed

For RCL TPH/DRO

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - TPH/DROs in Soils
 Plant 6/16 - Former USTs
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO (mg/kg)
1996 VRPTier II Non-Residential				6000
05GP063	11/15/96	16.00	Prim	<10
05GP064	11/16/96	4.00	Prim	<10
05GP064	11/16/96	12.00	Prim	<10
05GP064	11/16/96	16.00	Prim	<10
05GP064	11/16/96	16.00	Dup 1	<10
06GP007	12/16/96	4.00	Prim	<10
06GP007	12/16/96	8.00	Prim	<10
06GP007	12/16/96	14.00	Prim	38
06GP008	12/16/96	4.00	Prim	<10
06GP008	12/16/96	8.00	Prim	<10
07GP005	11/14/96	8.00	Prim	<10
07GP005	11/14/96	12.00	Prim	<10
07GP005	11/14/96	15.00	Prim	<10
07GP008	11/17/96	4.00	Prim	<10
07GP008	11/17/96	12.00	Prim	<10
07GP008	11/17/96	19.00	Prim	3300 PI
17GP001	11/12/96	4.00	Prim	<10
17GP001	11/12/96	12.00	Prim	<10
17GP001	11/12/96	18.00	Prim	[8100] PI
17GP003	12/16/96	4.00	Prim	65
17GP003	12/16/96	8.00	Prim	<10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level The following qualifier(s) exist: P, I, J

For RCL TPH/DRO

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Soils
 Plant 6/16 - Former USTs
 Voluntary Site Investigation
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CONSTITUENT (Units in mg/kg)	SITE	05GP050	05GP050	05GP050	05GP050	07GP004	
	SAMPLE ID	05PS05004	05PS05008	05PS05012	05PS05016	07PS00404	
	DATE	1996 VRR	11/12/96	11/12/96	11/12/96	11/14/96	
	DEPTH (ft)	Tier II	4.00	8.00	12.00	16.00	4.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438	4.2	3.2	3.3	3.3	16	
Barium, Total	10000	56	32	46	16	33	
Cadmium, Total	730.0	2.8	<1	1.8	<1	<1	
Chromium, Total		82	29	16	6.9	5.5	
Copper, Total	1700	38	10.4	9.6	6.2	1.5	
Lead, Total	400	33	14	<5	6.2	<5	
Mercury, Total	87.60	0.15	0.11	<0.1	<0.1	<0.1	
Nickel, Total	10000	15	5.3	10	6.5	1.9	
Selenium, Total	7300	<0.5	<0.5	<0.5	<0.5	<0.5	
Silver, Total	7300	1.5	1	<1	<1	1.1	
Zinc, Total	10000	34	20	19	16	<5	
Sum of Concentrations		266.65	115.01	105.70	58.10	59.00	

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Analytical Summary - Inorganics in Soils
 Plant 6/16 - Former USTs
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CONSTITUENT	(Units in mg/kg)	SITE	07GP004	07GP004	07GP004	07GP005	07GP008
		SAMPLE ID	07PS00408	07PS00412	07PS00415	07PS00504	07PS00804
		DATE	1996 VRP 11/14/96	11/14/96	11/14/96	11/14/96	11/17/96
		DEPTH (ft)	Tier II 8.00	12.00	15.00	4.00	4.00
		RESULT TYPE	Non-Residential Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438		0.36	0.33	0.53	9.3	3.1
Barium, Total	10000		5.4	7.4	8.6	35	34
Cadmium, Total	730.0		<1	<1	<1	<1	<1
Chromium, Total			<5	<5	<5	11	9.6
Copper, Total	1700		3.1	2.7	3	5.9	4.3
Lead, Total	400		<5	<5	<5	<5	<5
Mercury, Total	87.60		<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, Total	10000		4.6	2.7	2.7	6.1	5.2
Selenium, Total	7300		<0.5	<0.5	<0.5	<0.5	<0.5
Silver, Total	7300		<1	<1	<1	2.1	1.7
Zinc, Total	10000		12	8.5	9.3	17	13
Sum of Concentrations			25.46	21.63	24.13	86.40	70.90

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Analytical Summary - Inorganics in Soils
 Plant 6/16 - Former USTs
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 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	07GP008	07GP008	07GP008	07GP008	09GP001
	SAMPLE ID	07PS00808	07PS00812	07PS00819	07QD00819	09PS00104
DATE	1996 VRP	11/17/96	11/17/96	11/17/96	11/17/96	11/15/96
DEPTH (ft)	Tier II	8.00	12.00	19.00	19.00	4.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1	Primary
Arsenic, Total	438	2.6	0.5	2.9 J	1.3	1.5
Barium, Total	10000	19	6.1	32 J	10	12
Cadmium, Total	730.0	<1	<1	<1	<1	<1
Chromium, Total		5 J	<5	8.3 J	<5	<5
Copper, Total	1700	4.6	3.5	4.4	6.2	4
Lead, Total	400	<5	<5	<5	<5	<5
Mercury, Total	87.80	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, Total	10000	4.6	2.6	4.5	4.6	4.1
Selenium, Total	7300	<0.5?	<0.5	<0.5	<0.5	<0.5
Silver, Total	7300	1.1?	<1	1.6	<1	<1
Zinc, Total	10000	14?	9.3	11	15	13
Sum of Concentrations		50.90	22.00	64.70	37.10	34.60

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Analytical Summary - Inorganics in Soils
 Plant 6/16 - Former USTs
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 AlliedSignal Industrial Complex
 South Bend, Indiana

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CONSTITUENT	(Units in mg/kg)	SITE	09GP001	09GP001	09GP002	09GP002	09GP002	
		SAMPLE ID	09PS00108	09PS00118	09PS00204	09PS00208	09PS00212	
		DATE	1996 VRP	11/15/96	11/15/96	11/17/96	11/17/96	11/17/96
		DEPTH (ft)	Tier II	8.00	18.00	4.00	8.00	12.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total		438	7.3	0.55	2.1	5.6	0.83	
Barium, Total		10000	29	5.5	13	138	5.9	
Cadmium, Total		730.0	<1	<1	<1	1	<1	
Chromium, Total			<5	<5	<5	<5	<5	
Copper, Total		1700	3.3	3.2	4.7	4.5	3.7	
Lead, Total		400	<5	<5	<5	<5	<5	
Mercury, Total		87.60	<0.1	<0.1	<0.1	<0.1	<0.1	
Nickel, Total		10000	3.8	3.3	4.0	4.1	2.9	
Selenium, Total		7300	<0.5	<0.5	<0.5?	<0.5	<0.5	
Silver, Total		7300	1.3	<1	<1?	1	<1	
Zinc, Total		10000	11	8	187	12	12	
Sum of Concentrations			55.70	20.55	41.80	166.20	25.33	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 ? = Duplicate records found, Data review required.

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Soils
 Plant 6/16 - Former USTs
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	09GP002	17GP001	17GP001	17GP001	17GP001	
	SAMPLE ID	09PS00218	17PS00104	17PS00108	17PS00112	17PS00118	
	DATE	1996 VRP	11/17/96	11/12/96	11/12/96	11/12/96	11/12/96
	DEPTH (ft)	Tier II	18.00	4.00	8.00	12.00	18.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438	0.53	1.7	4.6	0.64	0.67	
Barium, Total	10000	7.3	16	22	6.5	6.9	
Cadmium, Total	730.0	<1	<1	<1	<1	<1	
Chromium, Total		<5	7	<5	<5	<5	
Copper, Total	1700	3.5	4.5	4.8	2.9	3	
Lead, Total	400	<5	5.1	<5	<5	5.4	
Mercury, Total	87.60	<0.1	<0.1	<0.1	<0.1	<0.1	
Nickel, Total	10000	2.8	4.8	6.7	3.4	2.6	
Selenium, Total	7300	<0.5	<0.5	<0.5	<0.5	<0.5	
Silver, Total	7300	<1	<1	<1	<1	<1	
Zinc, Total	10000	9	12	12	9.2	8.1	
Sum of Concentrations		23.13	51.10	50.10	22.64	26.67	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Soils
 Plant 6/16 - Former USTs
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

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CONSTITUENT (Units in mg/kg)	SITE	17GP002	17GP002	17GP002	17GP003	17GP003	
	SAMPLE ID	17PS00204	17PS00208	17PS00212	17PS00304	17PS00308	
	DATE	1996 VRP 12/13/96	12/13/96	12/13/96	12/16/96	12/16/96	
	DEPTH (ft)	Tier II 4.00	4.00	8.00	12.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438	0.89	0.99	0.47	8.5	1.9	
Barium, Total	10000	4.9	5	6.1	89	10	
Cadmium, Total	730.0	<1	<1	<1	3	<1	
Chromium, Total		<5	<5	<5	8.7	<5	
Copper, Total	1700	3.1	2.9	2.8	28	2.8	
Lead, Total	400	<5	<5	<5	50	<5	
Mercury, Total	87.60	<0.1	<0.1	<0.1	2.2	<0.1	
Nickel, Total	10000	4.5	4.6	3.5	9.2	4	
Selenium, Total	7300	<0.5	<0.5	<0.5	0.75	<0.5	
Silver, Total	7300	<1	<1	<1	2	<1	
Zinc, Total	10000	12	13	11	124	11	
Sum of Concentrations		25.39	26.49	23.87	325.35	29.70	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Soils
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 AlliedSignal Industrial Complex
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CONSTITUENT	(Units in mg/kg)	SITE	17GP003
		SAMPLE ID	17PS00314
		DATE	1996 VRP 12/16/96
		DEPTH (ft)	Tier II 14:00
		RESULT TYPE	Non-Residential Primary
Arsenic, Total		438	0.50
Barium, Total		10000	4.6
Cadmium, Total		730.0	< 1
Chromium, Total			< 5
Copper, Total		1700	1.8
Lead, Total		400	< 5
Mercury, Total		87.60	< 0.1
Nickel, Total		10000	2.8
Selenium, Total		7300	< 0.57
Silver, Total		7300	< 17
Zinc, Total		10000	7.07
Sum of Concentrations			16.70

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

? = Duplicate records found, Data review required. The following qualifier(s) exist: J

Analytical Summary - VOCs in Groundwater
 Plant 6/16 - Former USTs
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 AlliedSignal Industrial Complex
 South Bend, Indiana

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CONSTITUENT (Units in ug/l)	SITE	01CPT008	01CPT008	01CPT016	01CPT016	01CPT016	
	SAMPLE ID	1996 VRP	01CPW00844	01CQD00844	01CPW01631	01CPW01643	01CPW01655
	DATE	Tier II	12/05/96	12/05/96	07/25/97	07/25/97	07/25/97
	RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary	Primary
Vinyl chloride		10	<10	<2	<1	4.2	[140]
Benzene		98.6	<5	<5	42	46	<100
Ethylbenzene		10220	<5	<5	1.7	<1	<100
Toluene		20440	<5	<5	<1	<1	<100
Xylene (total)		204400	<10	<5	<3	<3	<300
Isopropylbenzene		1.02E+4	<1	<5	---	---	---
Naphthalene		4088	<5	<5	---	---	---
1,2,4-Trimethylbenzene		5.11E+3	<1	<400	---	---	---
1,3,5-Trimethylbenzene		5.11E+3	<1	<5	---	---	---
1,1-Dichloroethane		10220	<5	<5	<1	6.2	<100
1,2-Dichloroethane		31.4	<5	<5	<1	6.0	[6300]
cis-1,2-Dichloroethene		1022	760	590	---	---	---
trans-1,2-Dichloroethene		2040	190	150	---	---	---
1,2-Dichloroethene (Total)			---	---	6.0	36	240
1,2-Dichloropropane		4.21E+1	<5	<5	<1	<1	[150]
1,1,1-Trichloroethane		9198	<5	<5	<1	<1	<100
Tetrachloroethene		56.1	<5	<5	2.0	<1	<100
Trichloroethene		260	<5	<5	1.1	2.3	<100
Chloroethane		9.86E+2	<10	<10	3.7	<1	<100
Sum of Concentrations			950.00	740.00	58.50	100.70	6830.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Plant 6/16 - Former USTs
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CONSTITUENT (Units in ug/l)	SITE	01CPT016	02GP001	05GP048	05GP049	05GP052
	SAMPLE ID	01COD01655	02PW00119	05PW04821	05PW04920	05PW05219
	DATE	07/25/97	11/16/96	11/11/96	11/12/96	11/12/96
	RESULT TYPE	Duplicate 1	Primary	Primary	Primary	Primary
	1996 VRP					
	Tier II					
	Non-Residential					
Vinyl chloride	10	[110]	< 2	< 2000	< 500	< 20
Benzene	98.6	< 100	8.9	< 5000	< 1300	68 J
Ethylbenzene	10220	< 100	9.5	< 5000	1500 J	< 50 UJ
Toluene	20440	< 100	< 5	< 5000	< 1300	100 J
Xylene (total)	204400	< 300	< 5	< 5000	7400 J	81 J
Isopropylbenzene	1.02E+4	---	14	< 5000	< 1300	86 J
Naphthalene	4088	---	< 5	< 5000	1700 J	< 50
1,2,4-Trimethylbenzene	5.11E+3	---	11	< 5000	< 1300	340 J
1,3,5-Trimethylbenzene	5.11E+3	---	< 5	< 5000	< 1300	< 50
1,1-Dichloroethane	10220	< 100	< 5	< 5000	< 1300	< 50
1,2-Dichloroethane	31.4	[6300]	< 5	< 5000	< 1300	< 50
cis-1,2-Dichloroethane	1022	---	< 5	[88000]	< 1300	< 50
trans-1,2-Dichloroethane	2040	---	< 5	< 5000	< 1300	< 50
1,2-Dichloroethane (Total)		230	---	---	---	---
1,2-Dichloropropane	4.21E+1	[160]	---	---	---	---
1,1,1-Trichloroethane	9198	< 100	< 5	< 5000	< 1300	< 50
Tetrachloroethene	56.1	< 100	< 5	< 5000	< 1300	< 50
Trichloroethene	260	< 100	< 5	[13000]	< 1300	< 50 UJ
Chloroethane	9.86E+2	< 100	---	---	---	---
Sum of Concentrations		6800.00	43.40	101000.00	10800.00	675.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[J] = Greater than Action Level

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Plant 6/16 - Former USTs
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

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CONSTITUENT (Units in ug/l)	SITE	05GP063	07GP005	09GP002	09GP004	09GP005	
	SAMPLE ID	1996 VRP	05PW06320	07PW00521	09PW00421	09PW00521	
	DATE	Tier II	11/15/96	11/14/96	11/17/96	07/16/97	07/16/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 200	8.2	< 200	[850]	[47]
Benzene		98.6	[1600]	37	[6500]	< 500	[930]
Ethylbenzene		10220	2900	< 5	< 500	< 500	< 50
Toluene		20440	2400	< 5	< 500	< 500	< 50
Xylene (total)		204400	8700	< 5	< 500	< 500	< 50
Isopropylbenzene		1.02E+4	< 500	< 5	< 500	< 500	< 50
Naphthalene		4088	< 500	< 5	< 500	< 500	< 50
1,2,4-Trimethylbenzene		5.11E+3	1500	< 5	< 500	< 500	< 50
1,3,5-Trimethylbenzene		5.11E+3	< 500	< 5	< 500	< 500	< 50
1,1-Dichloroethane		10220	< 500	6.4	< 500	< 500	< 50
1,2-Dichloroethane		31.4	< 500	< 5	< 500	< 500	< 50
cis-1,2-Dichloroethane		1022	< 500	43	< 500	[4200]	< 50
trans-1,2-Dichloroethane		2040	< 500	< 5	< 500	< 500	< 50
1,2-Dichloroethane (Total)			---	---	---	---	---
1,2-Dichloropropane		4.21E+1	---	---	< 500	< 500	< 50
1,1,1-Trichloroethane		9198	< 500	< 5	< 500	< 500	< 50
Tetrachloroethene		56.1	< 500	< 5	< 500	< 500	< 50
Trichloroethene		260	< 500	67	< 500	[6100]	< 50
Chloroethane		9.86E+2	---	---	< 1000	< 1000	< 100
Sum of Concentrations			17100.00	161.60	6500.00	11150.00	977.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1

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CONSTITUENT (Units in ug/l)	SITE	09GP006	09GP007	09GP008	17GP001	MW-6
	SAMPLE ID	09PW00620	09PW00720	09PW00820	17PW00120	
	DATE	07/17/97	07/17/97	07/18/97	11/12/96	12/19/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Vinyl chloride	10	< 10	< 2	[410]	< 1000	< 200 JHT
Benzene	98.6	< 25	< 5	[870]	[15000] J	[9800] JHT
Ethylbenzene	10220	< 25	< 5	540	2100 J	2000 JHT
Toluene	20440	< 25	< 5	200	11000 J	17000 JHT
Xylene (total)	204400	< 25	< 5	630	6500 J	7900 JHT
Isopropylbenzene	1.02E + 4	< 25	< 5	280	< 100	< 500 JHT
Naphthalene	4088	< 25	< 5	80	< 500	< 500 JHT
1,2,4-Trimethylbenzene	5.11E + 3	< 25	< 5	140	560 J	1500 JHT
1,3,5-Trimethylbenzene	5.11E + 3	< 25	< 5	65	< 100	< 500 JHT
1,1-Dichloroethane	10220	40	< 5	< 50	2000 J	2200 JHT
1,2-Dichloroethane	31.4	< 25	< 5	< 50	< 500	< 500 JHT
cis-1,2-Dichloroethane	1022	57	< 5	370	[5500] J	[120000] JHT
trans-1,2-Dichloroethane	2040	< 25	< 5	< 50	< 500	< 500 JHT
1,2-Dichloroethane (Total)						
1,2-Dichloropropane	4.21E + 1	< 25	< 5	< 50	< 500	< 500 JHT
1,1,1-Trichloroethane	9198	< 25	18	< 50	< 500	< 500 JHT
Tetrachloroethene	56.1	< 25	< 5	< 50	< 500	< 500 JHT
Trichloroethene	260	[340]	120	[300]	< 500	[19000] JHT
Chloroethane	9.86E + 2	< 50	< 10	< 100	< 1000	< 1000 JHT
Sum of Concentrations		437.00	138.00	3885.00	42660.00	179400.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level The following qualifier(s) exist: J, U, H, T

Analytical Summary - VOCs in Soils
 Plant 14 - Former USTs
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CONSTITUENT	(Units in mg/kg)	SITE	05GP035	05GP035	05GP035	05GP035	05GP036
		SAMPLE ID	05PS03504	05PS03512	05QD03512	05PS03516	05PS03608
DATE	1996 VRP	10/17/96	10/17/96	10/17/96	10/17/96	10/17/96	10/17/96
DEPTH (ft)	Tier II	4:00	12:00	12:00	12:00	16:00	8:00
RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Primary	Primary	Primary
Toluene	1000	<0.56	<0.25	<0.25	2.2 J	<0.25	<0.25
Xylene (total)	1000	3.4 J	1.5	1.1	10 J	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.56	<0.25	<0.25	<1.3	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.56	<0.25 UJ	1.9	20 J	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	5.2 J	0.81 J	<0.25	<1.3	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	5.8 J	0.77 J	<0.25	<1.3	<0.25	<0.25
Naphthalene	10000	<0.56	<0.25	<0.25	<1.3	<0.25	<0.25
2-Methylnaphthalene	10000	<1.1	<0.5	<0.5	<2.6	<0.5	<0.5
Sum of Concentrations		14.40	3.08	3.00	32.20	0.00	

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CONSTITUENT	(Units in mg/kg)	SITE	05GP038	05GP038	05GP038	05GP039	05GP039
		SAMPLE ID	05PS03804	05PS03808	05PS03818	05PS03904	05PS03912
		DATE	1996 VRP	10/17/96	10/17/96	10/17/96	10/17/96
		DEPTH (ft)	Tier II	4.00	8.00	16.00	4.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Toluene		1000	<0.25	<0.25	<0.25	<0.25	<0.05
Xylene (total)		1000	<0.25	<0.25	<0.25	<0.25	<0.1
Isopropylbenzene		1.0E + 03	<0.25	<0.25	<0.25	<0.25	<0.01
n-Propylbenzene		1.00E + 03	<0.25	<0.25	<0.25	<0.25	<0.01
1,3,5-Trimethylbenzene		1.00E + 03	<0.25	<0.25	<0.25	<0.25	<0.01
1,2,4-Trimethylbenzene		1.00E + 3	<0.25	<0.25	<0.25	<0.25	<0.01
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25	<0.05#
2-Methylnaphthalene		10000	<0.5	<0.5	<0.5	<0.5	<0.1
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	05GP041	05GP041	05GP041	05GP042	05GP043
	SAMPLE ID	05PS04104	05PS04112	05PS04116	05PS04210	05PS04308
	DATE	1996 VRP	10/17/96	10/17/96	10/17/96	10/18/96
	DEPTH (ft)	Tier II	4.00	12.00	16.00	10.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.25	<0.05	<0.25
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.1	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25	<0.01	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.01	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.01	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.01	<0.25
Naphthalene	10000	<0.25	<0.25	<0.25	<0.05#	<0.25
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.1	<0.5
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

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For RCL VOC

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CONSTITUENT (Units in mg/kg)	SITE	05GP043	05GP043	05GP043	05GP059	05GP059	
	SAMPLE ID	05PS04312	05QD04312	05PS04318	05PS05904	05PS05908	
	DATE	1996 VRP	10/18/96	10/18/96	10/18/96	11/14/96	11/14/96
	DEPTH (ft)	Tier II	12.00	12.00	16.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary	Primary
Toluene	1000	<0.25	<0.55	<1.3	<0.25	<0.05	
Xylene (total)	1000	0.68 J	2.5	3.5	<0.25	<0.1	
Isopropylbenzene	1.0E+03	<0.25	<0.55	2	<0.25	<0.01	
n-Propylbenzene	1.00E+03	<0.25 UJ	<0.55	<1.3	<0.25	<0.01	
1,3,5-Trimethylbenzene	1.00E+03	<0.25	2.5	<1.3	<0.25	<0.01	
1,2,4-Trimethylbenzene	1.00E+3	1.4 J	8.6	13	<0.25	<0.01	
Naphthalene	10000	0.63 J	2.1	<1.3	<0.25	<0.05#	
2-Methylnaphthalene	10000	1.1 J	2.5	<2.6	<0.5	<0.1	
Sum of Concentrations		3.82	18.20	18.50	0.00	0.00	

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CONSTITUENT (Units in mg/kg)	SITE	05GP059	05GP059	05GP059	05GP060	05GP060
	SAMPLE ID	05QD05908	05PS05912	05PS05915	05PS06004	05PS06008
DATE	1996 VRP	11/14/96	11/14/96	11/14/96	11/14/96	11/14/96
DEPTH (ft)	Tier II	8.00	12.00	15.00	4.00	8.00
RESULT TYPE	Non-Residential	Duplicate 1	Primary	Primary	Primary	Primary
Toluene	1000	<0.05	<0.25	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.1	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.01	0.99	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.01	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.01	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.01	<0.25	<0.25	<0.25	<0.25
Naphthalene	10000	<0.05	0.3	<0.25	<0.25	<0.25
2-Methylnaphthalene	10000	<0.1	<0.5	<0.5	<0.5	<0.5
Sum of Concentrations		0.00	1.29	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	05GP060	05GP060	05GP060	05GP066	05GP066	
	SAMPLE ID	05PS06012	05PS06018	05QD06018	05PS06604	05PS06612	
	DATE	1996 VRP	11/14/96	11/14/96	11/14/96	12/17/96	12/17/96
	DEPTH (ft)	Tier II	12.00	15.00	15.00	4.00	12.00
	RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Primary	Primary
Toluene	1000	<0.05	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.1	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.01	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.01	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.01	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.01	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene	10000	<0.05#	<0.25	<0.25	<0.25	<0.25	<0.25
2-Methylnaphthalene	10000	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00	0.00

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= Constituent analyzed in more than one test method, highest result reported.

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CONSTITUENT (Units in mg/kg)	SITE	05GP066	05GP067	05GP067	05GP067	05GP067
	SAMPLE ID	05PS06616	05PS06704	05PS06712	05QD06712	05PS06716
DATE	1996 VRP	12/17/96	12/17/96	12/17/96	12/17/96	12/17/96
DEPTH (ft)	Tier II	16.00	4.00	12.00	12.00	16.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1	Primary
Toluene	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.5
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	05GP068	05GP068	05GP068	05GP069	05GP069
	SAMPLE ID	05PS06804	05PS06808		05PS06904	05PS06908
	DATE	1996 VRP	12/17/96	12/17/96	12/18/96	12/13/96
	DEPTH (ft)	Tier II	4.00	8.00	12.00	4.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Toluene		1000	<0.25	<0.25	<0.25	<0.25
Xylene (total)		1000	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene		1.0E+03	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene		1.00E+03	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.25	<0.25	<0.25	<0.25
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25
2-Methylnaphthalene		10000	<0.5	<0.5	<0.5	<0.5
Sum of Concentrations			0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	05GP069	05HA044	05HA045	10GP001	10GP001
	SAMPLE ID	05PS06914	05HA04407	05HA04507	10PS00104	10PS00108
DATE	1996 VRP	12/13/96	11/05/96	11/06/96	11/14/96	11/14/96
DEPTH (ft)	Tier II	14.00	7.00	7.00	4.00	8.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.25	<0.25	<0.05
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.25	<0.1
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.01
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.01
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.01
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.01
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.05#
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.1
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

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CONSTITUENT	(Units in mg/kg)	SITE	10GP002
		SAMPLE ID	10PS00216
		DATE	1996 VRP 11/15/96
		DEPTH (ft)	Tier II 16.00
		RESULT TYPE	Non-Residential Primary
Toluene		1000	<0.25
Xylene (total)		1000	<0.25
Isopropylbenzene		1.0E+03	<0.25
n-Propylbenzene		1.00E+03	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.25
Naphthalene		10000	<0.25
2-Methylnaphthalene		10000	<0.5
Sum of Concentrations			0.00

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The following qualifier(s) exist: J, U

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	05GP035	05GP035	05GP035	05GP035	05GP035
	SAMPLE ID	05PS03504	05PS03512	05QD03512	05PS03516	05PS03608
	DATE	1996 VRP	10/17/96	10/17/96	10/17/96	10/17/96
	DEPTH (ft)	Tier II	4.00	12.00	12.00	16.00
	RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Primary
Fluoranthene	10000	---	---	---	---	---
Naphthalene	10000	<0.56	<0.25	<0.25	<1.3	<0.25
Pyrene	10000	---	---	---	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

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Analytical Summary - PNAs in Soils
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 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	05GP038	05GP038	05GP038	05GP039	05GP039
			SAMPLE ID	05PS03804	05PS03808	05PS03816	05PS03904
		DATE	1996 VRP	10/17/96	10/17/96	10/17/96	10/17/96
		DEPTH (ft)	Tier II	4.00	8.00	16.00	4.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Fluoranthene		10000	---	---	---	---	0.67
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25	<0.05#
Pyrene		10000	---	---	---	---	0.59
Sum of Concentrations			0.00	0.00	0.00	0.00	1.26

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= Constituent in more than one test method, highest result reported.

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CONSTITUENT (Units in mg/kg)	SITE	05GP039	05GP040	05GP040	05GP040	05GP040
	SAMPLE ID	05PS03916	05PS04004	05PS04008	05PS04012	05PS04016
	DATE	1996 VRP	10/17/96	10/17/96	10/17/96	10/17/96
	DEPTH (ft)	Tier II	16.00	4.00	8.00	12.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Fluoranthene	10000	---	---	< 0.33	---	---
Naphthalene	10000	< 0.25	< 0.25	< 0.05#	< 0.25	< 0.25
Pyrene	10000	---	---	< 0.33	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

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For RCL PNA

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	05GP041	05GP041	05GP041	05GP042	05GP043	
	SAMPLE ID	05PS04104	05PS04112	05PS04116	05PS04210	05PS04308	
	DATE	1996 VRP	10/17/96	10/17/96	10/17/96	10/18/96	10/18/96
	DEPTH (ft)	Tier II	4.00	12.00	16.00	10.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Fluoranthene	10000	---	---	---	< 0.33	---	
Naphthalene	10000	< 0.25	< 0.25	< 0.25	< 0.05#	< 0.25	
Pyrene	10000	---	---	---	< 0.33	---	
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent analyzed by more than one test method, highest result reported.

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CONSTITUENT (Units in mg/kg)	SITE	05GP043	05GP043	05GP043	05GP059	05GP059	
	SAMPLE ID	05PS04312	05QD04312	05PS04316	05PS05904	05PS05908	
	DATE	1996 VRP	10/18/96	10/18/96	10/18/96	11/14/96	11/14/96
	DEPTH (ft)	Tier II	12.00	12.00	16.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary	Primary
Fluoranthene	10000	---	---	---	---	---	<0.33
Naphthalene	10000	0.63 J	2.1	<1.3	<0.25	<0.05#	
Pyrene	10000	---	---	---	---	---	<0.33
Sum of Concentrations		0.63	2.10	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

For RCL PNA

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT	(Units in mg/kg)	SITE	05GP060	05GP060	05GP060	05GP066	05GP066
		SAMPLE ID	05PS06012	05PS06018	05QD06018	05PS06604	05PS06612
DATE	1996 VRP	11/14/96	11/14/96	11/14/96	12/17/96	12/17/96	12/17/96
DEPTH (ft)	Tier II	12.00	15.00	15.00	4.00	12.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Primary	Primary	Primary
Fluoranthene	10000	<0.33	---	---	---	---	---
Naphthalene	10000	<0.05#	<0.25	<0.25	<0.25	<0.25	<0.25
Pyrene	10000	<0.33	---	---	---	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 # = Constituent in more than one test method, highest result reported.

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CONSTITUENT (Units in mg/kg)	SITE	05GP066	05GP067	05GP067	05GP067	05GP067
	SAMPLE ID	05PS06616	05PS06704	05PS06712	05QD06712	05PS06716
	DATE	1996 VRP	12/17/96	12/17/96	12/17/96	12/17/96
	DEPTH (ft)	Tier II	16.00	4.00	12.00	12.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1
Fluoranthene	10000	---	---	---	---	---
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25
Pyrene	10000	---	---	---	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - PNAs in Soils
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CONSTITUENT	(Units in mg/kg)	SITE	05GP068	05GP068	05GP068	05GP069	05GP069	
		SAMPLE ID	05PS06804	05PS06808		05PS06904	05PS06908	
		DATE	1996 VRP	12/17/96	12/17/96	12/18/96	12/13/96	12/13/96
		DEPTH (ft)	Tier II	4.00	8.00	12.00	4.00	8.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Fluoranthene		10000	---	---	---	---	---	---
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Pyrene		10000	---	---	---	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - PNAs in Soils
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CONSTITUENT	(Units in mg/kg)	SITE	05GP069	05HA044	05HA045	10GP001	10GP001
		SAMPLE ID	05PS06914	05HA04407	05HA04507	10PS00104	10PS00108
		DATE	1996 VRP 12/13/96	11/05/96	11/06/96	11/14/96	11/14/96
		DEPTH (ft)	Tier II 14.00	7.00	7.00	4.00	8.00
		RESULT TYPE	Non-Residential Primary	Primary	Primary	Primary	Primary
Fluoranthene	10000		---	---	---	---	< 0.33
Naphthalene	10000		< 0.25	< 0.25	< 0.25	< 0.25	< 0.05#
Pyrene	10000		---	---	---	---	< 0.33
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

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CONSTITUENT (Units in mg/kg)	SITE	10GP001	10GP001	10GP002	10GP002	10GP002
	SAMPLE ID	10PS00112	10PS00117	10PS00204	10PS00208	10PS00208
DATE	1996 VRP	11/14/96	11/14/96	11/15/96	11/15/96	11/15/96
DEPTH (ft)	Tier II	12.00	17.00	4.00	8.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Fluoranthene	10000	---	---	---	---	< 0.33
Naphthalene	10000	< 0.25	< 0.25	< 0.25	< 0.25	< 0.33#
Pyrene	10000	---	---	---	---	< 0.33
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 # = Constituent in more than one test method, highest result reported.

Analytical Summary - Inorganics in Soils
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CONSTITUENT	(Units in mg/kg)	SITE	05HA044
		SAMPLE ID	05HA04407
		DATE	1996 VRP 11/05/96
		DEPTH (ft)	Tier II 7.00
		RESULT TYPE	Non-Residential Primary
Arsenic, Total		438	0.97
Barium, Total		10000	4.9
Copper, Total		1700	4.1
Nickel, Total		10000	3.1
Zinc, Total		10000	13
Sum of Concentrations			26.07

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - TPH/DROs in Soils
 Plant 14 - Former USTs
 Voluntary Site Investigation
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SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO (mg/kg)
1996 VRPTier II Non-Residential				6000
05GP035	10/17/96	4.00	Prim	720 PI
05GP035	10/17/96	12.00	Prim	230 PI
05GP035	10/17/96	12.00	Dup 1	270
05GP035	10/17/96	16.00	Prim	670 PI
05GP036	10/17/96	8.00	Prim	39
05GP036	10/17/96	12.00	Prim	< 10
05GP036	10/17/96	16.00	Prim	12
05GP037	10/17/96	4.00	Prim	33
05GP037	10/17/96	8.00	Prim	2800 PI
05GP037	10/17/96	15.00	Prim	1010
05GP038	10/17/96	4.00	Prim	61
05GP038	10/17/96	8.00	Prim	21
05GP038	10/17/96	16.00	Prim	< 10
05GP039	10/17/96	4.00	Prim	< 10
05GP039	10/17/96	16.00	Prim	12
05GP040	10/17/96	4.00	Prim	140 PI
05GP040	10/17/96	12.00	Prim	17
05GP040	10/17/96	16.00	Prim	11
05GP041	10/17/96	4.00	Prim	10
05GP041	10/17/96	12.00	Prim	< 10
05GP041	10/17/96	16.00	Prim	14
05GP042	10/18/96	4.00	Prim	22
05GP042	10/18/96	8.00	Prim	< 10
05GP042	10/18/96	16.00	Prim	16
05GP043	10/18/96	8.00	Prim	< 10
05GP043	10/18/96	12.00	Prim	2300 JPI
05GP043	10/18/96	12.00	Dup 1	840
05GP043	10/18/96	16.00	Prim	2400 PI
05GP059	11/14/96	4.00	Prim	10
05GP059	11/14/96	12.00	Prim	160 PI
05GP059	11/14/96	15.00	Prim	< 10
05GP060	11/14/96	4.00	Prim	70
05GP060	11/14/96	8.00	Prim	< 10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

For RCL TPH/DRO

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - TPH/DROs in Soils
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 Voluntary Site Investigation
 AlliedSignal Industrial Complex
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SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO (mg/kg)
1996 VRPTier IINon-Residential				6000
05GP060	11/14/96	15.00	Prim	<10
05GP066	12/17/96	4.00	Prim	<10
05GP066	12/17/96	12.00	Prim	<10
05GP066	12/17/96	16.00	Prim	<10
05GP066	12/17/96	16.00	Dup 1	<10
05GP069	12/13/96	4.00	Prim	11
05GP069	12/13/96	8.00	Prim	<10
05GP069	12/13/96	14.00	Prim	<10
10GP001	11/14/96	4.00	Prim	16
10GP001	11/14/96	12.00	Prim	<10
10GP001	11/14/96	17.00	Prim	<10
10GP002	11/15/96	4.00	Prim	<10
10GP002	11/15/96	8.00	Prim	<10
10GP002	11/15/96	16.00	Prim	<10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following qualifier(s) exist: P, I, J

For RCL TPH/DRO

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
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CONSTITUENT (Units in ug/l)	SITE	05GP060	05GP069	10GP001
	SAMPLE ID	05PW06021	05PW06920	10PW00122
	DATE	11/14/96	12/13/96	11/14/96
	RESULT TYPE	Primary	Primary	Primary
	1996 VRP	11/14/96	12/13/96	11/14/96
	Tier II	Primary	Primary	Primary
	Non-Residential	Primary	Primary	Primary
Vinyl chloride	10	< 10	3.4	< 10
Benzene	98.6	< 5	9.7	< 5
1,1-Dichloroethane	10220	< 5	7.0	< 5
cis-1,2-Dichloroethene	1022	< 5	9.2	16
Trichloroethene	260	< 5	< 5	75
Sum of Concentrations		0.00	29.30	91.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 19 - Former USTs
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CONSTITUENT (Units in mg/kg)	SITE	05GP019	05GP019	05GP019	05GP021	05GP021	
	SAMPLE ID	05PS01904	05PS01908	05PS01912	05PS02104	05PS02108	
	DATE	1996 VRP	10/14/96	10/14/96	10/14/96	10/14/96	
	DEPTH (ft)	Tier II	4:00	8:00	12:00	4:00	
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	
Ethyl benzene		1000	84	40	28	25	1.8
Xylene (total)		1000	<2.8	<5.5	<2.7	<2.8	<0.25
Isopropylbenzene		1.0E+03	83	40	46	43	6
n-Propylbenzene		1.00E+03	<2.8	<5.5	<2.7	<2.8	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<2.8	<5.5	<2.7	<2.8	<0.25
1,2,4-Trimethylbenzene		1.00E+3	5.7	6.7	4	<2.8	<0.25
Trichloroethene		25.73	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations			172.70	86.70	78.00	68.00	7.80

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Analytical Summary - VOCs in Soils
 Plant 19 - Former USTs
 Voluntary Site Investigation
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CONSTITUENT (Units in mg/kg)	SITE	05GP021	05GP023	05GP024	05GP024	05GP024
	SAMPLE ID	05PS02112	05PS02312	05PS02404	05PS02408	05PS02412
DATE	1996 VRP	10/14/96	10/15/96	10/15/96	10/15/96	10/15/96
DEPTH (ft)	Tier II	12.00	12.00	4.00	8.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Ethyl benzene	1000	17	<0.13 E	<0.25	<0.25	<0.25
Xylene (total)	1000	<2.7	<0.13 E	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	26	<0.13 E	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<2.7	<0.13 E	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<2.7	<0.13 E	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	2.9	<0.13 E	<0.25	<0.25	<0.25
Trichloroethene	25.73	<0.1	<0.13 E	<0.1	<0.1	0.39
Sum of Concentrations		45.90	0.00	0.00	0.00	0.39

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 19 - Former USTs
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CONSTITUENT (Units in mg/kg)	SITE	05GP025	05GP025	05GP025	05GP026	05GP026	
	SAMPLE ID	05PS02504	05PS02508	05PS02514	05PS02608	05PS02612	
	DATE	1996 VRP	10/15/96	10/15/96	10/15/96	10/15/96	10/15/96
	DEPTH (ft)	Tier II	4.00	8.00	14.00	8.00	14.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Ethyl benzene	1000	<0.25	<0.25	<0.25	<0.25	<0.25	
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.25	0.37	
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25	
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	0.37	<0.25	0.76	
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	0.69	<0.25	0.97	
Trichloroethene	25.73	<0.1	<0.1	<0.1	<0.1	<0.1	
Sum of Concentrations		0.00	0.00	1.06	0.00	2.10	

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Analytical Summary - VOCs in Soils
 Plant 19 - Former USTs
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 AlliedSignal Industrial Complex
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CONSTITUENT	(Units in mg/kg)	SITE	05GP055	05GP055	05GP055	05GP056	05GP056	
		SAMPLE ID	05PS05504	05PS05508	05PS05512	05PS05604	05PS05608	
		DATE	1996 VRP	11/13/96	11/13/96	11/13/96	11/13/96	11/13/96
		DEPTH (ft)	Tier II	4.00	8.00	12.00	4.00	8.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Ethyl benzene	1000		<0.05	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)	1000		<0.1	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03		<0.01	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03		<0.01	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03		<0.01	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3		<0.01	<0.25	<0.25	<0.25	<0.25	<0.25
Trichloroethene	25.73		<0.05	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
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CONSTITUENT (Units in mg/kg)	SITE	05GP056	05GP057	05GP057	05GP057	05GP057	
	SAMPLE ID	05PS05612	05PS05704	05PS05708	05QD05708	05PS05712	
	DATE	1996 VRP	11/13/96	11/13/96	11/13/96	11/13/96	11/13/96
	DEPTH (ft)	Tier II	12.00	4.00	8.00	8.00	12.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1	Primary
Ethyl benzene	1000	<0.25	<0.25	<0.05	<0.05	<0.25	
Xylene (total)	1000	<0.25	<0.25	<0.1	<0.1	<0.25	
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.01	<0.01	<0.25	
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.01	<0.01	<0.25	
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.01	<0.01	<0.25	
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.01	<0.01	<0.25	
Trichloroethene	25.73	<0.1	<0.1	<0.05	<0.05	<0.1	
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00	

Values represent total concentrations unless noted < =Not detected at indicated reporting limit --- =Not analyzed

Analytical Summary - VOCs in Soils
 Plant 19 - Former USTs
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CONSTITUENT	(Units in mg/kg)	SITE	05GP057	05GP058	05GP058	05GP058	05GP058
		SAMPLE ID	05QD05712	05PS05804	05PS05808	05PS05810	05PS05812
		DATE	1996 VRP	11/13/96	11/14/96	11/14/96	11/14/96
		DEPTH (ft)	Tier II	12.00	4.00	8.00	10.00
		RESULT TYPE	Non-Residential	Duplicate 1	Primary	Primary	Primary
Ethyl benzene		1000	<0.25	<0.25	<0.05	<0.25	<0.25
Xylene (total)		1000	<0.25	<0.25	<0.1	<0.25	<0.25
Isopropylbenzene		1.0E + 03	<0.25	<0.25	<0.01	<0.25	<0.25
n-Propylbenzene		1.00E + 03	<0.25	<0.25	<0.01	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E + 03	<0.25	<0.25	<0.01	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E + 3	<0.25	<0.25	<0.01	<0.25	<0.25
Trichloroethene		25.73	<0.1	<0.1	<0.05	<0.1	<0.1
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 19 - Former USTs
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CONSTITUENT (Units in mg/kg)	SITE	05GP065	05GP065	05GP065
	SAMPLE ID	05PS06504	05PS06508	
	DATE	1996 VRP	12/17/96	12/17/96
	DEPTH (ft)	Tier II	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary
Ethyl benzene	1000	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25
Trichloroethene	25.73	<0.1	<0.1	<0.25
Sum of Concentrations		0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following qualifier(s) exist: E, J

Analytical Summary - TPH/DROs in Soils
 Plant 19 - Former USTs
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SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO (mg/kg)
1996 VRPTier IINon-Residential				6000
05GP019	10/14/96	4.00	Prim	190
05GP019	10/14/96	8.00	Prim	540
05GP019	10/14/96	12.00	Prim	890
05GP020	10/14/96	4.00	Prim	580
05GP020	10/14/96	8.00	Prim	220
05GP020	10/14/96	12.00	Prim	350
05GP021	10/14/96	4.00	Prim	86
05GP021	10/14/96	8.00	Prim	130
05GP021	10/14/96	12.00	Prim	820
05GP022	10/14/96	4.00	Prim	170
05GP022	10/14/96	8.00	Prim	910
05GP022	10/14/96	12.00	Prim	330
05GP023	10/15/96	4.00	Prim	<10
05GP023	10/15/96	8.00	Prim	<10
05GP023	10/15/96	14.00	Prim	650 PI
05GP024	10/15/96	4.00	Prim	13
05GP024	10/15/96	8.00	Prim	<10
05GP024	10/15/96	12.00	Prim	11
05GP025	10/15/96	4.00	Prim	99
05GP025	10/15/96	8.00	Prim	25
05GP025	10/15/96	14.00	Prim	15
05GP026	10/15/96	8.00	Prim	<10
05GP026	10/15/96	14.00	Prim	110
05GP026	10/15/96	16.00	Prim	190
05GP054	11/13/96	4.00	Prim	130 PI
05GP054	11/13/96	12.00	Prim	490 PI
05GP054	11/13/96	14.00	Prim	4040 PI
05GP055	11/13/96	8.00	Prim	12
05GP055	11/13/96	12.00	Prim	12
05GP056	11/13/96	4.00	Prim	13
05GP056	11/13/96	8.00	Prim	<10
05GP056	11/13/96	12.00	Prim	18
05GP057	11/13/96	4.00	Prim	<10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit -- = Not analyzed

For RCL TPH/DRO

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Soils
 Plant 19 - Former USTs
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	05GP023	05GP055	05GP055	05GP055
	SAMPLE ID	05PS02312	05PS05504	05PS05508	05PS05512
DATE	1996 VRP	10/15/96	11/13/96	11/13/96	11/13/96
DEPTH (ft)	Tier II	12.00	4.00	8.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Arsenic, Total	438	2.3	3.8	0.92	1.7
Barium, Total	10000	31	9.4	5.9	7.5
Chromium, Total		9.6	5.4	< 5	< 5
Copper, Total	1700	11	6.8	5.4	4.6
Lead, Total	400	5.2	< 5	< 5	5
Nickel, Total	10000	13	5.8	5.3	3.3
Silver, Total	7300	2	< 1	< 1	< 1
Zinc, Total	10000	44	18	13	13
Sum of Concentrations		118.10	49.20	30.52	35.10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Plant 19 - Former USTs
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

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CONSTITUENT (Units in ug/l)	SITE	05GP054	05GP055	05GP057	05GP085	
	SAMPLE ID	1996 VRP	05PW05421	05PW05518	05PW05718	05PW06520
	DATE	Tier II	11/13/96	11/13/96	11/13/96	12/17/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Xylene (total)		204400	< 10	< 5	< 10	78
Isopropylbenzene		1.02E+4	< 1	< 5	< 1	68
1,2,4-Trimethylbenzene		5.11E+3	19	< 5	< 1	200
1,1-Dichloroethane		10220	< 5	< 5	12	< 50
1,1,1-Trichloroethane		9198	< 5	< 5	30	< 50
Sum of Concentrations			19.00	0.00	42.00	348.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Transportation Area - Former USTs
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	03GP039	03GP039	03GP039	03GP041	03GP041
	SAMPLE ID	03PS03908	03QD03908	03PS03914	03PS04108	03PS04114
	DATE	1996 VRP 04/23/97	04/23/97	04/23/97	04/25/97	04/25/97
	DEPTH (ft)	Tier II 8.00	8.00	14.00	8.00	14.00
	RESULT TYPE	Non-Residential Primary	Duplicate 1	Primary	Primary	Primary
Ethyl benzene	1000	<0.05	<0.05	<0.05	<0.05	<0.05
Trichloroethane	25.73	<0.05	<0.05	<0.05	<0.05	0.10
Sum of Concentrations		0.00	0.00	0.00	0.00	0.10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - TPH/DROs in Soils
 Transportation Area - Former USTs
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO (mg/kg)
1996 VRPTier II Non-Residential				6000
03GP022	10/28/96	4.00	Prim	<10
03GP022	10/28/96	8.00	Prim	<10
03GP022	10/28/96	12.00	Prim	<10
03GP022	10/28/96	12.00	Dup 1	<10
03GP023	10/28/96	4.00	Prim	<10
03GP023	10/28/96	12.00	Prim	<10
03GP023	10/28/96	15.00	Prim	150 PI
03GP024	10/29/96	4.00	Prim	<10
03GP024	10/29/96	8.00	Prim	<10
03GP025	10/29/96	4.00	Prim	<10
03GP025	10/29/96	8.00	Prim	10
03GP028	10/30/96	4.00	Prim	<10
03GP028	10/30/96	10.00	Prim	<10
03GP028	10/30/96	14.00	Prim	<10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following qualifier(s) exist: P, I

For RCL TPH/DRO

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Soils
 Transportation Area - Former USTs
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	03GP022	03GP022	03GP022	03GP022	03GP023	
	SAMPLE ID	03PS02204	03PS02208	03PS02212	03QD02212	03PS02308	
	DATE	1996 VRP	10/28/96	10/28/96	10/28/96	10/28/96	10/28/96
	DEPTH (ft)	Tier II	4.00	8.00	12.00	12.00	4.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1	Primary
Arsenic, Total	438	0.63	2.4	4.3	1.9	2.5	
Barium, Total	10000	19	38	2.8	2.8	12	
Chromium, Total		< 5	7.3	< 5	< 5	< 5	
Copper, Total	1700	3.9	7.7	3	2.7	4.1	
Lead, Total	400	5	< 5	< 5	< 5	< 5	
Mercury, Total	87.60	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	
Nickel, Total	10000	3.8	9.1	2.8	2.7	4.2	
Selenium, Total	7300	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
Silver, Total	7300	< 1	1.4	< 1	< 1	< 1	
Zinc, Total	10000	14	22	9.3	9.4	10	
Sum of Concentrations		46.33	87.90	22.20	19.50	32.80	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Soils
 Transportation Area - Former USTs
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	03GP023	03GP023	03GP024	03GP024	03GP024
	SAMPLE ID	03PS02312	03PS02315	03PS02404	03PS02408	03PS02412
DATE	1996 VRP	10/28/96	10/28/96	10/29/96	10/29/96	10/29/96
DEPTH (ft)	Tier II	12.00	15.00	4.00	8.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438	0.27	4.5	0.97	13	1.3
Barium, Total	10000	3.7	25	31	14	4.8
Chromium, Total		<5	6.5	6.1	<5	<5
Copper, Total	1700	3.6	10	4.5	6.4	4
Lead, Total	400	<5	<5	<5	<5	<5
Mercury, Total	87.60	<0.1	<0.1	0.25	0.36	<0.1
Nickel, Total	10000	3.8	9.7	5	6.9	4.1
Selenium, Total	7300	<0.5	<0.5	<0.5	0.98	<0.5
Silver, Total	7300	<1	1.4	<1	<1	<1
Zinc, Total	10000	1.1	28	19	18	13
Sum of Concentrations		22.37	85.10	66.82	59.64	27.20

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Soils
 Transportation Area - Former USTs
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	03GP025	03GP025	03GP025	03GP028	03GP028
	SAMPLE ID	03PS02504	03PS02506	03PS02512	03PS02804	03PS02810
DATE	1996 VRP	10/29/96	10/29/96	10/29/96	10/30/96	10/30/96
DEPTH (ft)	Tier II	4.00	8.00	12.00	4.00	10.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438	1.4	2.3	9.6	0.57	0.83
Barium, Total	10000	44	11	26	56	4.4
Chromium, Total		5.6	<5	9.5	9.7	<5
Copper, Total	1700	6.5	4.8	16	7.2	4.5
Lead, Total	400	5.7	<5	17	7.6	<5
Mercury, Total	87.60	0.2	0.15	<0.1	<0.1	<0.1
Nickel, Total	10000	4	2.8	18	6.3	4.6
Selenium, Total	7300	0.55	<0.5	<0.5	<0.5	<0.5
Silver, Total	7300	<1	<1	2.4	<1	<1
Zinc, Total	10000	6.9	7.9	66	19	12
Sum of Concentrations		74.85	28.95	164.50	106.37	26.33

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Transportation Area - Former USTs
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

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CONSTITUENT (Units in ug/l)	SITE	03GP024	03GP025	03GP026	03GP028	03GP029
	SAMPLE ID	03PW02418	03PW02518	03PW02618	03PW02819	03PW02916
	DATE	10/29/96	10/29/96	10/30/96	10/30/96	04/22/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
	1996 VRP					
	Tier II					
Vinyl chloride	10	[130]	<2	9.9	[16]	<2
Ethylbenzene	10220	120	<5	<5	<5	<5
Methyl(tert)butyl Ether	6950	130	<50	<50	<50	<50
Toluene	20440	<5	<5	<5	<5	34
Isopropylbenzene	1.02E+4	90	<5	<5	<5	<5
2-Methylnaphthalene	2040.00	20	<10	<10	<10	<10
Naphthalene	4088	20	<5	<5	<5	<5
1,2,4-Trimethylbenzene	5.11E+3	62	<5	<5	<5	<5
1,1-Dichloroethane	10220	60	<5	<5	<5	<5
1,1-Dichloroethene	7	[15]	<5	<5	<5	[100]
cis-1,2-Dichloroethene	1022	200	<5	<5	<5	[1200]
trans-1,2-Dichloroethene	2040	<5	<5	<5	<5	43
1,1,1-Trichloroethane	9198	94	<5	<5	<5	540
Trichloroethene	260	160 B	<5	<5	<5	[1400]
Sum of Concentrations		1101.00	0.00	9.90	16.00	3317.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

Analytical Summary - VOCs in Groundwater
 Transportation Area - Former USTs
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

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Date: 09/29/99

CONSTITUENT (Units in ug/l)	SITE	1996 VRP	03GP036
	SAMPLE ID	Tier II	03PW03622
	DATE	Non-Residential	Primary
	RESULT TYPE		
Vinyl chloride		10	< 2
Ethylbenzene		10220	< 5
Methyl(tert)butyl Ether		6950	< 50
Toluene		20440	< 5
Isopropylbenzene		1.02E + 4	< 5
2-Methylnaphthalene		2040.00	< 10
Naphthalene		4088	< 5
1,2,4-Trimethylbenzene		5.11E + 3	< 5
1,1-Dichloroethane		10220	< 5
1,1-Dichloroethene		7	< 5
cis-1,2-Dichloroethene		1022	< 5
trans-1,2-Dichloroethene		2040	< 5
1,1,1-Trichloroethane		9198	< 5
Trichloroethene		260	< 5
Sum of Concentrations			0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following qualifier(s) exist: B

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Soils
 Plant 11 - Heat Treat Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	1996 VRP	RESULT TYPE
	06GP008		
	SAMPLE ID	06PS00816	
	DATE	12/16/96	
	DEPTH (ft)	Tier II	16.00
	RESULT TYPE	Non-Residential	Primary
Ethyl benzene		1000	0.41
1,3,5-Trimethylbenzene		1.00E+03	0.38
1,2,4-Trimethylbenzene		1.00E+3	1.2
Naphthalene		10000	0.89#
Sum of Concentrations			2.88

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 # = Constituent in more than one test method, highest result reported.

Analytical Summary - PNAs in Soils
 Plant 11 - Heat Treat Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	1996 VRP	DATE
	06GP008		12/16/96
	SAMPLE ID		06PS00816
	DEPTH (ft)	Tier II	16.00
	RESULT TYPE	Non-Residential	Primary
Fluoranthene		10000	0.45
Naphthalene		10000	0.89#
Sum of Concentrations			1.34

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

Analytical Summary - TPH/DROs in Soils
Area 6 - Plant 12 Machinery Sumps
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO	Sum
				(mg/kg)	(mg/kg)
1996 VRPTier II Non-Residential				10000 <i>oil</i>	
06GP001	11/11/96	4.00	Prim	<10	0.00
06GP001	11/11/96	8.00	Prim	<10	0.00
06GP001	11/11/96	19.00	Prim	<10	0.00
06GP003	11/12/96	4.00	Prim	<10	0.00
06GP003	11/12/96	12.00	Prim	<10	0.00
06GP003	11/12/96	19.00	Prim	<10	0.00
06GP004	11/13/96	4.00	Prim	<10	0.00
06GP004	11/13/96	11.00	Prim	11	11.00
06GP005	11/13/96	4.00	Prim	42	42.00
06GP005	11/13/96	12.00	Prim	<10	0.00
06GP005	11/13/96	16.00	Prim	<10	0.00
06GP005	11/13/96	16.00	Dup 1	<10	0.00
06GP006	11/14/96	4.00	Prim	98 PI	98.00
06GP006	11/14/96	12.00	Prim	240 PI	240.00
06GP006	11/14/96	16.00	Prim	2400 PI	2400.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following qualifier(s) exist: P, I

For RCL TPH/DRO

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Soils
 Area 7 - Solid Waste Management Units
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	05GP055	05GP055	05GP055	05GP061	05GP061	
		SAMPLE ID	05PS05504	05PS05508	05PS05512	05PS06104	05PS06108	
		DATE	1996 VRP	11/13/96	11/13/96	11/13/96	11/15/96	11/15/96
		DEPTH (ft)	Tier II	4.00	8.00	12.00	4.00	8.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Naphthalene		10000	<0.05#	<0.25	<0.25	<0.25	<0.25	<0.33#
Acenaphthene		1.0E+04	<0.33	---	---	---	---	<0.33
2-Methylnaphthalene		10000	<0.1#	<0.5	<0.5	<0.5	<0.5	<0.33#
Tetrachloroethene		8.01	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

Analytical Summary - VOCs in Soils
 Area 7 - Solid Waste Management Units
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	07GP002	07GP002	07GP002	07GP002	07GP002	
	SAMPLE ID	07PS00204	07QD00204	07PS00208	07QD00208	07PS00212	
	DATE	1996 VRP	10/22/96	10/22/96	10/22/96	10/22/96	10/22/96
	DEPTH (ft)	Tier II	4.00	4.00	8.00	8.00	12.00
	RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Duplicate 1	Primary
Naphthalene	10000	<0.05#	34#	<0.25	<0.25	<0.25	
Acenaphthene	1.0E+04	<0.33	13	---	---	---	
2-Methylnaphthalene	10000	<0.1#	12#	<0.5	<0.5	<0.5	
Tetrachloroethene	8.01	0.48 J	0.14	<0.1	<0.1	0.1	
Sum of Concentrations		0.48	59.14	0.00	0.00	0.10	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

Analytical Summary - VOCs in Soils
 Area 7 - Solid Waste Management Units
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	07GP002	07GP003	07GP003	07GP003	07GP005
	SAMPLE ID	07PS00216	07PS00304	07PS00308	07PS00315	07PS00504
	DATE	1996 VRP 10/22/96	10/23/96	10/23/96	10/23/96	11/14/96
	DEPTH (ft)	Tier II 16.00	4.00	8.00	15.00	4.00
	RESULT TYPE	Non-Residential Primary	Primary	Primary	Primary	Primary
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.05#
Acenaphthene	1.0E+04	---	---	---	---	<0.33
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.1
Tetrachloroethene	8.01	0.44	1.4	0.21	0.31	<0.05
Sum of Concentrations		0.44	1.40	0.21	0.31	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 # = Constituent analyzed by more than one test method, highest result reported.

Analytical Summary - VOCs in Soils
 Area 7 - Solid Waste Management Units
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	07GP006	07GP006	07GP006	07GP006	07GP006
		SAMPLE ID	07PS00604	07PS00608	07PS00612	07QD00612	07PS00616
		DATE	1996 VRP	11/15/96	11/15/96	11/15/96	11/15/96
		DEPTH (ft)	Tier II	4.00	8.00	12.00	12.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1
Naphthalene	10000		<0.25	<0.33#	<0.25	<0.25	<0.25
Acenaphthene	1.0E+04		---	<0.33	---	---	---
2-Methylnaphthalene	10000		<0.5	<0.33#	<0.5	<0.5	<0.5
Tetrachloroethene	8.01		<0.1	<0.05	<0.1	<0.1	<0.1
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 # = Constituent in more than one test method, highest result reported.

Analytical Summary - VOCs in Soils
 Area 7 - Solid Waste Management Units
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	07GP008	07GP008	07GP009
	SAMPLE ID	07PS00812	07PS00819	
	DATE	1996 VRP	11/17/96	11/17/96
	DEPTH (ft)	Tier II	12.00	19.00
	RESULT TYPE	Non-Residential	Primary	Primary
		12/17/96	12.00	12.00
Naphthalene	10000	<0.25	<0.25	<0.33#
Acenaphthene	1.0E+04	---	---	<0.33
2-Methylnaphthalene	10000	<0.5	<0.5	<0.33#
Tetrachloroethene	8.01	<0.1	<0.1	0.10
Sum of Concentrations		0.00	0.00	0.10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported. The following qualifier(s) exist: J

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - SVOCs in Soils
 Area 7 - Solid Waste Management Units
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	05GP055	05GP055	05GP055	05GP061	05GP061	
	SAMPLE ID	05PS05504	05PS05508	05PS05512	05PS06104	05PS06108	
	DATE	1996 VRP	11/13/96	11/13/96	11/13/96	11/15/96	11/15/96
	DEPTH (ft)	Tier II	4.00	8.00	12.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
2-Methylnaphthalene		10000	<0.1#	<0.5	<0.5	<0.5	<0.33#
Acenaphthene		1.0E+04	<0.33	---	---	---	<0.33
Anthracene		1.00E+04	<0.33	---	---	---	<0.33
Benzo (a) anthracene		103.8	<0.33	---	---	---	<0.33
Benzo (b) pyrene		69.85	<0.33	---	---	---	<0.33
Benzo (b) fluoranthene		354.98	<0.33	---	---	---	<0.33?
Benzo (ghi) perylene			<0.33	---	---	---	<0.33
Carbazole		1.00E+04	<0.33	---	---	---	<0.33
Chrysene		1.00E+04	<0.33	---	---	---	<0.33
Fluoranthene		10000	<0.33	---	---	---	<0.33
Fluorene		1.00E+04	<0.33	---	---	---	<0.33
Naphthalene		10000	<0.05#	<0.25	<0.25	<0.25	<0.33#
Phenanthrene		1.00E+04	<0.33	---	---	---	<0.33
Pyrene		10000	<0.33	---	---	---	<0.33
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 # = Constituent found in more than one test method, highest result reported. ? = Duplicate results found, Data review required.

Analytical Summary - SVOCs in Soils
 Area 7 - Solid Waste Management Units
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	05GP061	06GP004	07GP001	07GP001	07GP001
	SAMPLE ID	05PS06116	06PS00408	07PS00104	07PS00108	07PS00114
DATE	1996 VRP	11/15/96	11/13/96	10/22/96	10/22/96	10/22/96
DEPTH (ft)	Tier II	16:00	8:00	4:00	8:00	14:00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
2-Methylnaphthalene	10000	<0.5	<0.1	<0.5	<0.5	<0.5
Acenaphthene	1.0E+04	---	<0.33	---	---	---
Anthracene	1.00E+04	---	<0.33	---	---	---
Benzo (a) anthracene	103.8	---	<0.33	---	---	---
Benzo (b) pyrene	69.85	---	<0.33	---	---	---
Benzo (b) fluoranthene	354.98	---	<0.33	---	---	---
Benzo (ghi) perylene		---	<0.33	---	---	---
Carbazole	1.00E+04	---	---	---	---	---
Chrysene	1.00E+04	---	<0.33	---	---	---
Fluoranthene	10000	---	<0.33	---	---	---
Fluorene	1.00E+04	---	<0.33	---	---	---
Naphthalene	10000	<0.25	<0.05#	<0.25	<0.25	<0.25
Phenanthrene	1.00E+04	---	<0.33	---	---	---
Pyrene	10000	---	<0.33	---	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

Analytical Summary - SVOCs in Soils
 Area 7 - Solid Waste Management Units
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	07GP002	07GP002	07GP002	07GP002	07GP002
	SAMPLE ID	07PS00204	07QD00204	07PS00208	07QD00208	07PS00212
DATE	1996 VRP	10/22/96	10/22/96	10/22/96	10/22/96	10/22/96
DEPTH (ft)	Tier II	4.00	4.00	8.00	8.00	12.00
RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Duplicate 1	Primary
2-Methylnaphthalene	10000	<0.1#	12#	<0.5	<0.5	<0.5
Acenaphthene	1.0E+04	<0.33	13	---	---	---
Anthracene	1.00E+04	<0.33	30	---	---	---
Benzo (a) anthracene	103.8	<0.33	18	---	---	---
Benzo (b) pyrene	69.85	<0.33	25	---	---	---
Benzo (b) fluoranthene	354.98	0.39 J	47	---	---	---
Benzo (ghi) perylene		<0.33	14	---	---	---
Carbazole	1.00E+04	<0.33	14	---	---	---
Chrysene	1.00E+04	<0.33	25	---	---	---
Fluoranthene	10000	0.55 J	76	---	---	---
Fluorene	1.00E+04	<0.33	21	---	---	---
Naphthalene	10000	<0.05#	34#	<0.25	<0.25	<0.25
Phenanthrene	1.00E+04	0.55	97	---	---	---
Pyrene	10000	0.41	51	---	---	---
Sum of Concentrations		1.90	475.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

Analytical Summary - SVOCs in Soils
 Area 7 - Solid Waste Management Units
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	07GP002	07GP003	07GP003	07GP003	07GP005
	SAMPLE ID	07PS00216	07PS00304	07PS00308	07PS00315	07PS00504
	DATE	1996 VRP 10/22/96	10/23/96	10/23/96	10/23/96	11/14/96
	DEPTH (ft)	Tier II 16.00	4.00	8.00	15.00	4.00
	RESULT TYPE	Non-Residential Primary	Primary	Primary	Primary	Primary
2-Methylnaphthalene		10000	<0.5	<0.5	<0.5	<0.1
Acenaphthene		1.0E+04	---	---	---	<0.33
Anthracene		1.00E+04	---	---	---	<0.33
Benzo (a) anthracene		103.8	---	---	---	<0.33
Benzo (b) pyrene		69.85	---	---	---	<0.33
Benzo (b) fluoranthene		354.98	---	---	---	<0.33
Benzo (ghi) perylene			---	---	---	<0.33
Carbazole		1.00E+04	---	---	---	---
Chrysene		1.00E+04	---	---	---	<0.33
Fluoranthene		10000	---	---	---	<0.33
Fluorene		1.00E+04	---	---	---	<0.33
Naphthalene		10000	<0.25	<0.25	<0.25	<0.05#
Phenanthrene		1.00E+04	---	---	---	<0.33
Pyrene		10000	---	---	---	<0.33
Sum of Concentrations			0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

Analytical Summary - SVOCs in Soils
 Area 7 - Solid Waste Management Units
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	07GP006	07GP006	07GP006	07GP006	07GP006
	SAMPLE ID	07PS00604	07PS00608	07PS00612	07QD00612	07PS00616
DATE	1996 VRP	11/15/96	11/15/96	11/15/96	11/15/96	11/15/96
DEPTH (ft)	Tier II	4.00	8.00	12.00	12.00	16.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1	Primary
2-Methylnaphthalene	10000	<0.5	<0.33#	<0.5	<0.5	<0.5
Acenaphthene	1.0E+04	---	<0.33	---	---	---
Anthracene	1.00E+04	---	<0.33	---	---	---
Benzo (a) anthracene	103.8	---	<0.33	---	---	---
Benzo (b) pyrene	69.85	---	<0.33	---	---	---
Benzo (b) fluoranthene	354.98	---	<0.33?	---	---	---
Benzo (ghi) perylene	---	---	<0.33	---	---	---
Carbazole	1.00E+04	---	<0.33	---	---	---
Chrysene	1.00E+04	---	<0.33	---	---	---
Fluoranthene	10000	---	0.69	---	---	---
Fluorene	1.00E+04	---	<0.33	---	---	---
Naphthalene	10000	<0.25	<0.33#	<0.25	<0.25	<0.25
Phenanthrene	1.00E+04	---	0.77	---	---	---
Pyrene	10000	---	0.44	---	---	---
Sum of Concentrations		0.00	1.90	0.00	0.00	0.00

Values represent total concentrations unless noted < =Not detected at indicated reporting limit --- =Not analyzed
 # = Constituent found in more than one test method, highest result reported. ? = Duplicate record found, Data review required.
 For RCL SVOC Criteria Comparison: 1996 VRP Tier II Non-Residential

Analytical Summary - SVOCs in Soils
Area 7 - Solid Waste Management Units
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	07GP007	07GP007	07GP007	07GP008	07GP008	
	SAMPLE ID	07PS00704	07PS00712	07PS00716	07PS00804	07PS00808	
	DATE	1996 VRP	11/15/96	11/15/96	11/15/96	11/17/96	11/17/96
	DEPTH (ft)	Tier II	4.00	12.00	16.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
2-Methylnaphthalene		10000	<0.5	<0.5	<0.5	<0.5	<0.1#
Acanaphthene		1.0E+04	---	---	---	---	<0.33
Anthracene		1.00E+04	---	---	---	---	<0.33
Benzo (a) anthracene		103.8	---	---	---	---	<0.33
Benzo (b) pyrene		69.85	---	---	---	---	<0.33
Benzo (b) fluoranthene		354.98	---	---	---	---	<0.33?
Benzo (ghi) perylene			---	---	---	---	<0.33
Carbazole		1.00E+04	---	---	---	---	<0.33
Chrysene		1.00E+04	---	---	---	---	<0.33
Fluoranthene		10000	---	---	---	---	<0.33
Fluorene		1.00E+04	---	---	---	---	<0.33
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25	<0.05#
Phenanthrene		1.00E+04	---	---	---	---	<0.33
Pyrene		10000	---	---	---	---	<0.33
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
= Constituent in more than one test method, highest result reported. ? = Duplicate records found, Data review required.

Analytical Summary - SVOCs in Soils
 Area 7 - Solid Waste Management Units
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	07GP008	07GP008	07GP009
	SAMPLE ID	07PS00812	07PS00819	
	DATE	1996 VRP	11/17/96	11/17/96
	DEPTH (ft)	Tier II	12.00	19.00
	RESULT TYPE	Non-Residential	Primary	Primary
2-Methylnaphthalene		10000	<0.5	<0.5
Acenaphthene		1.0E+04	---	---
Anthracene		1.00E+04	---	---
Benzo (a) anthracene		103.8	---	---
Benzo (b) pyrene		69.85	---	---
Benzo (b) fluoranthene		354.98	---	---
Benzo (ghi) perylene			---	---
Carbazole		1.00E+04	---	---
Chrysene		1.00E+04	---	---
Fluoranthene		10000	---	---
Fluorene		1.00E+04	---	---
Naphthalene		10000	<0.25	<0.25
Phenanthrene		1.00E+04	---	---
Pyrene		10000	---	---
Sum of Concentrations			0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 # = Constituent analyzed by more than one test method, highest result reported. ? = Duplicate record found, Data review required. The following qualifier(s) exist: J

Analytical Summary - TPH/DROs in Soils
 Area 7 - Solid Waste Management Units
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO (mg/kg)
1996 VRPTier II Non-Residential				6000
05GP055	11/13/96	8.00	Prim	12
05GP055	11/13/96	12.00	Prim	12
06GP004	11/13/96	4.00	Prim	<10
06GP004	11/13/96	11.00	Prim	11
06GP006	11/14/96	4.00	Prim	98 PI
06GP006	11/14/96	12.00	Prim	240 PI
06GP006	11/14/96	16.00	Prim	2400 PI
07GP001	10/22/96	4.00	Prim	17
07GP001	10/22/96	8.00	Prim	<10
07GP001	10/22/96	14.00	Prim	<10
07GP002	10/22/96	8.00	Prim	<10
07GP002	10/22/96	12.00	Prim	<10
07GP002	10/22/96	16.00	Prim	<10
07GP003	10/23/96	4.00	Prim	560
07GP003	10/23/96	8.00	Prim	<10
07GP003	10/23/96	15.00	Prim	<10
07GP005	11/14/96	8.00	Prim	<10
07GP005	11/14/96	12.00	Prim	<10
07GP005	11/14/96	15.00	Prim	<10
07GP006	11/15/96	4.00	Prim	100 PI
07GP006	11/15/96	12.00	Prim	<10
07GP006	11/15/96	12.00	Dup 1	<10
07GP006	11/15/96	16.00	Prim	<10
07GP007	11/15/96	4.00	Prim	<10
07GP007	11/15/96	12.00	Prim	<10
07GP007	11/15/96	16.00	Prim	<10
07GP008	11/17/96	4.00	Prim	<10
07GP008	11/17/96	12.00	Prim	<10
07GP008	11/17/96	19.00	Prim	3300 PI
07GP009	12/17/96	4.00	Prim	420 PI
07GP009	12/17/96	8.00	Prim	<10
07GP009	12/17/96	14.00	Prim	<10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following qualifier(s) exist: P, I

For RCL TPH/DRO

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - PCBs in Soils
 Area 7 - Solid Waste Management Units
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	05GP055	07GP002	07GP002	07GP005	07GP006	
	SAMPLE ID	05PS05504	07PS00204	07QD00204	07PS00504	07PS00608	
	DATE	1996 VRP	11/13/96	10/22/96	10/22/96	11/14/96	11/15/96
	DEPTH (ft)	Tier II	4.00	4.00	4.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Primary	Primary
PCB-1016		4.23	<0.33	<0.33	<0.33	<0.33	<0.33
PCB-1221		4.23	<0.33	<0.33	<0.33	<0.33	<0.33
PCB-1232		4.23	<0.33	<0.33	<0.33	<0.33	<0.33
PCB-1242		4.23	<0.33	<0.33	<0.33	<0.33	<0.33
PCB-1248		1.28E+00	<0.33	<0.33	<0.33	<0.33	<0.33
PCB-1254		3.05E+00	<0.33	<0.33	<0.33	<0.33	<0.33
PCB-1260		4.23	<0.33	<0.33	<0.33	<0.33	<0.33
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - PCBs in Soils
 Area 7 - Solid Waste Management Units
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	07GP008	07GP009	
		SAMPLE ID	07PS00808		
		DATE	1996 VRP	11/17/96	12/17/96
		DEPTH (ft)	Tier II	8.00	12.00
		RESULT TYPE	Non-Residential	Primary	Primary
PCB-1016		4.23	<9.6	<0.33	
PCB-1221		4.23	<9.6	<0.33	
PCB-1232		4.23	<9.6	<0.33	
PCB-1242		4.23	<9.6	<0.33	
PCB-1248		1.28E+00	<9.6	<0.33	
PCB-1254		3.05E+00	<9.6	<0.33	
PCB-1260		4.23	<9.6	<0.33	
Sum of Concentrations			0.00	0.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Soils
 Area 7 - Solid Waste Management Units
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	05GP055	05GP055	05GP055	07GP001	07GP001	
	SAMPLE ID	05PS05504	05PS05508	05PS05512	07PS00104	07PS00108	
	DATE	1996 VRP	11/13/96	11/13/96	11/13/96	10/22/96	10/22/96
	DEPTH (ft)	Tier II	4.00	8.00	12.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438	3.8	0.92	1.7	5.7	8.7	
Barium, Total	10000	9.4	5.9	7.5	36	3.4	
Cadmium, Total	730.0	<1	<1	<1	22	<1	
Chromium, Total		5.4	<5	<5	<5	<5	
Copper, Total	1700	6.8	5.4	4.6	120	7.5	
Lead, Total	400	<5	<5	5	33	<5	
Mercury, Total	87.60	<0.1	<0.1	<0.1	<0.1	<0.1	
Nickel, Total	10000	5.8	5.3	3.3	4.2	4.8	
Selenium, Total	7300	<0.5	<0.5	<0.5	<0.5	<0.5	
Silver, Total	7300	<1	<1	<1	1.7	<1	
Zinc, Total	10000	18	13	13	100	15	
Cyanide, total	10000	---	---	---	---	---	
Sum of Concentrations		49.20	30.52	35.10	322.60	39.40	

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Analytical Summary - Inorganics in Soils
 Area 7 - Solid Waste Management Units
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	07GP001	07GP002	07GP002	07GP002	07GP002	
	SAMPLE ID	07PS00114	07PS00204	07QD00204	07PS00208	07PS00212	
	DATE	1996 VRP	10/22/96	10/22/96	10/22/96	10/22/96	10/22/96
	DEPTH (ft)	Tier II	14.00	4.00	4.00	8.00	12.00
	RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Primary	Primary
Arsenic, Total	438	1.5	6.7	5.3	3.7	0.84	
Barium, Total	10000	10	97	82	4.6	3.5	
Cadmium, Total	730.0	< 1	6.3	11	< 1	< 1	
Chromium, Total		17	7.9	13	< 5	< 5	
Copper, Total	1700	10	20	44	4	3.7	
Lead, Total	400	< 5	38	58	< 5	< 5	
Mercury, Total	87.60	< 0.1	0.2	0.18	< 0.1	< 0.1	
Nickel, Total	10000	4.4	8.3	16	3	4.3	
Selenium, Total	7300	< 0.5	1.5	1.2	< 0.5	< 0.5	
Silver, Total	7300	1	2.6	2.5	< 1	< 1	
Zinc, Total	10000	15	32	170	13	12	
Cyanide, total	10000		< 0.5	1.2			
Sum of Concentrations		58.90	220.50	404.38	28.30	24.34	

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Analytical Summary - Inorganics in Soils
 Area 7 - Solid Waste Management Units
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	07GP002	07GP002	07GP003	07GP003	07GP003
	SAMPLE ID	07QD00212	07PS00216	07PS00304	07PS00308	07PS00315
DATE	1996 VRP	10/22/96	10/22/96	10/23/96	10/23/96	10/23/96
DEPTH (ft)	Tier II	12.00	16.00	4.00	8.00	15.00
RESULT TYPE	Non-Residential	Duplicate 1	Primary	Primary	Primary	Primary
Arsenic, Total	438	1	2	4.8	7.1	5.1
Barium, Total	10000	3.7	37	49	5.7	11
Cadmium, Total	730.0	<1	<1	<1	<1	<1
Chromium, Total		<5	12	5.5	<5	9.8
Copper, Total	1700	3.4	17	4.7	3.7	17
Lead, Total	400	<5	7.8	14	<5	17
Mercury, Total	87.60	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, Total	10000	4.2	13	5.7	6	9.9
Selenium, Total	7300	<0.5	<0.5	0.65	<0.5	<0.5
Silver, Total	7300	<1	2.1	1.4	<1	1.5
Zinc, Total	10000	14	35	12	16	32
Cyanide, total	10000	---	---	---	---	---
Sum of Concentrations		26.30	125.90	97.75	38.50	103.30

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Analytical Summary - Inorganics in Soils
 Area 7 - Solid Waste Management Units
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	07GP006	07GP006	07GP006	07GP006	07GP006	
	SAMPLE ID	07PS00604	07PS00608	07PS00612	07QD00612	07PS00616	
	DATE	1996 VRP	11/15/96	11/15/96	11/15/96	11/15/96	11/15/96
	DEPTH (ft)	Tier II	4.00	8.00	12.00	12.00	16.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate-1	Primary
Arsenic, Total	438	2.2	1.6	0.93	1.1	0.78	
Barium, Total	10000	24	29	4.8	6.3	5.4	
Cadmium, Total	730.0	<1	<1	<1	<1	<1	
Chromium, Total		6.9	7.8	<5	<5	<5	
Copper, Total	1700	44	5.3	1.7 J	3.2	3.3	
Lead, Total	400	45	8.1	<5	<5	<5	
Mercury, Total	87.60	0.14	<0.1	<0.1	<0.1	<0.1	
Nickel, Total	10000	5.5	3.8	2.3	3.7	9.2	
Selenium, Total	7300	<0.5	<0.5?	<0.5	<0.5	<0.5	
Silver, Total	7300	<1	<1?	<1	<1	<1	
Zinc, Total	10000	35	21?	5.9	9.4	22	
Cyanide, total	10000	---	<0.5	---	---	---	
Sum of Concentrations		162.74	76.60	15.63	23.70	40.68	

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 ? = Duplicate records found, Data review required.

Analytical Summary - Inorganics in Soils
 Area 7 - Solid Waste Management Units
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in: mg/kg)	SITE	07GP007	07GP007	07GP007	07GP008	07GP008	
		SAMPLE ID	07PS00704	07PS00712	07PS00716	07PS00804	07PS00808	
		DATE	1996 VRP	11/15/96	11/15/96	11/15/96	11/17/96	11/17/96
		DEPTH (ft)	Tier II	4.00	12.00	16.00	4.00	8.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total		438	0.28	0.88	0.98	3.1	2.6	
Barium, Total		10000	5.4	5.3	4.8	34	19	
Cadmium, Total		730.0	<1	<1	<1	<1	<1	
Chromium, Total			<5	<5	<5	9.6	5.1	
Copper, Total		1700	3.3	2	9.1	4.3	4.6	
Lead, Total		400	<5	<5	<5	<5	<5	
Mercury, Total		87.60	<0.1	<0.1	<0.1	<0.1	<0.1	
Nickel, Total		10000	9.1	2	14	5.2	4.6	
Selenium, Total		7300	<0.5	<0.5	<0.5	<0.5	<0.5	
Silver, Total		7300	<1	<1	<1	1.7	1.1?	
Zinc, Total		10000	22	<5	21	13	14?	
Cyanide, total		10000	---	---	---	---	<0.5 J	
Sum of Concentrations			40.08	10.18	49.88	70.90	50.90	

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 ? = Duplicate records found, Data review required.

Analytical Summary - Inorganics in Soils
 Area 7 - Solid Waste Management Units
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	07GP008	07GP008	07GP008	07GP009
	SAMPLE ID	07PS00812	07PS00819	07QD00819	
	DATE	1996 VRP 11/17/96	11/17/96	11/17/96	11/17/96
	DEPTH (ft)	Tier II 12.00	12.00	19.00	19.00
	RESULT TYPE	Non-Residential Primary	Primary	Primary	Duplicate 1 Primary
Arsenic, Total	438	0.5	2.9 J	1.3	0.53
Barium, Total	10000	6.1	32 J	10	7.5
Cadmium, Total	730.0	<1	<1	<1	<1
Chromium, Total		<5	8.3 J	<5	<5
Copper, Total	1700	3.5	4.4	6.2	3.6
Lead, Total	400	<5	<5	<5	<5
Mercury, Total	87.60	<0.1	<0.1	<0.1	<0.1
Nickel, Total	10000	2.6	4.5	4.6	4.2
Selenium, Total	7300	<0.5	<0.5	<0.5	<0.5?
Silver, Total	7300	<1	1.6	<1	<1?
Zinc, Total	10000	9.3	11	15	11?
Cyanide, total	10000	---	---	---	<0.5
Sum of Concentrations		22.00	64.70	37.10	26.83

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

? = Duplicate records found, Data review required. The following qualifier(s) exist: J

Analytical Summary - VOCs in Soils
 Area 8 - I-Beam Building Former Stormwater Drainage System
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	08GP001	08GP001	08GP001	08GP002	08GP002	
		SAMPLE ID	08PS00108	08PS00112	08PS00118	08PS00208	08PS00212	
		DATE	1996 VRP	10/07/96	10/07/96	10/07/96	10/08/96	10/08/96
		DEPTH (ft)	Tier II	8.00	12.00	18.00	8.00	12.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene		1000	<0.25	<0.25	<0.25	<2.6	<0.25	
Ethyl benzene		1000	<0.25	<0.25	<0.25	<2.6	3	
Xylene (total)		1000	<0.25	<0.25	0.57 J	<2.6	<0.25	
Isopropylbenzene		1.0E+03	<0.25	<0.25	<0.25	<2.6	3.8	
n-Propylbenzene		1.00E+03	<0.25	<0.25	1.3 J	<2.6	<0.25	
1,3,5-Trimethylbenzene		1.00E+03	<0.25	<0.25	0.64 J	<2.6	<0.25	
1,2,4-Trimethylbenzene		1.00E+3	<0.25	<0.25	1.1 J	6.2	1.4	
Naphthalene		10000	<0.25	<0.25	0.36 J	2.8	1.5	
2-Methylnaphthalene		10000	<0.5	<0.5	0.52 J	6.5	6.2	
1,1-Dichloroethane		1000	<0.1	<0.1	<0.1	57	0.14	
cis-1,2-Dichloroethene		102.49	<0.1	<0.1	<0.1	6.4	<0.1	
1,1,1-Trichloroethane		1000	<0.1	<0.1	<0.1	7.2	0.58	
Chlorobenzene		3.16E+02	<0.1	<0.1	<0.1	<0.1	<0.1	
Tetrachloroethene		8.01	<0.1	<0.1	<0.1	<0.1	<0.1	
Trichloroethene		25.73	<0.1	<0.1	<0.1	3.3	<0.1	
Sum of Concentrations			0.00	0.00	4.48	89.40	16.62	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Area 8 - I-Beam Building Former Stormwater Drainage System
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	08GP002	08GP002	08GP003	08GP003	08GP003
	SAMPLE ID	08PS00214	08PS00216	08PS00308	08PS00312	08PS00314
	DATE	1996 VRP	10/08/96	10/08/96	10/08/96	10/08/96
	DEPTH (ft)	Tier II	14.00	16.00	8.00	12.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Toluene	1000	<0.71 IN	<0.25	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.71 IN	2.4	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.71 IN	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.71 IN	2.8	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.71 IN	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.71 IN	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	0.99	1.2	<0.25	<0.25	<0.25
Naphthalene	10000	<0.71# IN	0.88	<0.25	<0.25	<0.25
2-Methylnaphthalene	10000	<0.71 IN	1.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	1000	<0.71 IN	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.71 IN	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.71 IN	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	3.16E+02	<0.71 IN	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.71 IN	<0.1	<0.1	<0.1	<0.1
Trichloroethene	25.73	<0.71 IN	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations:		0.99	8.78	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

Analytical Summary - VOCs in Soils
 Area 8 - I-Beam Building Former Stormwater Drainage System
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	08GP004	08GP004	08GP004	08GP005	08GP005	
	SAMPLE ID	08PS00408	08PS00412	08PS00416	08PS00504	08PS00508	
	DATE	1996 VRP	10/08/96	10/08/96	10/08/96	10/09/96	10/09/96
	DEPTH (ft)	Tier II	8.00	12.00	16.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethane	102.49	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	3.16E+02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethane	8.01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethane	25.73	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Area 8 - I-Beam Building Former Stormwater Drainage System
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	08GP005	08GP006	08GP006	08GP006	08GP007
	SAMPLE ID	08PS00515	08PS00608	08PS00612	08PS00614	08PS00708
DATE	1996 VRP	10/09/96	10/09/96	10/09/96	10/09/96	10/09/96
DEPTH (ft)	Tier II	15.00	8.00	12.00	14.00	8.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.1	0.14
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	3.16E+02	<0.1	<0.1	<0.1	<0.1	0.26
Tetrachloroethene	8.01	<0.1	0.28	<0.1	<0.1	<0.1
Trichloroethene	25.73	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations		0.00	0.28	0.00	0.00	0.40

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Analytical Summary - VOCs in Soils
 Area 8 - I-Beam Building Former Stormwater Drainage System
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	08GP007	08GP007	08GP008	08GP008	08GP008
	SAMPLE ID	08PS00712	08QD00712	08PS00804	08PS00812	08PS00816
	DATE	1996 VRP	10/09/96	10/09/96	10/14/96	10/14/96
	DEPTH (ft)	Tier II	12.00	12.00	4.00	12.00
	RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.05	<0.05	<0.05
Ethyl benzene	1000	<0.25	<0.25	<0.05	<0.05	3.3
Xylene (total)	1000	<0.25	<0.25	<0.05	<0.05	1.4
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.05	<0.05	3.5
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.05	<0.05	<0.05
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.05	<0.05	<0.05
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.05	<0.05	2.7
Naphthalene	10000	<0.25	<0.25	<0.05	<0.05	<0.05
2-Methylnaphthalene	10000	<0.5	<0.5	<0.1	<0.1	<0.1
1,1-Dichloroethane	1000	<0.1	<0.1	<0.05	<0.05	<0.05
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.05	<0.05	<0.05
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.05	<0.05	<0.05
Chlorobenzene	3.16E+02	<0.1	<0.1	<0.05	<0.05	<0.05
Tetrachloroethene	8.01	<0.1	<0.1	<0.05	<0.05	<0.05
Trichloroethene	25.73	<0.1	<0.1	<0.05	<0.05	<0.05
Sum of Concentrations		0.00	0.00	0.00	0.00	10.90

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Area 8 - I-Beam Building Former Stormwater Drainage System
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	08GP009	08GP009	08GP009	08GP009	08GP009
	SAMPLE ID	08PS00904	08PS00908	08PS00912	08QD00912	08QD00912
DATE	1996 VRP	10/21/96	10/21/96	10/21/96	10/21/96	10/21/96
DEPTH (ft)	Tier II	4.00	8.00	12.00	12.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1	Duplicate 2
Toluene	1000	<0.25	<0.25	<0.05	---	---
Ethyl benzene	1000	<0.25	<0.25	<0.05	---	---
Xylene (total)	1000	<0.25	<0.25	<0.1	---	---
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.01	---	---
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.01	---	---
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.01	---	---
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.01	---	---
Naphthalene	10000	<0.25	<0.25	<0.05#	<0.33	<0.33
2-Methylnaphthalene	10000	<0.5	<0.5	<0.1	---	<0.33
1,1-Dichloroethane	1000	<0.1	<0.1	<0.05	---	---
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.05	---	---
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.05	---	---
Chlorobenzene	3.16E+02	<0.1	<0.1	<0.05	---	---
Tetrachloroethene	8.01	<0.1	<0.1	<0.05	---	---
Trichloroethene	25.73	<0.1	<0.1	<0.05	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

Analytical Summary - VOCs in Soils
 Area 8 - I-Beam Building Former Stormwater Drainage System
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	08GP010	08GP010	08GP010	08GP011	08GP011
	SAMPLE ID	08PS01004	08PS01008	08PS01014	08PS01104	08PS01108
DATE	1996 VRP	10/21/96	10/21/96	10/21/96	10/22/96	10/22/96
DEPTH (ft)	Tier II	4.00	8.00	14.00	4.00	8.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25 E	<0.25	3.7	<0.25	<0.25
Ethyl benzene	1000	<0.25 E	<0.25	<0.56	<0.25	<0.25
Xylene (total)	1000	<0.25 E	<0.25	2.8	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.25 E	<0.25	<0.56	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25 E	<0.25	<0.56	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25 E	<0.25	6.7	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25 E	<0.25	8.8	<0.25	<0.25
Naphthalene	10000	<0.25 E	<0.25	<0.56	<0.25	<0.25
2-Methylnaphthalene	10000	<0.5 E	<0.5	<1.1	<0.5	<0.5
1,1-Dichloroethane	1000	<0.1 E	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.1 E	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.1 E	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	3.16E+02	<0.1 E	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.1 E	<0.1	<0.1	<0.1	<0.1
Trichloroethene	25.73	<0.1 E	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations		0.00	0.00	22.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Area 8 - I-Beam Building Former Stormwater Drainage System
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	08GP011	08GP012	08GP012	08GP012	08GP012
	SAMPLE ID	08PS01112	08PS01204	08PS01206	08PS01208	08PS01212
	DATE	1996 VRP	10/22/96	10/22/96	10/22/96	10/22/96
	DEPTH (ft)	Tier II	12.00	4.00	6.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.25	<0.05	<0.25
Ethyl benzene	1000	<0.25	<0.25	<0.25	<0.05	<0.25
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.1	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25	<0.01	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.01	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.01	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.01	<0.25
Naphthalene	10000	<0.25	<0.25	<0.25	<0.05#	<0.25
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.1	<0.5
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.05	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.05	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.05	<0.1
Chlorobenzene	3.16E+02	<0.1	<0.1	<0.1	<0.05	<0.1
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.05	<0.1
Trichloroethene	25.73	<0.1	<0.1	<0.1	<0.05	<0.1
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Soils
 Area 8 - I-Beam Building Former Stormwater Drainage System
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	08SD001	08SD002
	SAMPLE ID	08SD00101	08SD00201
	DATE	1996 VRP	10/24/96
	DEPTH (ft)	Tier:II	1:00
	RESULT TYPE	Non-Residential	Primary
Toluene		1000	<0.25
Ethyl benzene		1000	<0.25
Xylene (total)		1000	<0.25
Isopropylbenzene		1.0E+03	<0.25
n-Propylbenzene		1.00E+03	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.25
Naphthalene		10000	<0.25
2-Methylnaphthalene		10000	<0.5
1,1-Dichloroethane		1000	<0.1
cis-1,2-Dichloroethene		102.49	<0.1
1,1,1-Trichloroethane		1000	<0.1
Chlorobenzene		3.16E+02	<0.1
Tetrachloroethene		8.01	<0.1
Trichloroethene		25.73	<0.1
Sum of Concentrations			0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported. The following qualifier(s) exist: J, I, N, E

Analytical Summary - PNAs in Soils
 Area 8 - I-Beam Building Former Stormwater Drainage System
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	08GP011	08GP012	08GP012	08GP012	08GP012
	SAMPLE ID	08PS01112	08PS01204	08PS01206	08PS01208	08PS01212
DATE	1996 VRP	10/22/96	10/22/96	10/22/96	10/22/96	10/22/96
DEPTH (ft)	Tier II	12.00	4.00	6.00	8.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Naphthalene	10000	< 0.25	< 0.25	< 0.25	< 0.05#	< 0.25
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent more than one test method, highest result reported.

Analytical Summary - PNAs in Soils
 Area 8 - I-Beam Building Former Stormwater Drainage System
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	08SD001	08SD002
		SAMPLE ID	08SD00101	08SD00201
		DATE	1996 VRP 10/24/96	10/24/96
		DEPTH (ft)	Tier II 1.00	1.00
		RESULT TYPE	Non-Residential Primary	Primary

Naphthalene		10000	< 0.25	< 0.05#
Sum of Concentrations			0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported. The following qualifier(s) exist: J, I, N, E

For RCL PNA

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Soils
 Area 8 - I-Beam Building Former Stormwater Drainage System
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	08GP004	08GP004	08GP004
	SAMPLE ID	08PS00408	08PS00412	08PS00416
	DATE	1996 VRP	10/08/96	10/08/96
	DEPTH (ft)	Tier II	8.00	12.00
	RESULT TYPE	Non-Residential	Primary	Primary
Arsenic, Total		438	6.4	1.9
Barium, Total		10000	29	24
Cadmium, Total		730.0	<1	<1
Chromium, Total			<5	6.4
Copper, Total		1700	5.1	6.9
Nickel, Total		10000	8.3	5.5
Selenium, Total		7300	0.53	<0.5
Zinc, Total		10000	84	27
Sum of Concentrations			133.33	71.70
				95.50

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - TPH/DROs in Soils
Area 8 - I-Beam Building Former Stormwater Drainage System
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO (mg/kg)
1996 VRPTier II Non-Residential				6000
08GP001	10/07/96	8.00	Prim	<10
08GP001	10/07/96	12.00	Prim	<10
08GP001	10/07/96	16.00	Prim	[9300] PI
08GP002	10/08/96	8.00	Prim	[12000] PI
08GP002	10/08/96	12.00	Prim	[6600] PI
08GP002	10/08/96	16.00	Prim	[7100] PI
08GP003	10/08/96	8.00	Prim	<10
08GP003	10/08/96	12.00	Prim	<10
08GP003	10/08/96	14.00	Prim	<10
08GP004	10/08/96	8.00	Prim	<10
08GP004	10/08/96	12.00	Prim	<10
08GP004	10/08/96	16.00	Prim	<10
08GP005	10/09/96	4.00	Prim	210 PI
08GP005	10/09/96	8.00	Prim	<10
08GP005	10/09/96	15.00	Prim	<10
08GP006	10/09/96	8.00	Prim	<10
08GP006	10/09/96	12.00	Prim	<10
08GP006	10/09/96	14.00	Prim	<10
08GP007	10/09/96	8.00	Prim	14
08GP007	10/09/96	12.00	Prim	<10
08GP009	10/21/96	4.00	Prim	84 PI
08GP009	10/21/96	8.00	Prim	1100 PI
08GP010	10/21/96	4.00	Prim	23
08GP010	10/21/96	8.00	Prim	140 PI
08GP010	10/21/96	14.00	Prim	2900 PI
08GP011	10/22/96	4.00	Prim	350 PI
08GP011	10/22/96	8.00	Prim	130 PI
08GP011	10/22/96	12.00	Prim	13
08GP012	10/22/96	4.00	Prim	130 PI
08GP012	10/22/96	6.00	Prim	510 PI
08GP012	10/22/96	12.00	Prim	<10
08SD001	10/24/96	1.00	Prim	30

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level The following qualifier(s) exist: P, I

For RCL TPH/DRO

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Area 8 - I-Beam Building Former Stormwater Drainage System
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

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Date: 09/29/99

CONSTITUENT (Units in ug/l)	SITE	08GP002	08GP003	08GP004	08GP005	08GP006
	SAMPLE ID	08PW00223	08PW00319	08PW00422	08PW00518	08PW00618
	DATE	10/08/96	10/08/96	10/08/96	10/09/96	10/09/96
	RESULT TYPE	Primary	Primary	Primary	Primary	Primary
	1996 VRP	1996 VRP	1996 VRP	1996 VRP	1996 VRP	1996 VRP
	Tier II	Tier II	Tier II	Tier II	Tier II	Tier II
	Non-Residential	Non-Residential	Non-Residential	Non-Residential	Non-Residential	Non-Residential
Vinyl chloride	10	< 10	< 2	< 10	< 2	< 2
Ethylbenzene	10220	< 5	< 5	< 5	< 5	< 5
Xylene (total)	204400	< 10	< 5	< 10	< 5	< 5
Isopropylbenzene	1.02E+4	< 1	< 5	< 1	< 5	< 5
2-Methylnaphthalene	2040.00	< 10	< 10	< 10	< 10	< 10
Naphthalene	4088	< 5	< 5	< 5	< 5	< 5
1,2,4-Trimethylbenzene	5.11E+3	7.6	< 5	< 1	< 1	< 1
1,3,5-Trimethylbenzene	5.11E+3	3.1	< 5	< 1	< 5	< 5
1,1-Dichloroethane	10220	230	94	< 5	44	< 5
cis-1,2-Dichloroethene	1022	140	< 5	< 5	< 5	< 5
1,1,1-Trichloroethane	9198	100	30	< 5	72	< 5
Trichloroethene	260	< 5	20 B	< 5	78 B	< 5
Chloroethane	9.86E+2	38	---	< 10	---	---
Sum of Concentrations		518.70	144.00	0.00	194.00	0.00

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Analytical Summary - VOCs in Groundwater
 Area 8 - I-Beam Building Former Stormwater Drainage System
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

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Date: 09/29/99

CONSTITUENT (Units in ug/l)	SITE	08GP007	08GP008	08GP009	08GP010	08GP012
	SAMPLE ID	08PW00718	08PW00821	08PW00920	08PW01018	08PW01219
	1996 VRP					
	Tier II	10/09/96	10/14/96	10/21/96	10/21/96	10/22/96
	Non-Residential	Primary	Primary	Primary	Primary	Primary
	RESULT TYPE					
Vinyl chloride	10	<2	[25]	<2	<10	<2
Ethylbenzene	10220	<5	<5	<5	280	<5
Xylene (total)	204400	<5	<5	<5	190	<5
Isopropylbenzene	1.02E+4	<5	<5	<5	100	<5
2-Methylnaphthalene	2040.00	<10	<10	13	<50	<10
Naphthalene	4088	<5	<5	14	<25	<5
1,2,4-Trimethylbenzene	5.11E+3	<1	<400	5.1	340	<5
1,3,5-Trimethylbenzene	5.11E+3	<5	<5	<5	29	<5
1,1-Dichloroethane	10220	<5	<5	<5	<25	<5
cis-1,2-Dichloroethene	1022	<5	<5	8.8	<25	<5
1,1,1-Trichloroethane	9198	<5	<5	<5	<25	<5
Trichloroethene	260	<5	<5	<5	<25	<5
Chloroethane	9.86E+2	---	<10	---	---	---
Sum of Concentrations		0.00	25.00	40.90	939.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Area 8 - I-Beam Building Former Stormwater Drainage System
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	08GP012	
	SAMPLE ID	1996.VRP	08QD01219
	DATE	Tier II	10/22/96
	RESULT TYPE	Non-Residential	Duplicate 1
Vinyl chloride		10	< 2
Ethylbenzene		10220	< 5
Xylene (total)		204400	< 5
Isopropylbenzene		1.02E+4	< 5
2-Methylnaphthalene		2040.00	< 10
Naphthalene		4088	< 5
1,2,4-Trimethylbenzene		5.11E+3	< 5
1,3,5-Trimethylbenzene		5.11E+3	< 5
1,1-Dichloroethane		10220	< 5
cis-1,2-Dichloroethane		1022	< 5
1,1,1-Trichloroethane		9198	< 5
Trichloroethane		260	< 5
Chloroethane		9.86E+2	---
Sum of Concentrations			0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following qualifier(s) exist: B

Analytical Summary - VOCs in Soils
 Plant 3 - Former Plating and Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	05GP028	05GP028	05GP028	05GP028	05GP029	
	SAMPLE ID	05PS02804	05PS02812	05QD02812	05PS02815	05PS02908	
	DATE	1996 VRP	10/15/96	10/15/96	10/15/96	10/16/96	
	DEPTH (ft)	Tier II	4.00	12.00	12.00	15.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Primary	Primary
Benzene	4.77	<0.1	<0.1	<0.1	<0.1	<0.1	
Toluene	1000	<0.25	30	41	35	<0.25	
Ethyl benzene	1000	<0.25	20	26	26	<0.25	
Xylene (total)	1000	<0.25	7.3	8.7	8.4	<0.25	
Isopropylbenzene	1.0E+03	<0.25	<1.3 UJ	6.4	6.1	<0.25	
n-Propylbenzene	1.00E+03	<0.25	7.2	7.7	6.6	<0.25	
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<1.3	<1.3	6.4	<0.25	
1,2,4-Trimethylbenzene	1.00E+3	<0.25	6.4	6.5	6.3	<0.25	
Naphthalene	10000	<0.25	<1.3	<1.3	<0.25	<0.25	
2-Methylnaphthalene	10000	<0.5	<2.6	<2.6	<0.5	<0.5	
cis-1,2-Dichloroethane	102.49	<0.1	<0.1	<0.1	<0.1	<0.1	
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1	
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	<0.1	
Trichloroethene	25.73	<0.1	<0.1	<0.1	<0.1	<0.1	
Sum of Concentrations		0.00	70.90	96.30	94.80	0.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 3 - Former Plating and Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	05GP029	05GP029	05GP029	05GP029	05GP029
	SAMPLE ID	05PS02910	05PS02912	05QD02912	05QD02912	05PS02916
	DATE	1996 VRP	10/16/96	10/16/96	10/16/96	10/16/96
	DEPTH (ft)	Tier II	10.00	12.00	12.00	15.00
	RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Duplicate 2
		Non-Residential	Primary	Primary	Duplicate 1	Duplicate 2
Benzene	4.77	<0.1	<0.13 INE	<0.05	<0.05	<0.1
Toluene	1000	<0.25	<0.13 INE	<0.05	<0.05	<0.25
Ethyl benzene	1000	0.63	<0.13 INE	<0.05	<0.05	<0.25
Xylene (total)	1000	1	0.5 JIN	<0.1	<0.05	<0.25
Isopropylbenzene	1.0E + 03	<0.25	<0.13 INE	<0.01	<0.05	<0.25
n-Propylbenzene	1.00E + 03	<0.25	0.34 JIN	<0.01	<0.05	<0.25
1,3,5-Trimethylbenzene	1.00E + 03	0.37	0.55 JIN	0.1	0.21 J	<0.25
1,2,4-Trimethylbenzene	1.00E + 3	0.77	1.1 JIN	0.21	0.10 J	<0.25
Naphthalene	10000	<0.25	1.1#	<0.05	<0.05	<0.25
2-Methylnaphthalene	10000	<0.5	<1.3 INE	<0.5	<0.1	<0.5
cis-1,2-Dichloroethene	102.49	<0.1	<0.13 INE	<0.05	<0.05	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.13 INE	<0.05	<0.05	<0.1
Tetrachloroethene	8.01	<0.1	<0.13 INE	<0.05	<0.05	<0.1
Trichloroethene	25.73	<0.1	<0.13 INE	<0.05	<0.05	<0.1
Sum of Concentrations		2.77	3.59	0.31	0.31	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

Analytical Summary - VOCs in Soils
 Plant 3 - Former Plating and Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	05GP031	05GP031	05GP031	05GP031	05GP048	
		SAMPLE ID	05PS03108	05PS03112	05QD03112	05PS03116	05PS04804	
		DATE	1996 VRP	10/16/96	10/16/96	10/16/96	10/16/96	11/11/96
		DEPTH (ft)	Tier II	8.00	12.00	12.00	16.00	4.00
		RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Primary	Primary
Benzene		4.77	<0.1	<0.1 *	<0.1	<0.1	<0.29	
Toluene		1000	<7.8	30 *	5.5	3.8	<0.74	
Ethyl benzene		1000	14	40 *	10	2.8	<0.74	
Xylene (total)		1000	86	310 *	83	14	1.7	
Isopropylbenzene		1.0E+03	<7.8	42 *	12	5.9	<0.74	
n-Propylbenzene		1.00E+03	<7.8	12 *	<5.2	<2.6	<0.74	
1,3,5-Trimethylbenzene		1.00E+03	60	81 *	26	11	2.8	
1,2,4-Trimethylbenzene		1.00E+3	120	280 *	88	28	1.4	
Naphthalene		10000	20	30 *	9.7	3.1	<0.74	
2-Methylnaphthalene		10000	19	<21 *	<10	<6.2	<1.5	
cis-1,2-Dichloroethene		102.49	<0.1	<0.1 *	<0.1	<0.1	15	
1,1,1-Trichloroethane		1000	<0.1	<0.1 *	<0.1	<0.1	<0.29	
Tetrachloroethene		8.01	<0.1	<0.1 *	<0.1	<0.1	<0.29	
Trichloroethene		25.73	<0.1	<0.1 *	<0.1	<0.1	7.6	
Sum of Concentrations			319.00	825.00	234.20	68.60	28.50	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 3 - Former Plating and Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	1996 VRP	05GP048	05GP048	05GP048	05GP063	05GP064
	SAMPLE ID		05PS04808	05PS04811	05PS04814		05PS06404
	DATE		11/11/96	11/11/96	11/11/96	11/15/96	11/16/96
	DEPTH (ft)	Tier II	8.00	11.00	14.00	12.00	4.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Benzene		4.77	<0.21	<0.05	<45	<0.05	<0.1
Toluene		1000	1 J	0.17	[1200]	0.097	<0.25
Ethyl benzene		1000	0.77 J	0.15	600	0.15	<0.25
Xylene (total)		1000	2.6 J	0.6	[2500]	0.56	<0.25
Isopropylbenzene		1.0E+03	<0.53	<0.01	150	<0.05	<0.25
n-Propylbenzene		1.00E+03	<0.53	<0.01	<110	<0.05	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.53	0.14	580	0.86	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.53	0.14	870	0.24	<0.25
Naphthalene		10000	<0.53	<0.05#	<110	<0.33#	<0.25
2-Methylnaphthalene		10000	<1.1	<0.1	<220	<0.33#	<0.5
cis-1,2-Dichloroethene		102.49	<0.21	0.1	[190]	<0.05	<0.1
1,1,1-Trichloroethane		1000	<0.21	<0.05	<45	<0.05	<0.1
Tetrachloroethene		8.01	<0.21	<0.05	<45	<0.05	<0.1
Trichloroethene		25.73	<0.21	<0.05	<45	<0.05	<0.1
Sum of Concentrations			4.37	1.30	6090.00	1.92	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent analyzed by more than one test method, highest result reported. [] = Greater than Reporting Level

Analytical Summary - VOCs in Soils
 Plant 3 - Former Plating and Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	05GP064	05GP064	05GP064	05GP064	09GP001	
	SAMPLE ID	05PS06408	05PS06412	05PS06416	05QD06416	09PS00104	
	DATE	1996 VRP	11/16/96	11/16/96	11/16/96	11/15/96	
	DEPTH (ft)	Tier II	8.00	12.00	16.00	16.00	4.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1	Primary
Benzene	4.77	<0.05	<0.1	<0.1	<0.1	<0.1	
Toluene	1000	<0.05	<0.25	<0.25	<0.25	<0.25	
Ethyl benzene	1000	0.19	<0.25	<0.25	<0.25	<0.25	
Xylene (total)	1000	0.26	<0.25	0.29	<0.25	<0.25	
Isopropylbenzene	1.0E+03	<0.05	<0.25	<0.25	<0.25	<0.25	
n-Propylbenzene	1.00E+03	<0.05	<0.25	<0.25	<0.25	<0.25	
1,3,5-Trimethylbenzene	1.00E+03	0.11	<0.25	<0.25	<0.25	<0.25	
1,2,4-Trimethylbenzene	1.00E+3	<0.05	<0.25	<0.25	<0.25	<0.25	
Naphthalene	10000	<0.33#	<0.25	<0.25	<0.25	<0.25	
2-Methylnaphthalene	10000	<0.33#	<0.5	<0.5	<0.5	<0.5	
cis-1,2-Dichloroethene	102.49	<0.05	<0.1	<0.1	<0.1	<0.1	
1,1,1-Trichloroethane	1000	<0.05	<0.1	<0.1	<0.1	<0.1	
Tetrachloroethene	8.01	<0.05	<0.1	<0.1	<0.1	<0.1	
Trichloroethene	25.73	<0.05	<0.1	<0.1	<0.1	<0.1	
Sum of Concentrations		0.56	0.00	0.29	0.00	0.00	

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= Constituent in more than one test method, highest result reported.

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Soils
 Plant 3 - Former Plating and Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	09GP001	09GP001	09GP002	09GP002	09GP002	
	SAMPLE ID	09PS00108	09PS00118	09PS00204	09PS00208	09PS00212	
	DATE	1996 VRP	11/15/96	11/15/96	11/17/96	11/17/96	
	DEPTH (ft)	Tier II	8.00	18.00	4.00	8.00	12.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Benzene		4.77	<0.1	<0.1	<0.05	<0.1	<0.1
Toluene		1000	<0.25	<0.25	<0.05	<0.25	<0.25
Ethyl benzene		1000	<0.25	7.8	<0.05	<0.25	<0.25
Xylene (total)		1000	<0.25	7.5	<0.05	<0.25	0.6
Isopropylbenzene		1.0E+03	<0.25	6.7	<0.05	<0.25	<0.25
n-Propylbenzene		1.00E+03	<0.25	<0.25	<0.05	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.25	6.9	<0.05	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.25	4.5	<0.05	<0.25	0.34
Naphthalene		10000	<0.25	0.25	<0.05	<0.25	<0.25
2-Methylnaphthalene		10000	<0.5	0.54	<0.1	<0.5	<0.5
cis-1,2-Dichloroethene		102.49	<0.1	<0.1	<0.05	<0.1	<0.1
1,1,1-Trichloroethane		1000	<0.1	<0.1	<0.05	<0.1	<0.1
Tetrachloroethane		8.01	<0.1	<0.1	<0.05	0.1	<0.1
Trichloroethene		25.73	<0.1	<0.1	<0.05	<0.1	<0.1
Sum of Concentrations			0.00	34.19	0.00	0.10	0.94

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 3 - Former Plating and Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	09GP002	09GP003	09GP003	09GP003	09GP003
	SAMPLE ID	09PS00218	09PS00304	09PS00308	14PS00312	14QD00312
DATE	1996 VRP	11/17/96	07/16/97	07/16/97	07/16/97	07/16/97
DEPTH (ft)	Tier II	18.00	4.00	8.00	12.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Duplicate 1
Benzene	4.77	<0.1	<0.05	<0.05	<0.05	<0.05
Toluene	1000	<0.25	<0.05	<0.05	<0.05	<0.05
Ethyl benzene	1000	<0.25	<0.05	<0.05	<0.05	<0.05
Xylene (total)	1000	<0.25	<0.05	<0.05	<0.05 UJ	0.19 J
Isopropylbenzene	1.0E + 03	<0.25	<0.05	<0.05	<0.05	<0.05
n-Propylbenzene	1.00E + 03	<0.25	<0.05	<0.05	<0.05 UJ	<0.05 J
1,3,5-Trimethylbenzene	1.00E + 03	<0.25	<0.05	<0.05	<0.05 J	0.054 J
1,2,4-Trimethylbenzene	1.00E + 3	<0.25	<0.05	<0.05	0.086 J	0.19 J
Naphthalene	10000	<0.25	<0.05	<0.05	<0.05	<0.05
2-Methylnaphthalene	10000	<0.5	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<0.05	<0.05	<0.05	<0.05
1,1,1-Trichloroethane	1000	<0.1	<0.05	<0.05	<0.05	<0.05
Tetrachloroethene	8.01	<0.1	<0.05	<0.05	<0.05	<0.05
Trichloroethene	25.73	<0.1	<0.05	<0.05	<0.05	<0.05
Sum of Concentrations		0.00	0.00	0.00	0.11	0.45

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 3 - Former Plating and Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	09GP003	09GP004	09GP004	09GP004	09GP004	
	SAMPLE ID	09PS00318	09PS00404	09PS00408	09PS00416	09QD00416	
	DATE	1996 VRP	07/16/97	07/16/97	07/16/97	07/16/97	
	DEPTH (ft)	Tier II	18:00	4:00	8:00	16:00	
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Duplicate 1
Benzene		4.77	<0.05	<0.05	<0.05	<0.05	<0.05
Toluene		1000	26	<0.05	<0.05	<0.05	<0.05
Ethyl benzene		1000	20	<0.05	<0.05	<0.05	<0.05
Xylene (total)		1000	100	<0.05	<0.05	<0.05	<0.05
Isopropylbenzene		1.0E+03	14	<0.05	<0.05	<0.05	<0.05
n-Propylbenzene		1.00E+03	<0.05	<0.05	<0.05	<0.05	<0.05
1,3,5-Trimethylbenzene		1.00E+03	9.7	<0.05	<0.05	<0.05	<0.05
1,2,4-Trimethylbenzene		1.00E+3	2.5	<0.05	<0.05	<0.05	<0.05
Naphthalene		10000	3.2	<0.05	<0.05	<0.05	<0.05
2-Methylnaphthalene		10000	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene		102.49	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,1-Trichloroethane		1000	<0.05	<0.05	<0.05	<0.05	<0.05
Tetrachloroethene		8.01	1.5	0.11	0.78	0.24	0.37
Trichloroethene		25.73	2.5	<0.05	0.57	0.25	0.35
Sum of Concentrations			179.40	0.11	1.35	0.49	0.72

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 3 - Former Plating and Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	09GP005	09GP005	09GP005	09GP005	09GP006
	SAMPLE ID	09PS00502	09PS00508	09PS00514	09QD00514	09PS00604
DATE	1996 VRP	07/16/97	07/16/97	07/16/97	07/16/97	07/17/97
DEPTH (ft)	Tier II	2.00	8.00	14.00	14.00	4.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1	Primary
Benzene	4.77	<0.05	<0.05	<0.05	<0.05	<0.05
Toluene	1000	<0.05	<0.05	<0.05	<0.05	<0.05
Ethyl benzene	1000	<0.05	<0.05	<0.05	<0.05	<0.05
Xylene (total)	1000	<0.05	<0.05	<0.05	<0.05	<0.05
Isopropylbenzene	1.0E+03	<0.05	<0.05	<0.05	<0.05	<0.05
n-Propylbenzene	1.00E+03	<0.05	<0.05	<0.05	<0.05	<0.05
1,3,5-Trimethylbenzene	1.00E+03	<0.05	<0.05	<0.05	<0.05	<0.05
1,2,4-Trimethylbenzene	1.00E+3	<0.05	<0.05	<0.05	<0.05	<0.05
Naphthalene	10000	<0.05	<0.05	<0.05	<0.05	<0.05
2-Methylnaphthalene	10000	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,1-Trichloroethane	1000	<0.05	<0.05	<0.05	<0.05	<0.05
Tetrachloroethene	8.01	<0.05	<0.05	<0.05	<0.05	<0.05
Trichloroethene	25.73	<0.05	<0.05	<0.05	<0.05	<0.05
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 3 - Former Plating and Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	09GP006	09GP006	09GP006	09GP007	09GP007
	SAMPLE ID	09PS00610	09PS00618	09QD00618	09PS00704	09PS00708
DATE	1996 VRP	07/17/97	07/17/97	07/17/97	07/17/97	07/17/97
DEPTH (ft)	Tier II	10.00	18.00	18.00	4.00	8.00
RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Primary	Primary
Benzene	4.77	<0.05	<0.05	<0.05	<0.05	<0.05
Toluene	1000	<0.05	<0.05	<0.05	<0.05	<0.05
Ethyl benzene	1000	<0.05	<0.05	<0.05	<0.05	<0.05
Xylene (total)	1000	<0.05	<0.05	<0.05	<0.05	<0.05
Isopropylbenzene	1.0E+03	<0.05	<0.05	<0.05	<0.05	<0.05
n-Propylbenzene	1.00E+03	<0.05	<0.05	<0.05	<0.05	<0.05
1,3,5-Trimethylbenzene	1.00E+03	<0.05	<0.05	<0.05	<0.05	<0.05
1,2,4-Trimethylbenzene	1.00E+3	<0.05	<0.05	<0.05	<0.05	<0.05
Naphthalene	10000	<0.05	<0.05	<0.05	<0.05	<0.05
2-Methylnaphthalene	10000	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,1-Trichloroethane	1000	<0.05	<0.05	<0.05	<0.05	<0.05
Tetrachloroethene	8.01	<0.05	<0.05	<0.05	<0.05	<0.05
Trichloroethene	25.73	<0.05	<0.05	<0.05	<0.05	<0.05
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 3 - Former Plating and Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	09GP007	09GP007	09GP008	09GP008	09GP008
		SAMPLE ID	09PS00712	09PS00717	09PS00808	09PS00812	09PS00816
		DATE	1996 VRP 07/17/97	07/17/97	07/18/97	07/18/97	07/18/97
		DEPTH (ft)	Tier II 12.00	17.00	8.00	12.00	16.00
		RESULT TYPE	Non-Residential Primary	Primary	Primary	Primary	Primary
Benzene		4.77	<0.05	<0.05	<0.05	<0.05	<0.05
Toluene		1000	<0.05	<0.05	<0.05	<0.05	<0.05
Ethyl benzene		1000	<0.05	<0.05	<0.05	<0.05	<0.05
Xylene (total)		1000	<0.05	<0.05	<0.05	0.69	<0.05
Isopropylbenzene		1.0E+03	<0.05	<0.05	<0.05	<0.05	<0.05
n-Propylbenzene		1.00E+03	<0.05	<0.05	<0.05	<0.05	<0.05
1,3,5-Trimethylbenzene		1.00E+03	<0.05	<0.05	<0.05	<0.05	<0.05
1,2,4-Trimethylbenzene		1.00E+3	<0.05	<0.05	<0.05	<0.05	<0.05
Naphthalene		10000	<0.05	<0.05	<0.05	<0.05	<0.05
2-Methylnaphthalene		10000	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene		102.49	<0.05	<0.05	<0.05	0.1	0.30
1,1,1-Trichloroethane		1000	<0.05	0.61	<0.05	0.31	0.39
Tetrachloroethene		8.01	<0.05	<0.05	<0.05	0.15	0.16
Trichloroethene		25.73	<0.05	<0.05	0.92	3.3	5.5
Sum of Concentrations			0.00	0.51	0.92	4.55	6.35

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 3 - Former Plating and Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	09HA001	09HA001	09HA001	17GP001	17GP001
	SAMPLE ID	09HA00104	01HA00107	09HA00109	17PS00104	17PS00108
DATE	1996 VRP	07/25/97	07/25/97	07/25/97	11/12/96	11/12/96
DEPTH (ft)	Tier II	4.00	7.00	9.00	4.00	8.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Benzene	4.77	<0.10	<0.05	<0.10	<0.1	<0.05
Toluene	1000	<0.25	<0.05	<0.25	<0.25	<0.05
Ethyl benzene	1000	<0.10	<0.05	<0.25	<0.25	<0.05
Xylene (total)	1000	<2.50	<0.05	<0.25	<0.25	<0.1
Isopropylbenzene	1.0E+03	<0.10	<0.05	<0.25	<0.25	<0.01
n-Propylbenzene	1.00E+03	<0.25	<0.05	<0.25	<0.25	<0.01
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.05	<0.25	<0.25	<0.01
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.05	---	<0.25	<0.01
Naphthalene	10000	<0.25	<0.05	<0.25	<0.25	<0.05#
2-Methylnaphthalene	10000	<0.5	<0.1	<0.5	<0.5	<0.1#
cis-1,2-Dichloroethene	102.49	<0.10	0.27	2.7	<0.1	<0.05
1,1,1-Trichloroethane	1000	<0.25	<0.05	1.1	<0.1	<0.05
Tetrachloroethene	8.01	<0.10	<0.05	0.23	<0.1	<0.05
Trichloroethene	25.73	0.14	0.17	1.3	<0.1	<0.05
Sum of Concentrations		0.14	0.44	5.33	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Soils
 Plant 3 - Former Plating and Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	17GP001	17GP001
	SAMPLE ID	17PS00112	17PS00118
DATE	1996 VRP	11/12/96	11/12/96
DEPTH (ft)	Tier II	12.00	18.00
RESULT TYPE	Non-Residential	Primary	Primary
Benzene	4.77	<0.1	[80]
Toluene	1000	<0.25	700
Ethyl benzene	1000	<0.25	280
Xylene (total)	1000	<0.25	720
Isopropylbenzene	1.0E+03	<0.25	<29
n-Propylbenzene	1.00E+03	<0.25	<29
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<29
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<29
Naphthalene	10000	<0.25	<29
2-Methylnaphthalene	10000	<0.5	<58
cis-1,2-Dichloroethene	102.49	<0.1	<12
1,1,1-Trichloroethane	1000	<0.1	<12
Tetrachloroethene	8.01	<0.1	<12
Trichloroethene	25.73	<0.1	<12
Sum of Concentrations		0.00	1780.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level The following qualifier(s) exist: U, J, I, N, E, *

Analytical Summary - TPH/DROs in Soils
 Plant 3 - Former Plating and Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO (mg/kg)
1996 VRPTier II Non-Residential				6000
05GP027	10/15/96	4.00	Prim	94
05GP027	10/15/96	8.00	Prim	< 10
05GP027	10/15/96	8.00	Dup 1	< 10
05GP027	10/15/96	16.00	Prim	480 PI
05GP030	10/16/96	8.00	Prim	190 PI
05GP030	10/16/96	12.00	Prim	22
05GP030	10/16/96	16.00	Prim	410 PI
05GP032	10/16/96	8.00	Prim	< 10
05GP032	10/16/96	12.00	Prim	980 PI
05GP032	10/16/96	12.00	Dup 1	890
05GP032	10/16/96	16.00	Prim	430 PI
05GP033	10/16/96	8.00	Prim	65
05GP033	10/16/96	12.00	Prim	1900 PI
05GP033	10/16/96	16.00	Prim	330 PI
05GP048	11/11/96	4.00	Prim	1100 PI
05GP048	11/11/96	8.00	Prim	730 PI
05GP048	11/11/96	14.00	Prim	4300 PI
05GP063	11/15/96	4.00	Prim	< 10
05GP063	11/15/96	8.00	Prim	< 10
05GP063	11/15/96	16.00	Prim	< 10
05GP064	11/16/96	4.00	Prim	< 10
05GP064	11/16/96	12.00	Prim	< 10
05GP064	11/16/96	16.00	Prim	< 10
05GP064	11/16/96	16.00	Dup 1	< 10
17GP001	11/12/96	4.00	Prim	< 10
17GP001	11/12/96	12.00	Prim	< 10
17GP001	11/12/96	18.00	Prim	[8100] PI

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level The following qualifier(s) exist: P, I

For RCL TPH/DRO

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Soils
 Plant 3 - Former Plating and Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	09GP001	09GP001	09GP001	09GP002	09GP002
	SAMPLE ID	09PS00104	09PS00108	09PS00118	09PS00204	09PS00208
DATE	1996 VRP	11/15/96	11/15/96	11/15/96	11/17/96	11/17/96
DEPTH (ft)	Tier II	4.00	8.00	18.00	4.00	8.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438	1.5	7.3	0.55	2.1	6.6
Barium, Total	10000	12	29	6.5	13	138
Cadmium, Total	730.0	<1	<1	<1	<1	1
Chromium, Total		<5	<5	<5	<5	<5
Copper, Total	1700	4	3.3	3.2	4.7	4.5
Lead, Total	400	<5	<5	<5	<5	<5
Nickel, Total	10000	4.1	3.8	3.3	4.0	4.1
Silver, Total	7300	<1	1.3	<1	<17	1
Zinc, Total	10000	13	11	8	187	12
Sum of Concentrations		34.60	55.70	20.55	41.80	166.20

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 ? = Duplicate records found, Data review required.

Analytical Summary - Inorganics in Soils
 Plant 3 - Former Plating and Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	09GP002	09GP002	17GP001	17GP001	17GP001
	SAMPLE ID	09PS00212	09PS00218	17PS00104	17PS00108	17PS00112
	DATE	1996 VRP	11/17/96	11/17/96	11/12/96	11/12/96
	DEPTH (ft)	Tier II	12.00	18.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Arsenic, Total	438	0.83	0.53	1.7	4.6	0.64
Barium, Total	10000	5.9	7.3	16	22	6.5
Cadmium, Total	730.0	< 1	< 1	< 1	< 1	< 1
Chromium, Total		< 5	< 5	7	< 5	< 5
Copper, Total	1700	3.7	3.5	4.5	4.8	2.9
Lead, Total	400	< 5	< 5	5.1	< 5	< 5
Nickel, Total	10000	2.9	2.8	4.8	6.7	3.4
Silver, Total	7300	< 1	< 1	< 1	< 1	< 1
Zinc, Total	10000	12	9	12	12	9.2
Sum of Concentrations		25.33	23.13	51.10	50.10	22.64

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Soils
 Plant 3 - Former Plating and Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units: in mg/kg)	SITE	17GP001
		SAMPLE ID	17PS00118
		DATE	1996 VRP 11/12/96
		DEPTH (ft)	Tier II 18.00
		RESULT TYPE	Non-Residential Primary
Arsenic, Total		438	0.67
Barium, Total		10000	6.9
Cadmium, Total		730.0	< 1
Chromium, Total			< 5
Copper, Total		1700	3
Lead, Total		400	5.4
Nickel, Total		10000	2.6
Silver, Total		7300	< 1
Zinc, Total		10000	8.1
Sum of Concentrations			26.67

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Plant 3 - Former Plating and Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	05GP048	05GP063	09GP002	09GP004	09GP005	
	SAMPLE ID	1996 VRP	05PW04821	05PW06320	09PW00421	09PW00621	
	DATE	Tier II	11/11/96	11/15/96	11/17/96	07/16/97	07/16/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 2000	< 200	< 200	[850]	[47]
Benzene		98.6	< 5000	[1600]	[6500]	< 500	[930]
Ethylbenzene		10220	< 5000	2900	< 500	< 500	< 50
Toluene		20440	< 5000	2400	< 500	< 500	< 50
Xylene (total)		204400	< 5000	8700	< 500	< 500	< 50
Isopropylbenzene		1.02E+4	< 5000	< 500	< 500	< 500	< 50
Naphthalene		4088	< 5000	< 500	< 500	< 500	< 50
1,2,4-Trimethylbenzene		5.11E+3	< 5000	1500	< 500	< 500	< 50
1,3,5-Trimethylbenzene		5.11E+3	< 5000	< 500	< 500	< 500	< 50
1,1-Dichloroethane		10220	< 5000	< 500	< 500	< 500	< 50
cis-1,2-Dichloroethane		1022	[88000]	< 500	< 500	[4200]	< 50
1,1,1-Trichloroethane		9198	< 5000	< 500	< 500	< 500	< 50
Trichloroethene		260	[13000]	< 500	< 500	[6100]	< 50
Sum of Concentrations			101000.00	17100.00	6500.00	11150.00	977.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Plant 3 - Former Plating and Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	09GP006	09GP007	09GP008	17GP001	MW-6	
	SAMPLE ID	1996 VRP	09PW00620	09PW00720	09PW00820	17PW00120	
	DATE	Tier II	07/17/97	07/17/97	07/18/97	11/12/96	12/19/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 10	< 2	[410]	< 1000	< 200 JHT
Benzene		98.6	< 25	< 5	[870]	[15000] J	[9800] JHT
Ethylbenzene		10220	< 25	< 5	540	2100 J	2000 JHT
Toluene		20440	< 25	< 5	200	11000 J	17000 JHT
Xylene (total)		204400	< 25	< 5	630	6500 J	7900 JHT
Isopropylbenzene		1.02E+4	< 25	< 5	280	< 100	< 500 JHT
Naphthalene		4088	< 25	< 5	80	< 500	< 500 JHT
1,2,4-Trimethylbenzene		5.11E+3	< 25	< 5	140	560 J	1500 JHT
1,3,5-Trimethylbenzene		5.11E+3	< 25	< 5	65	< 100	< 500 JHT
1,1-Dichloroethane		10220	40	< 5	< 50	2000 J	2200 JHT
cis-1,2-Dichloroethane		1022	57	< 5	370	[5500] J	[120000] JHT
1,1,1-Trichloroethane		9198	< 25	18	< 50	< 500	< 500 JHT
Trichloroethane		260	[340]	120	[300]	< 500	[19000] JHT
Sum of Concentrations			437.00	138.00	3885.00	42660.00	179400.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level The following qualifier(s) exist: J, H, T

Analytical Summary - VOCs in Soils
 Area 12 - Former Chrome Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	05GP054	05GP054	05GP054	05GP054	05GP055
	SAMPLE ID	05PS05404	05PS05408	05PS05412	05PS05414	05PS05504
DATE	1996 VRP	11/13/96	11/13/96	11/13/96	11/13/96	11/13/96
DEPTH (ft)	Tier II	4.00	8.00	12.00	14.00	4.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Ethyl benzene	1000	<0.25	<0.05	35	210 J	<0.05
Xylene (total)	1000	<0.25	<0.1	<2.8	59 J	<0.1
Isopropylbenzene	1.0E+03	<0.25	<0.01	5.3	220 J	<0.01
n-Propylbenzene	1.00E+03	<0.25	<0.01	<2.8	120 J	<0.01
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.01	2.9	<5.7	<0.01
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.01	<2.8	30 J	<0.01
Trichloroethene	25.73	<0.1	<0.05	<1.1	<2.3	<0.05
Sum of Concentrations		0.00	0.00	43.20	639.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Area 12 - Former Chrome Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	05GP055	05GP055	06GP003	12GP001	12GP001	
		SAMPLE ID	05PS05508	05PS05512	06PS00308	12PS00104	12PS00108	
		DATE	1996 VRP	11/13/96	11/13/96	11/12/96	11/12/96	
		DEPTH (ft)	Tier II	8.00	12.00	8.00	4.00	8.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Ethyl benzene		1000	<0.25	<0.25	<0.05	<0.25	<0.25	
Xylene (total)		1000	<0.25	<0.25	<0.1	<0.25	<0.25	
Isopropylbenzene		1.0E + 03	<0.25	<0.25	<0.01	<0.25	<0.25	
n-Propylbenzene		1.00E + 03	<0.25	<0.25	<0.01	<0.25	<0.25	
1,3,5-Trimethylbenzene		1.00E + 03	<0.25	<0.25	<0.01	<0.25	<0.25	
1,2,4-Trimethylbenzene		1.00E + 3	<0.25	<0.25	<0.01	<0.25	<0.25	
Trichloroethene		25.73	<0.1	<0.1	<0.05	<0.1	<0.1	
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Area 12 - Former Chrome Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	12GP001	12GP002	12GP002	12GP002	12GP002	
	SAMPLE ID	12PS00116	12PS00208	12PS00210	12PS00214	12PS00219	
	DATE	1996 VRP	11/12/96	11/14/96	11/14/96	11/14/96	
	DEPTH (ft)	Tier II	16.00	8.00	10.00	14.00	
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	
Ethyl benzene		1000	<0.05	<0.05	<0.25	<0.25	<0.25
Xylene (total)		1000	<0.1	<0.1	<0.25	<0.25	<0.25
Isopropylbenzene		1.0E+03	<0.01	<0.01	<0.25	<0.25	<0.25
n-Propylbenzene		1.00E+03	<0.01	<0.01	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.01	<0.01	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.01	<0.01	<0.25	<0.25	<0.25
Trichloroethene		25.73	0.12	<0.05	<0.1	<0.1	<0.1
Sum of Concentrations			0.12	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Area 12 - Former Chrome Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	12GP003	12GP003	12GP003
	SAMPLE ID	12PS00304	12PS00310	12PS00314
DATE	1996 VRP	11/14/96	11/14/96	11/14/96
DEPTH (ft)	Tier II	4.00	10.00	14.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary
Ethyl benzene	1000	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25
Trichloroethene	25.73	<0.1	<0.1	<0.1
Sum of Concentrations		0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following qualifier(s) exist: J

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - TPH/DROs in Soils
 Area 12 - Former Chrome Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO (mg/kg)
1996 VRPTier IINon-Residential				6000
05GP054	11/13/96	4.00	Prim	130 PI
05GP054	11/13/96	12.00	Prim	490 PI
05GP054	11/13/96	14.00	Prim	4040 PI
05GP055	11/13/96	8.00	Prim	12
05GP055	11/13/96	12.00	Prim	12
06GP003	11/12/96	4.00	Prim	< 10
06GP003	11/12/96	12.00	Prim	< 10
06GP003	11/12/96	19.00	Prim	< 10
06GP005	11/13/96	4.00	Prim	42
06GP005	11/13/96	12.00	Prim	< 10
06GP005	11/13/96	16.00	Prim	< 10
06GP005	11/13/96	16.00	Dup 1	< 10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following qualifier(s) exist: P, I

For RCL TPH/DRO

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Soils
 Area 12 - Former Chrome Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	05GP055	05GP056	05GP055	12GP001	12GP001	
	SAMPLE ID	05PS05504	05PS05508	05PS05512	12PS00104	12PS00108	
	DATE	1996 VRP	11/13/96	11/13/96	11/13/96	11/12/96	
	DEPTH (ft)	Tier II	4.00	8.00	12.00	4.00	
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	
Arsenic, Total		438	3.8	0.92	1.7	6.6	4.3
Barium, Total		10000	9.4	6.9	7.6	32	29
Chromium, Total			5.4	<5	<5	12	6.4
Copper, Total		1700	6.8	6.4	4.6	6	8.3
Lead, Total		400	<5	<5	5	7.2	<5
Nickel, Total		10000	5.8	6.3	3.3	5.8	8.4
Silver, Total		7300	<1	<1	<1	1.4	1.3
Zinc, Total		10000	18	13	13	18	23
Sum of Concentrations			49.20	30.52	35.10	89.00	80.70

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Soils
 Area 12 - Former Chrome Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	12GP001	12GP002	12GP002	12GP002	12GP002	
	SAMPLE ID	12PS00118	12PS00208	12PS00210	12PS00214	12PS00219	
	DATE	1996 VRP	11/12/96	11/14/96	11/14/96	11/14/96	
	DEPTH (ft)	Tier II	16.00	8.00	10.00	14.00	19.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438	1.1	1	0.53	1	2.3	
Barium, Total	10000	8.1	11	7.9	7.5	7.1	
Chromium, Total	<5	<5	<5	<5	<5	15	
Copper, Total	1700	9.4	7.5	25	15	19	
Lead, Total	400	<5	<5	<5	<5	7.8	
Nickel, Total	10000	5.2	5.4	4.6	5.4	19	
Silver, Total	7300	<1	<1	<1	<1	1.5	
Zinc, Total	10000	15	14	15	18	37	
Sum of Concentrations		38.80	38.90	53.03	46.90	172.60	

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Analytical Summary - Inorganics in Soils
 Area 12 - Former Chrome Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	12GP003	12GP003	12GP003
	SAMPLE ID	12PS00304	12PS00310	12PS00314
DATE	1996 VRP	11/14/96	11/14/96	11/14/96
DEPTH (ft)	Tier II	4.00	10.00	14.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary
Arsenic, Total	438	32	1.3	1
Barium, Total	10000	33	4.3	6.3
Chromium, Total		16	< 5	< 5
Copper, Total	1700	8.9	3.4	4.1
Lead, Total	400	10	< 5	< 5
Nickel, Total	10000	5.3	3.5	3.3
Silver, Total	7300	1	< 1	< 1
Zinc, Total	10000	28	10	12
Sum of Concentrations		134.20	22.50	26.70

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Area 12 - Former Chrome Anodizing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	05GP054	05GP055	06GP003	06GP005	12GP001	
	SAMPLE ID	05PW05421	05PW05518	06PW00320	06PW00521	12PW00121	
	1996 VRP						
	DATE	Tier II	11/13/96	11/13/96	11/12/96	11/13/96	11/12/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
1,2,4-Trimethylbenzene	5.11E+3	19	<5	<1	<1	<1	
1,1-Dichloroethane	10220	<5	<5	<5	<5	13	
cis-1,2-Dichloroethane	1022	<5	<5	190	20	130	
1,1,1-Trichloroethane	9198	<5	<5	<5	<5	93	
Trichloroethene	260	<5	<5	81 J	21	150	
Sum of Concentrations		19.00	0.00	271.00	41.00	386.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following qualifier(s) exist: J

Analytical Summary - VOCs in Soils
 Plant 1 - Former Electroplating Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	05GP071	05GP071	05GP071	13GP001	13GP001
		SAMPLE ID	05PS07108	05PS07112	05PS07116	13PS00104	13PS00108
		DATE	1996 VRP 12/09/96	12/09/96	12/09/96	10/23/96	10/23/96
		DEPTH (ft)	Tier II 8.00	8.00	16.00	4.00	8.00
		RESULT TYPE	Non-Residential Primary	Primary	Primary	Primary	Primary
1,1,1-Trichloroethane	1000		<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene	25.73		0.26	0.23	0.26	<0.1	<0.1
Vinyl chloride	0.13		<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations			0.26	0.23	0.26	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 1 - Former Electroplating Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	13GP001	13GP002	13GP002	13GP002	13GP003	
	SAMPLE ID	13PS00116	13PS00206	13PS00210	13PS00215	13PS00322	
	DATE	1996 VRP	10/23/96	10/24/96	10/24/96	11/01/96	
	DEPTH (ft)	Tier II	16.00	6.00	10.00	15.00	22.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1	
Trichloroethene	25.73	<0.1	<0.1	<0.1	<0.1	0.77	
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.1	<0.1	
Sum of Concentrations		0.00	0.00	0.00	0.00	0.77	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 1 - Former Electroplating Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	13GP003	13GP003	13GP004	13GP004	13GP004
		SAMPLE ID	13PS00326	13PS00330	13PS00422	13PS00428	13PS00434
		DATE	1996 VRP	11/01/96	11/01/96	11/01/96	11/01/96
		DEPTH (ft)	Tier II	26.00	30.00	22.00	28.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
1,1,1-Trichloroethane		1000	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene		25.73	0.84	<0.1	0.44	0.34	<0.1
Vinyl chloride		0.13	0.11	<0.1	0.12	<0.1	0.11
Sum of Concentrations			0.95	0.00	0.56	0.34	0.11

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 1 - Former Electroplating Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	13GP005	13GP005	13GP005	13GP006	13GP006	
	SAMPLE ID	13PS00522	13PS00526	13PS00532	13PS00604	13PS00608	
	DATE	1996 VRP	11/03/96	11/03/96	11/03/96	11/15/96	11/15/96
	DEPTH (ft)	Tier II	22.00	28.00	34.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
1,1,1-Trichloroethane		1000	<0.1	<0.1	<0.1	1.3	0.15
Trichloroethene		26.73	0.12	0.91	0.26	2.6	0.67
Vinyl chloride		0.13	[0.15]	0.11	<0.1	<0.1	<0.1
Sum of Concentrations			0.27	1.02	0.26	3.90	0.82

▲
 Saturated soil sample;
 collected below water table.

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Soils
 Plant 1 - Former Electroplating Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	13GP006	13GP006	13GP006	13GP006	13GP007	
	SAMPLE ID	13PS00612	13PS00616	13PS00628	13PS00638	13PS00704	
	DATE	1996.VRP	11/15/96	11/15/96	11/15/96	11/15/96	12/09/96
	DEPTH (ft)	Tier II	12.00	16.00	28.00	38.00	4.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
1,1,1-Trichloroethane	1000	0.16	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene	25.73	0.54	0.25	<0.1	<0.1	<0.1	<0.1
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations		0.70	0.25	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 1 - Former Electroplating Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	13GP007	13GP007	13GP007
	SAMPLE ID	13PS00708	13PS00712	13PS00716
DATE	1996 VRP	12/09/96	12/09/96	12/09/96
DEPTH (ft)	Tier II	8.00	12.00	16.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.05
Trichloroethene	25.73	<0.1	<0.1	<0.05
Vinyl chloride	0.13	<0.1	<0.1	<0.1
Sum of Concentrations		0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Soils
 Plant 1 - Former Electroplating Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	13GP001	13GP001	13GP001	13GP002	13GP002	
		SAMPLE ID	13PS00104	13PS00108	13PS00116	13PS00208	13PS00210	
		DATE	1996 VRP	10/23/96	10/23/96	10/23/96	10/24/96	10/24/96
		DEPTH (ft)	Tier II	4.00	8.00	16.00	6.00	10.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total		438	47	15	0.54	5.2	1.6	
Barium, Total		10000	190	8	16	21	5.2	
Cadmium, Total		730.0	15	1.5	1	<1	<1	
Chromium, Total			28	<5	10	6.8	<5	
Copper, Total		1700	71	4.9	11	7.2	2.5	
Lead, Total		400	170	<5	5.8	<5	<5	
Mercury, Total		87.60	0.38	<0.1	<0.1	<0.1	<0.1	
Nickel, Total		10000	30	8.1	6.2	11	3.7	
Silver, Total		7300	2.8	<1	<1	1.6	<1	
Zinc, Total		10000	210	54	32	39	8.2	
Cyanide, total		10000	---	---	---	---	---	
Sum of Concentrations			764.18	91.50	82.54	91.80	21.20	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Soils
 Plant 1 - Former Electroplating Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	13GP002	13GP003	13GP003	13GP003	13GP004
	SAMPLE ID	13PS00215	13PS00322	13PS00326	13PS00330	13PS00422
	DATE	1996 VRP	10/24/96	11/01/96	11/01/96	11/01/96
	DEPTH (ft)	Tier II	15.00	22.00	26.00	30.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Arsenic, Total	438	1.2	1.3	0.87	1.8	4.9
Barium, Total	10000	6.2	6.1	8.4	19	10
Cadmium, Total	730.0	<1	<1	<1	<1	<1
Chromium, Total		<5	460 J	122	5	12
Copper, Total	1700	3.9	32	6.9	9.2	12
Lead, Total	400	<5	<5	<5	<5	<5
Mercury, Total	87.60	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, Total	10000	3.7	3.5	2.8	7.4	10
Silver, Total	7300	<1	<1	<1	<1	1.8
Zinc, Total	10000	10	9.9	7.7	20	28
Cyanide, total	10000	---	---	---	---	---
Sum of Concentrations		25.00	512.80	148.67	62.40	78.70

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Soils
 Plant 1 - Former Electroplating Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	13GP004	13GP004	13GP005	13GP005	13GP005	
							SAMPLE ID
	DATE	1996 VRP	11/01/96	11/01/96	11/03/96	11/03/96	11/03/96
	DEPTH (ft)	Tier II	28.00	34.00	22.00	28.00	34.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438	1.6	0.63	1.7	0.97	2.4	
Barium, Total	10000	5.1	4.2	6.3	5.5	7.4	
Cadmium, Total	730.0	<1	<1	<1	<1	<1	
Chromium, Total	135	<5	<5	5.4	5.2	5.8	
Copper, Total	1700	7.6	2.5	8.1	19	4.1	
Lead, Total	400	<5	<5	<5	<5	<5	
Mercury, Total	87.60	<0.1	<0.1	<0.1	<0.1	<0.1	
Nickel, Total	10000	8.1	2.4	14	14	10	
Silver, Total	7300	<1	<1	<1	<1	<1	
Zinc, Total	10000	11	<5	31	113	405	
Cyanide, total	10000	---	---	---	---	---	
Sum of Concentrations		168.40	9.73	66.50	167.67	434.70	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Soils
 Plant 1 - Former Electroplating Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	13GP006	13GP006	13GP006	13GP006	13GP006
	SAMPLE ID	13PS00604	13PS00608	13PS00612	13PS00616	13PS00628
DATE	1996 VRP	11/15/96	11/15/96	11/15/96	11/15/96	11/15/96
DEPTH (ft)	Tier II	4.00	8.00	12.00	16.00	28.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438	3.2	2.1	0.74	0.44	1.2
Barium, Total	10000	203	6.6	3.9	2.5	3.9
Cadmium, Total	730.0	9.4	4.1	12	21	<1
Chromium, Total		296	18	18	<5	<5
Copper, Total	1700	79	34	16	130	4.5
Lead, Total	400	1564	38	<5	<5	<5
Mercury, Total	87.60	1.3	<0.1	<0.1	<0.1	<0.1
Nickel, Total	10000	6.9	7.6	17	19	12
Silver, Total	7300	2.07	<1	<1	<1	<1
Zinc, Total	10000	4107	72	92	130	24
Cyanide, total	10000	13	---	---	---	---
Sum of Concentrations		1586.80	182.30	157.64	302.94	45.60

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

? = Duplicate records found, Data review required. [] = Greater than Action Level

Analytical Summary - Inorganics in Soils
 Plant 1 - Former Electroplating Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	13GP006	13GP007	13GP007	13GP007	13GP007
	SAMPLE ID	13PS00638	13PS00704	13PS00708	13PS00712	13PS00716
DATE	1996 VRP	1.1/15/96	12/09/96	12/09/96	12/09/96	12/09/96
DEPTH (ft)	Tier II	38.00	4.00	8.00	12.00	16.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438	2.9	3.3	1	0.52	0.78
Barium, Total	10000	26	36	4.6	3.5	4.1
Cadmium, Total	730.0	<1	<1	<1	<1	7.4
Chromium, Total		7.4	5.8	13	14	7.1
Copper, Total	1700	13	11	5.3	3	6.5
Lead, Total	400	<5	320	<5	<5	<5
Mercury, Total	87.60	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, Total	10000	12	6.4	5.9	3.3	2.8
Silver, Total	7300	1.2	<1	<1	<1	<1
Zinc, Total	10000	26	34	13	7.2	78
Cyanide, total	10000	---	---	---	---	1.7
Sum of Concentrations		88.50	416.50	42.80	31.52	108.38

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following qualifier(s) exist: J

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Plant 1 - Former Electroplating Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	05GP071	13GP001	13GP003	13GP004	13GP004	
	SAMPLE ID	1996 VRP	05PW07119	13PW00119	13PW00319	13PW00419	13QD00419
	DATE	Tier II	12/09/96	10/23/96	11/01/96	11/01/96	11/01/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Duplicate 1
Vinyl chloride		10	[23]	<10	<250	<10	<10
Xylene (total)		204400	12.8	<10	<250	<10	<10
1,2,4-Trimethylbenzene		5.11E+3	5.4	<1	<25	<1	<1
1,1-Dichloroethane		10220	<5	<5	1300	32 J	29
1,1-Dichloroethene		7	<5	<5	[180]	<5	<5
cis-1,2-Dichloroethane		1022	43	<5	380	<5	<5
trans-1,2-Dichloroethane		2040	7.9	<5	<130	<5	<5
1,1,1-Trichloroethane		9198	<5	<5	2700	<5	<5
Trichloroethene		260	210	<5	[2100]	<5	<5
Chloroethane		9.86E+2	---	<10	<250	330 J	300
Sum of Concentrations			301.30	0.00	6660.00	362.00	329.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Detection Level

For BCL VOC1

Critical Comparison on 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Plant 1 - Former Electroplating Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE		13GP005	13GP006	13GP008
	SAMPLE ID	1996 VRP	13PW00520	13PW00620	13QD00620
	DATE	Tier II	11/03/96	11/15/96	11/15/96
	RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1
Vinyl chloride		10	< 100	< 2	< 2
Xylene (total)		204400	< 100	< 5	< 5
1,2,4-Trimethylbenzene		5.11E+3	< 10	< 5	< 5
1,1-Dichloroethane		10220	< 50	190 J	< 5
1,1-Dichloroethene		7	< 50	< 5	< 5
cis-1,2-Dichloroethene		1022	< 50	150 J	< 5
trans-1,2-Dichloroethene		2040	< 50	< 5	< 5
1,1,1-Trichloroethane		9198	< 50	250	290
Trichloroethene		260	[960] J	[1500]	[1600]
Chloroethane		9.86E+2	< 100	< 10	< 10
Sum of Concentrations			960.00	2090.00	1890.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level The following qualifier(s) exist: B, J

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Groundwater
 Plant 1 - Former Electroplating Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	13GP001	13GP003	13GP004	13GP004	13GP005
	SAMPLE ID	13PW00119	13PW00319	13PW00419	13QD00419	13PW00520
	DATE	10/23/96	11/01/96	11/01/96	11/01/96	11/03/96
	RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Primary
	1996 VRP	Tier II				
Cyanide	2044	---	8	80	70	< 5
Arsenic, Dissolved (Filtered)	50	< 1	< 1	27	27	< 1
Barium, Dissolved (Filtered)	7154	56	79	160	170	98
Cadmium, Dissolved (Filtered)	51.1	< 0.2	< 0.2	< 0.2	< 0.2	6.8
Mercury, Dissolved (Filtered)	6.1	< 0.2	< 0.2	< 0.2 UJ	0.2	< 0.2
Nickel, Dissolved (Filtered)	2040	< 10	< 10	18	18	< 10
Selenium, Dissolved (Filtered)	511	< 2	< 2	< 2	< 2	3.9
Zinc, Dissolved (Filtered)	30660	< 20	< 20	< 20	< 20	240
Sum of Concentrations		56.00	87.00	285.00	285.20	348.70

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Groundwater
 Plant 1 - Former Electroplating Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	1996 VRP	13GP006
	SAMPLE ID	1996 VRP	13PW00620
	DATE	Tier II	11/15/96
	RESULT TYPE	Non-Residential	Primary
Cyanide		2044	[5200] PI
Arsenic, Dissolved (Filtered)		50	2.5
Barium, Dissolved (Filtered)		7154	32
Cadmium, Dissolved (Filtered)		51.1	<0.2
Mercury, Dissolved (Filtered)		6.1	<0.2
Nickel, Dissolved (Filtered)		2040	570
Selenium, Dissolved (Filtered)		511	<2
Zinc, Dissolved (Filtered)		30660	640
Sum of Concentrations			6444.50

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level The following qualifier(s) exist: U, J, P, I

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Soils
 Plant 1 - Former Painting and Degreasing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	05GP072	05GP072	05GP072	14GP001	14GP001	
	SAMPLE ID	05PS07204	05PS07208	05PS07212	14PS00108	14PS00112	
	DATE	1996 VRP	12/12/96	12/12/96	12/12/96	10/24/96	10/24/96
	DEPTH (ft)	Tier II	4.00	8.00	12.00	8.00	12.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.25	<0.25	<0.25	
Ethyl benzene	1000	<0.25	<0.25	<0.25	<0.25	<0.25	
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.25	<0.25	
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25	
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25	
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25	
Acenaphthene	1.0E+04	---	---	---	---	---	
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.5	
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1	
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	0.2	<0.1	
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1	
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	<0.1	
Trichloroethene	25.73	<0.1	<0.1	<0.1	2.5	0.83	
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.1	<0.1	
Sum of Concentrations		0.00	0.00	0.00	2.70	0.83	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 1 - Former Painting and Degreasing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	14GP001	14GP002	14GP002	14GP002	14GP002
		SAMPLE ID	14PS00114	14PS00208	14QD00208	14PS00212	14QD00212
		DATE	1996 VRP	10/24/96	10/24/96	10/24/96	10/24/96
		DEPTH (ft)	Tier II	14.00	8.00	8.00	12.00
		RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Primary
							Duplicate 1
Toluene	1000		<0.25	<0.25	<1	<0.13	<0.13
Ethyl benzene	1000		<0.25	<0.25	<1	<0.13	<0.13
Xylene (total)	1000		<0.25	<0.25	<1	<0.26	<0.26
Isopropylbenzene	1.0E+03		<0.25	<0.25	<1	<0.026	<0.026
n-Propylbenzene	1.00E+03		<0.25	<0.25	<1	<0.026	<0.026
1,3,5-Trimethylbenzene	1.00E+03		<0.25	<0.25	<1	<0.026	<0.026
1,2,4-Trimethylbenzene	1.00E+3		<0.25	<0.25	<1	<0.026	<0.026
Naphthalene	10000		<0.25	<0.25	<1	<0.13#	<0.13
Acenaphthene	1.0E+04		---	---	---	<0.33	---
2-Methylnaphthalene	10000		<0.5	<0.5	<2.1	<0.26	<0.26
1,1-Dichloroethane	1000		<0.1	<0.1	<0.1	<0.13	<0.13
cis-1,2-Dichloroethene	102.49		<0.1	<0.1	<0.1	<0.13	<0.13
1,1,1-Trichloroethane	1000		<0.1	<0.1	<0.1	<0.13	<0.13
Tetrachloroethene	8.01		<0.1	<0.1	<0.1	<0.13	<0.13
Trichloroethene	25.73		0.32	8.1 J	24	8.4	6.4
Vinyl chloride	0.13		<0.1	<0.1	<0.41	<0.26	<0.26
Sum of Concentrations			0.32	8.10	24.00	8.40	6.40

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent more than one test method, highest result reported.

Analytical Summary - VOCs in Soils
 Plant 1 - Former Painting and Degreasing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	14GP002	14GP002	14GP002	14GP002	14GP003
	SAMPLE ID	14PS00216	14PS00220	14PS00225	14PS00231	14PS00304
	DATE	1996 VRP	10/24/96	11/01/96	11/01/96	11/01/96
	DEPTH (ft)	Tier II	16.00	20.00	25.00	31.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Toluene	1000	<2.6	<0.25	<0.25	<0.05	<1.4
Ethyl benzene	1000	<2.6	<0.25	<0.25	<0.05	<1.4
Xylene (total)	1000	<2.6	<0.25	<0.25	<0.1	<1.4
Isopropylbenzene	1.0E+03	<2.6	<0.25	<0.25	<0.01	<1.4
n-Propylbenzene	1.00E+03	<2.6	<0.25	<0.25	<0.01	<1.4
1,3,5-Trimethylbenzene	1.00E+03	<2.6	<0.25	<0.25	<0.01	<1.4
1,2,4-Trimethylbenzene	1.00E+3	<2.6	<0.25	<0.25	<0.01	<1.4
Naphthalene	10000	<2.6	<0.25	<0.25	<0.05#	<1.4
Acenaphthene	1.0E+04	---	---	---	<0.33	---
2-Methylnaphthalene	10000	<5.2	<0.5	<0.5	<0.1	<2.7
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.05	<0.1
cis-1,2-Dichloroethane	102.49	<0.1	<0.1	<0.1	<0.05	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.05	<0.1
Tetrachloroethane	8.01	<0.1	<0.1	<0.1	<0.05	<0.1
Trichloroethene	25.73	[37]	5.6	0.41	0.084 J	[40]
Vinyl chloride	0.13	<1	<0.1	<0.1	<0.1	<0.55
Sum of Concentrations		37.00	5.60	0.41	0.08	40.00

↑
 Saturated soil sample;
 collected below water table.

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported. [] = Greater than Action Level

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Soils
 Plant 1 - Former Painting and Degreasing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	14GP003	14GP003	14GP004	14GP004	14GP004
	SAMPLE ID	14PS00308	14PS00316	14PS00404	14PS00408	14PS00416
	DATE	1996 VRP	10/25/96	10/25/96	10/29/96	10/29/96
	DEPTH (ft)	Tier II	8.00	16.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25
Acenaphthene	1.0E+04	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	0.15	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene	25.73	6.4	1.6	<0.1	<0.1	0.19
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations		6.40	1.75	0.00	0.00	0.19

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Analytical Summary - VOCs in Soils
 Plant 1 - Former Painting and Degreasing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	14GP005	14GP005	14GP005	14GP005	14GP005
	SAMPLE ID	14PS00504	14PS00508	14PS00512	14QD00512	14PS00516
DATE	1996 VRP	10/29/96	10/29/96	10/29/96	10/29/96	10/29/96
DEPTH (ft)	Tier II	4.00	8.00	12.00	12.00	16.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1	Primary
Toluene	1000	<0.25	<0.05	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.25	<0.05	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	<0.1	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.01	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.01	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.01	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.01	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	<0.05#	<0.25	<0.25	<0.25
Acenaphthene	1.0E+04	---	<0.33	---	---	---
2-Methylnaphthalene	10000	<0.5	<0.1	<0.5	<0.5	<0.5
1,1-Dichloroethane	1000	<0.1	<0.05	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<0.05	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.05	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.1	<0.05	<0.1	<0.1	<0.1
Trichloroethene	25.73	<0.1	0.098	<0.1 UJ	0.25	0.23
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations		0.00	0.10	0.00	0.25	0.23

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Soils
 Plant 1 - Former Painting and Degreasing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	14GP006	14GP006	14GP006	14GP007	14GP007	
	SAMPLE ID	14PS00604	14PS00610	14PS00616	14PS00704	14PS00710	
	DATE	1996 VRP	10/29/96	10/29/96	10/29/96	10/30/96	10/30/96
	DEPTH (ft)	Tier II	4.00	10.00	16.00	4.00	10.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Acenaphthene	1.0E+04	---	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	0.32	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene	25.73	0.42	0.11	0.19	<0.1	<0.1	<0.1
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations		0.74	0.11	0.19	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 1 - Former Painting and Degreasing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	14GP007	14GP008	14GP008	14GP008	14GP008
		SAMPLE ID	14PS00716	14PS00804	14PS00808	14QD00808	14PS00812
		DATE	1996 VRP	10/30/96	10/30/96	10/30/96	10/30/96
		DEPTH (ft)	Tier II	16.00	4.00	8.00	8.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1
Toluene		1000	<0.25	<0.25	<0.05	---	<0.25
Ethyl benzene		1000	<0.25	<0.25	<0.05	---	<0.25
Xylene (total)		1000	<0.25	<0.25	<0.1	---	<0.25
Isopropylbenzene		1.0E+03	<0.25	<0.25	<0.01	---	<0.25
n-Propylbenzene		1.00E+03	<0.25	<0.25	<0.01	---	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.25	<0.25	<0.01	---	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.25	<0.25	<0.01	---	<0.25
Naphthalene		10000	<0.25	<0.25	<0.05#	<0.33	<0.25
Acenaphthene		1.0E+04	---	---	<0.33	<0.33	---
2-Methylnaphthalene		10000	<0.5	<0.5	<0.1	---	<0.5
1,1-Dichloroethane		1000	<0.1	<0.1	<0.05	---	<0.1
cis-1,2-Dichloroethene		102.49	<0.1	<0.1	<0.05	---	<0.1
1,1,1-Trichloroethane		1000	<0.1	<0.1	<0.05	---	<0.1
Tetrachloroethene		8.01	<0.1	<0.1	<0.05	---	<0.1
Trichloroethene		25.73	<0.1	<0.1	0.063 J	---	<0.1
Vinyl chloride		0.13	<0.1	<0.1	<0.1	---	<0.1
Sum of Concentrations			0.00	0.00	0.06	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Soils
 Plant 1 - Former Painting and Degreasing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	14GP008	14GP009	14GP009	14GP009	14GP010
	SAMPLE ID	14PS00816	14PS00902	14PS00908	14PS00915	14PS01008
	DATE	1996 VRP 10/30/96	10/30/96	10/30/96	10/30/96	10/31/96
	DEPTH (ft)	Tier II 16.00	2.00	8.00	16.00	4.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25
Acenaphthene	1.0E+04	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	0.71
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene	25.73	<0.1	<0.1	<0.1	0.12	<0.1
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations		0.00	0.00	0.00	0.12	0.71

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Analytical Summary - VOCs in Soils
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CONSTITUENT (Units in mg/kg)	SITE	14GP010	14GP010	14GP010	14GP011	14GP011
	SAMPLE ID	14PS01008	14PS01012	14PS01016	14PS01104	14PS01110
DATE	1996 VRP	10/31/96	10/31/96	10/31/96	10/31/96	10/31/96
DEPTH (ft)	Tier II	8.00	12.00	16.00	4.00	10.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.05	<0.25	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.05	<0.25	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.05	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.05	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.05	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.05	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.05	<0.25	<0.25	<0.25	<0.25
Naphthalene	10000	<0.05	<0.25	<0.25	<0.25	<0.25
Acenaphthene	1.0E+04	---	---	---	---	---
2-Methylnaphthalene	10000	0.71	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	1000	<0.05	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethane	102.49	<0.05	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.05	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.05	<0.1	<0.1	<0.1	<0.1
Trichloroethene	25.73	<0.05	<0.1	<0.1	<0.1	<0.1
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations		0.71	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	14GP012	14GP012	14GP012	14GP012	14GP013
SAMPLE ID		14PS01218	14PS01222	14PS01226	14PS01230	14PS01304
DATE	1996 VRP	10/31/96	10/31/96	10/31/96	10/31/96	11/01/96
DEPTH (ft)	Tier II	18.00	22.00	28.00	30.00	8.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.54	<0.25	<120	<0.25
Ethyl benzene	1000	<0.25	<0.54	<0.25	<120	<0.25
Xylene (total)	1000	<0.25	<0.54	<0.25	<120	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.54	<0.25	<120	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.54	<0.25	<120	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.54	<0.25	<120	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.54	<0.25	<120	<0.25
Naphthalene	10000	<0.25	<0.54	<0.25	<120	<0.25
Acenaphthene	1.0E+04	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	<1.1	<0.5	<230	<0.5
1,1-Dichloroethane	1000	<0.1	<0.22	<0.1	880	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	1.4	<0.1	[570]	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.22	<0.1	[1500]	<0.1
Tetrachloroethene	8.01	<0.1	<0.22	<0.1	<46	<0.1
Trichloroethene	25.73	<0.1	23	<0.1	[2300]	1.8
Vinyl chloride	0.13	<0.1	<0.22	<0.1	[320]	<0.1
Sum of Concentrations		0.00	24.40	0.00	5570.00	1.80

↑
 Saturated soil sample;
 collected below water table.

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[] = Greater than Action Level

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	14GP013	14GP013	14GP014	14GP014	14GP014
	SAMPLE ID	14PS01312	14PS01315	14PS01404	14PS01410	14PS01415
DATE	1996 VRP	11/01/96	11/01/96	11/01/96	11/01/96	11/01/96
DEPTH (ft)	Tier II	12.00	15.00	8.00	10.00	15.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25
Acenaphthene	1.0E+04	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene	25.73	7.7	4.3	5.4	1.3	8.3
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations		7.70	4.30	5.40	1.30	8.30

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Analytical Summary - VOCs in Soils
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CONSTITUENT (Units in mg/kg)	SITE	14GP015	14GP015	14GP015	14GP016	14GP016	
	SAMPLE ID	14PS01504	14PS01512	14PS01515	14PS01604	14PS01610	
	DATE	1996 VRP	11/01/96	11/01/96	11/01/96	11/03/96	11/03/96
	DEPTH (ft)	Tier II	8.00	12.00	15.00	4.00	10.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.54	<0.25	<0.25	<0.25	<0.25	
Ethyl benzene	1000	<0.54	<0.25	<0.25	<0.25	<0.25	
Xylene (total)	1000	<0.54	<0.25	<0.25	<0.25	<0.25	
Isopropylbenzene	1.0E+03	<0.54	<0.25	<0.25	<0.25	<0.25	
n-Propylbenzene	1.00E+03	<0.54	<0.25	<0.25	<0.25	<0.25	
1,3,5-Trimethylbenzene	1.00E+03	<0.54	<0.25	<0.25	<0.25	<0.25	
1,2,4-Trimethylbenzene	1.00E+3	<0.54	<0.25	<0.25	<0.25	<0.25	
Naphthalene	10000	<0.54	<0.25	<0.25	<0.25	<0.25	
Acenaphthene	1.0E+04	---	---	---	---	---	
2-Methylnaphthalene	10000	<1.1	<0.5	<0.5	<0.5	<0.5	
1,1-Dichloroethane	1000	<0.22	<0.1	<0.1	<0.1	<0.1	
cis-1,2-Dichloroethene	102.49	<0.22	<0.1	<0.1	<0.1	<0.1	
1,1,1-Trichloroethane	1000	<0.22	<0.1	<0.1	<0.1	<0.1	
Tetrachloroethene	8.01	<0.22	<0.1	<0.1	<0.1	<0.1	
Trichloroethene	25.73	13	12	5.8	0.49	0.88	
Vinyl chloride	0.13	<0.22	<0.1	<0.1	<0.1	<0.1	
Sum of Concentrations		13.00	12.00	5.80	0.49	0.88	

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Analytical Summary - VOCs in Soils
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CONSTITUENT (Units in mg/kg)	SITE	14GP016	14GP016	14GP017	14GP017	14GP017
	SAMPLE ID	14PS01615	14QD01615	14PS01704	14PS01710	14PS01715
	DATE	1996 VRP	11/03/96	11/03/96	11/04/96	11/04/96
	DEPTH (ft)	Tier II	15.00	15.00	4.00	10.00
	RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary
Toluene	1000	<0.25	<2.6	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.25	<2.6	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	<2.6	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.25	<2.6	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	<2.6	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<2.6	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<2.6	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	<2.6	<0.25	<0.25	<0.25
Acenaphthene	1.0E+04	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	<6.2	<0.5	<0.5	<0.5
1,1-Dichloroethane	1000	<0.1	<1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.1	<1	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.1	<1	<0.1	<0.1	<0.1
Trichloroethene	25.73	4.3 J	[58]	0.79	0.16	0.52 J
Vinyl chloride	0.13	<0.1	<1	<0.1	<0.1	<0.1
Sum of Concentrations		4.30	58.00	0.79	0.16	0.52

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[J] = Greater than Action Level

Analytical Summary - VOCs in Soils
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CONSTITUENT (Units in mg/kg)	SITE	14GP017	14GP018	14GP018	14GP018	14GP019	
	SAMPLE ID	14QD01715	14PS01804	14PS01810	14PS01815	14PS01906	
	DATE	1996 VRP	11/04/96	11/04/96	11/04/96	11/06/96	
	DEPTH (ft)	Tier II	15.00	4.00	10.00	15.00	6.00
	RESULT TYPE	Non-Residential	Duplicate 1	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	0.87	<0.25	<0.25	<0.25	
Ethyl benzene	1000	<0.25	<0.25	<0.25	<0.25	<0.25	
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.25	<0.25	
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25	
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25	
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25	
Acenaphthene	1.0E+04	---	---	---	---	---	
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.5	
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1	
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.1	<0.1	
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1	
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	<0.1	
Trichloroethene	25.73	0.26	1.5	0.14	0.72	<0.1	
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.1	<0.1	
Sum of Concentrations		0.26	2.37	0.14	0.72	0.00	

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CONSTITUENT	SITE	14GP019	14GP019	14GP020	14GP020	14GP020
(Units in mg/kg)	SAMPLE ID	14PS01911	14PS01915	14PS02004	14PS02010	14PS02015
DATE	1996 VRP	11/06/96	11/06/96	11/06/96	11/06/96	11/06/96
DEPTH (ft)	Tier II	11.00	15.00	6.00	10.00	15.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25
Acenaphthene	1.0E+04	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene	25.73	<0.1	<0.1	0.31	0.46	0.28
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations		0.00	0.00	0.31	0.46	0.28

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	14GP021	14GP021	14GP021	14GP022	14GP022	
	SAMPLE ID	14PS02104	14PS02108	14PS02112	14PS02204	14PS02212	
	DATE	1996 VRP	12/09/96	12/09/96	12/09/96	12/12/96	12/12/96
	DEPTH (ft)	Tier II	4:00	8:00	12:00	4:00	12:00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.05	<0.25	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.25	<0.05	<0.25	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	<0.1	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.01	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.01	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.01	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.01	<0.25	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	<0.33# PI	<0.25	<0.25	<0.25	<0.25
Acenaphthene	1.0E+04	---	23# PI	---	---	---	---
2-Methylnaphthalene	10000	<0.5	<0.33#	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	1000	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethane	102.49	0.12	0.16	0.14	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1
Trichloroethene	25.73	0.55	0.68	0.51	<0.1	<0.1	0.15
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations		0.67	23.84	0.65	0.00	0.00	0.15

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	14GP022	14GP023	14GP023	14GP023	14GP024
	SAMPLE ID	14PS02214	14PS02304	14PS02308	14PS02314	14PS02408
	DATE	1996 VRP	12/12/96	12/12/96	12/12/96	12/12/96
	DEPTH (ft)	Tier II	14.00	4.00	8.00	14.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25
Acenaphthene	1.0E+04	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene	25.73	0.16	<0.1	<0.1	0.22	<0.1
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations		0.16	0.00	0.00	0.22	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 1 - Former Painting and Degreasing Operations
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 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	14GP025	14GP025	14GP025	14GP025	14GP025
	SAMPLE ID	14PS02504	14QD02504	14PS02508	14QD02508	14PS02512
DATE	1996 VRP	12/13/96	12/13/96	12/13/96	12/13/96	12/13/96
DEPTH (ft)	Tier II	4.00	4.00	8.00	8.00	12.00
RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Duplicate 1	Primary
Toluene	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25
Acenaphthene	1.0E+04	---	---	---	---	---
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene	25.73	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	14GP026	14GP026	14GP026	14GP027	14GP027	
	SAMPLE ID	14PS02604	14PS02608	14PS02614	14PS02704	14PS02708	
	DATE	1996 VRP	12/12/96	12/12/96	12/12/96	12/12/96	
	DEPTH (ft)	Tier II	4.00	8.00	14.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.25	<0.25	<0.25	
Ethyl benzene	1000	<0.25	<0.25	0.32	<0.25	<0.25	
Xylene (total)	1000	<0.25	<0.25	0.76	<0.25	<0.25	
Isopropylbenzene	1.0E+03	<0.25	<0.25	1.7	<0.25	<0.25	
n-Propylbenzene	1.00E+03	<0.25	<0.25	0.29	<0.25	<0.25	
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	0.57	<0.25	<0.25	
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	1.6	<0.25	<0.25	
Naphthalene	10000	<0.25	<0.25	1.2	<0.25	<0.25	
Acenaphthene	1.0E+04	---	---	---	---	---	
2-Methylnaphthalene	10000	<0.5	<0.5	1.8	<0.5	<0.5	
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1	
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.1	<0.1	
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1	
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	<0.1	
Trichloroethene	25.73	0.55	0.55	<0.1	1	3.5	
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.1	<0.1	
Sum of Concentrations		0.55	0.55	8.24	1.00	3.50	

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CONSTITUENT (Units in mg/kg)	SITE	14GP027	14GP028	14GP028	14GP028	14GP029	
	SAMPLE ID	14PS02712	14PS02804	14PS02808	14PS02814	14PS02904	
	DATE	1996 VRP	12/12/96	12/12/96	12/12/96	12/12/96	07/15/97
	DEPTH (ft)	Tier II	12.00	4.00	8.00	14.00	4.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.25	<0.25	<0.05	
Ethylbenzene	1000	<0.25	<0.25	<0.25	<0.25	<0.05	
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.25	<0.05	
Isopropylbenzene	1.0E+03	<0.25	<0.25	<0.25	<0.25	<0.05	
n-Propylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.05	
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.05	
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.05	
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.05	
Acenaphthene	1.0E+04	---	---	---	---	---	
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.1	
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.05	
cis-1,2-Dichloroethane	102.49	<0.1	<0.1	<0.1	<0.1	<0.05	
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.05	
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	<0.05	
Trichloroethene	25.73	1.4	0.48	0.52	0.59	<0.05	
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.1	<0.1	
Sum of Concentrations		1.40	0.48	0.52	0.59	0.00	

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CONSTITUENT (Units in mg/kg)	SITE	14GP029	14GP029	14GP029	14GP030	14GP030
	SAMPLE ID	14PS02910	14QD02910	14PS02916	14PS03004	14PS03008
DATE	1996 VRP	07/16/97	07/15/97	07/15/97	07/15/97	07/15/97
DEPTH (ft)	Tier II	10.00	10.00	16.00	4.00	8.00
RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary	Primary
Toluene	1000	<0.05	<0.05	<0.05	<0.05	<0.05
Ethyl benzene	1000	<0.05	<0.05	<0.05	<0.05	<0.05
Xylene (total)	1000	<0.05	<0.05	<0.05	<0.05	<0.05
Isopropylbenzene	1.0E+03	<0.05	<0.05	<0.05	<0.05	<0.05
n-Propylbenzene	1.00E+03	<0.05	<0.05	<0.05	<0.05	<0.05
1,3,5-Trimethylbenzene	1.00E+03	<0.05	<0.05	<0.05	<0.05	<0.05
1,2,4-Trimethylbenzene	1.00E+3	<0.05	<0.05	<0.05	<0.05	<0.05
Naphthalene	10000	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	1.0E+04	---	---	---	---	---
2-Methylnaphthalene	10000	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethane	1000	<0.05	<0.05	<0.05	<0.05	<0.05
cis-1,2-Dichloroethene	102.49	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,1-Trichloroethane	1000	<0.05	<0.05	<0.05	<0.05	<0.05
Tetrachloroathene	8.01	<0.05	<0.05	<0.05	<0.05	<0.05
Trichloroethene	25.73	<0.05	<0.05	0.19	<0.05	<0.05
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations		0.00	0.00	0.19	0.00	0.00

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CONSTITUENT	(Units in mg/kg)	SITE	14GP030	14GP031	14GP031	14GP031	14GP031
		SAMPLE ID	14PS03015	14PS03104	14PS03108	14PS03112	14PS03116
DATE	1996 VRP	07/15/97	07/15/97	07/15/97	07/15/97	07/15/97	
DEPTH (ft)	Tier II	15.00	4.00	8.00	12.00	16.00	
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary	
Toluene	1000	<0.05	<0.05	<0.05	<0.05	0.28	
Ethyl benzene	1000	<0.05	<0.05	<0.05	<0.05	0.51	
Xylene (total)	1000	<0.05	<0.05	<0.05	<0.05	2.0	
Isopropylbenzene	1.0E+03	<0.05	<0.05	<0.05	<0.05	<0.05	
n-Propylbenzene	1.00E+03	<0.05	<0.05	<0.05	<0.05	<0.05	
1,3,5-Trimethylbenzene	1.00E+03	<0.05	0.077	<0.05	<0.05	<0.05	
1,2,4-Trimethylbenzene	1.00E+3	---	0.19	<0.05	<0.05	<0.05	
Naphthalene	10000	<0.05	<0.05	0.28	<0.05	1.4	
Acenaphthene	1.0E+04	<0.05	---	---	---	---	
2-Methylnaphthalene	10000	<0.05	<0.1	0.69	<0.1	4.1	
1,1-Dichloroethane	1000	<0.05	<0.05	<0.05	<0.05	0.10	
cis-1,2-Dichloroethane	102.49	<0.05	<0.05	<0.05	<0.05	0.15	
1,1,1-Trichloroethane	1000	<0.05	0.066	<0.05	0.10	1.3	
Tetrachloroethene	8.01	<0.05	<0.05	0.12	<0.05	0.51	
Trichloroethene	25.73	<0.05	<0.05	<0.05	0.11	0.62	
Vinyl chloride	0.13	<0.05	<0.1	<0.1	<0.1	<0.1	
Sum of Concentrations		0.00	0.33	1.09	0.21	10.97	

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CONSTITUENT	(Units in mg/kg)	SITE	14GP032	14GP032	14GP032	14GP032	15GP010
		SAMPLE ID	14PS03204	14PS03208	14PS03212	14PS03216	15PS01004
		DATE	1996 VRP 07/15/97	07/15/97	07/15/97	07/15/97	11/06/96
		DEPTH (ft)	Tier II 4.00	8.00	12.00	16.00	4.00
		RESULT TYPE	Non-Residential Primary	Primary	Primary	Primary	Primary
Toluene		1000	<0.05	<0.05	<0.05	<0.05	<0.25
Ethyl benzene		1000	<0.05	<0.05	<0.05	<0.05	<0.25
Xylene (total)		1000	<0.05	<0.05	<0.05	<0.05	<0.25
Isopropylbenzene		1.0E+03	<0.05	<0.05	<0.05	<0.05	<0.25
n-Propylbenzene		1.00E+03	<0.05	<0.05	<0.05	<0.05	<0.25
1,3,5-Trimethylbenzene		1.00E+03	<0.05	<0.05	<0.05	<0.05	<0.25
1,2,4-Trimethylbenzene		1.00E+3	<0.05	<0.05	<0.05	<0.05	<0.25
Naphthalene		10000	<0.05	<0.05	<0.05	<0.05	<0.25
Acenaphthene		1.0E+04	---	---	---	---	---
2-Methylnaphthalene		10000	<0.1	<0.1	<0.1	<0.1	<0.5
1,1-Dichloroethane		1000	<0.05	<0.05	<0.05	<0.05	<0.1
cis-1,2-Dichloroethene		102.49	<0.05	<0.05	<0.05	<0.05	<0.1
1,1,1-Trichloroethane		1000	<0.05	<0.05	<0.05	<0.05	<0.1
Tetrachloroethene		8.01	<0.05	<0.05	<0.05	<0.05	<0.1
Trichloroethene		25.73	<0.05	<0.05	<0.05	<0.05	0.16
Vinyl chloride		0.13	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations			0.00	0.00	0.00	0.00	0.16

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CONSTITUENT (Units in mg/kg)	SITE	15GP010	15GP010	15GP010	15GP010
	SAMPLE ID	15PS01008	15PS01012	16PS01015	15QD01015
	DATE	1996 VRP	11/06/96	11/06/96	11/06/96
	DEPTH (ft)	Tier II	8.00	12.00	15.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary
					Duplicate 1
Toluene	1000	<0.05	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.05	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.1	<0.25	<0.25	<0.25
Isopropylbenzene	1.0E+03	<0.01	<0.25	<0.25	<0.25
n-Propylbenzene	1.00E+03	<0.01	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.01	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.01	<0.25	<0.25	<0.25
Naphthalene	10000	<0.05#	<0.25	<0.25	<0.25
Acenaphthene	1.0E+04	<0.33	---	---	---
2-Methylnaphthalene	10000	<0.1	<0.5	<0.5	<0.5
1,1-Dichloroethane	1000	<0.05	<0.1	<0.1	<0.1
cis-1,2-Dichloroethane	102.49	<0.05	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.05	<0.1	<0.1	<0.1
Tetrachloroethane	8.01	<0.05	<0.1	<0.1	<0.1
Trichloroethene	25.73	0.19	0.24	0.39	0.29
Vinyl chloride	0.13	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations		0.19	0.24	0.39	0.29

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported. The following qualifier(s) exist: J, U, P, I

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT (Units in mg/kg)	SITE	05GP072	05GP072	05GP072	14GP001	14GP001
	SAMPLE ID	05PS07204	05PS07208	05PS07212	14PS00108	14PS00112
DATE	1996-VRP	12/12/96	12/12/96	12/12/96	10/24/96	10/24/96
DEPTH (ft)	Tier II	4.00	8.00	12.00	8.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene	1.0E+04	---	---	---	---	---
Anthracene	1.00E+04	---	---	---	---	---
Benzo (a) anthracene	103.8	---	---	---	---	---
Benzo (b) pyrene	69.85	---	---	---	---	---
Benzo (b) fluoranthene	354.98	---	---	---	---	---
Benzo (ghi) perylene	---	---	---	---	---	---
Benzo (k) fluoranthene	3759.12	---	---	---	---	---
Chrysene	1.00E+04	---	---	---	---	---
Dibenzo (a,h) anthracene	69.86	---	---	---	---	---
Fluoranthene	10000	---	---	---	---	---
Indeno (1,2,3-cd) pyrene	629.17	---	---	---	---	---
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25
Phenanthrene	1.00E+04	---	---	---	---	---
Pyrene	10000	---	---	---	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	14GP001	14GP002	14GP002	14GP002	14GP002
	SAMPLE ID	14PS00114	14PS00208	14QD00208	14PS00212	14QD00212
DATE	1996 VRP	10/24/96	10/24/96	10/24/96	10/24/96	10/24/96
DEPTH (ft)	Tier II	14.00	8.00	8.00	12.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Primary	Duplicate 1
Acenaphthene	1.0E+04	---	---	---	<0.33	---
Anthracene	1.00E+04	---	---	---	<0.33	---
Benzo (a) anthracene	103.8	---	---	---	<0.33	---
Benzo (b) pyrene	69.85	---	---	---	<0.33	---
Benzo (b) fluoranthene	354.98	---	---	---	<0.33	---
Benzo (ghi) perylene	---	---	---	---	<0.33	---
Benzo (k) fluoranthene	3759.12	---	---	---	<0.33	---
Chrysene	1.00E+04	---	---	---	<0.33	---
Dibenzo (a,h) anthracene	69.86	---	---	---	<0.33	---
Fluoranthene	10000	---	---	---	<0.33	---
Indeno (1,2,3-cd) pyrene	629.17	---	---	---	<0.33	---
Naphthalene	10000	<0.25	<0.25	<1	<0.13#	<0.13
Phenanthrene	1.00E+04	---	---	---	<0.33	---
Pyrene	10000	---	---	---	<0.33	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

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= Constituent in more than one test method, highest result reported.

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CONSTITUENT	(Units in mg/kg)	SITE	14GP002	14GP002	14GP002	14GP002	14GP003
		SAMPLE ID	14PS00216	14PS00220	14PS00225	14PS00231	14PS00304
		DATE	1996 VRP 10/24/96	11/01/96	11/01/96	11/01/96	10/25/96
		DEPTH (ft)	Tier II 16.00	20.00	25.00	31.00	4.00
		RESULT TYPE	Non-Residential Primary	Primary	Primary	Primary	Primary
Acenaphthene	1.0E+04		---	---	---	<0.33	---
Anthracene	1.00E+04		---	---	---	<0.33	---
Benzo (a) anthracene	103.8		---	---	---	<0.33	---
Benzo (b) pyrene	69.85		---	---	---	<0.33	---
Benzo (b) fluoranthene	354.98		---	---	---	<0.33	---
Benzo (ghi) perylene			---	---	---	<0.33	---
Benzo (k) fluoranthene	3759.12		---	---	---	<0.33	---
Chrysene	1.00E+04		---	---	---	<0.33	---
Dibenzo (a,h) anthracene	69.86		---	---	---	<0.33	---
Fluoranthene	10000		---	---	---	<0.33	---
Indeno (1,2,3-cd) pyrene	629.17		---	---	---	<0.33	---
Naphthalene	10000		<2.6	<0.25	<0.25	<0.05#	<1.4
Phenanthrene	1.00E+04		---	---	---	<0.33	---
Pyrene	10000		---	---	---	<0.33	---
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

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= Constituent more than one test method, highest result reported.

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CONSTITUENT (Units in mg/kg)	SITE	14GP003	14GP003	14GP004	14GP004	14GP004
	SAMPLE ID	14PS00308	14PS00316	14PS00404	14PS00408	14PS00416
DATE	1996 VRP	10/25/96	10/25/96	10/29/96	10/29/96	10/29/96
DEPTH (ft)	Tier II	8.00	16.00	4.00	8.00	16.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acanaphthene	1.0E + 04	---	---	---	---	---
Anthracene	1.00E + 04	---	---	---	---	---
Benzo (a) anthracene	103.8	---	---	---	---	---
Benzo (b) pyrene	69.85	---	---	---	---	---
Benzo (b) fluoranthene	354.98	---	---	---	---	---
Benzo (ghi) perylene	---	---	---	---	---	---
Benzo (k) fluoranthene	3759.12	---	---	---	---	---
Chrysene	1.00E + 04	---	---	---	---	---
Dibenzo (a,h) anthracene	69.86	---	---	---	---	---
Fluoranthene	10000	---	---	---	---	---
Indeno (1,2,3-cd) pyrene	629.17	---	---	---	---	---
Naphthalene	10000	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Phenanthrene	1.00E + 04	---	---	---	---	---
Pyrene	10000	---	---	---	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	14GP005	14GP005	14GP005	14GP005	14GP005
	SAMPLE ID	14PS00504	14PS00508	14PS00512	14QD00512	14PS00516
DATE	1996 VRP	10/29/96	10/29/96	10/29/96	10/29/96	10/29/96
DEPTH (ft)	Tier II	4.00	8.00	12.00	12.00	16.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1	Primary
Acenaphthene	1.0E+04	---	<0.33	---	---	---
Anthracene	1.00E+04	---	<0.33	---	---	---
Benzo (a) anthracene	103.8	---	<0.33	---	---	---
Benzo (b) pyrene	69.85	---	<0.33	---	---	---
Benzo (b) fluoranthene	354.98	---	<0.33	---	---	---
Benzo (ghi) perylene		---	<0.33	---	---	---
Benzo (k) fluoranthene	3759.12	---	<0.33	---	---	---
Chrysene	1.00E+04	---	<0.33	---	---	---
Dibenzo (a,h) anthracene	69.86	---	<0.33	---	---	---
Fluoranthene	10000.	---	<0.33	---	---	---
Indeno (1,2,3-cd) pyrene	629.17	---	<0.33	---	---	---
Naphthalene	10000	<0.25	<0.05#	<0.25	<0.25	<0.25
Phenanthrene	1.00E+04	---	<0.33	---	---	---
Pyrene	10000.	---	<0.33	---	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

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 # = Constituent more than one test method, highest result reported.

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CONSTITUENT (Units in mg/kg)	SITE	14GP006	14GP006	14GP006	14GP007	14GP007	
	SAMPLE ID	14PS00604	14PS00610	14PS00616	14PS00704	14PS00710	
	DATE	1996 VRP	10/29/96	10/29/96	10/29/96	10/30/96	10/30/96
	DEPTH (ft)	Tier II	4.00	10.00	16.00	4.00	10.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene		1.0E + 04	---	---	---	---	---
Anthracene		1.00E + 04	---	---	---	---	---
Benzo (a) anthracene		103.8	---	---	---	---	---
Benzo (b) pyrene		69.85	---	---	---	---	---
Benzo (b) fluoranthene		354.98	---	---	---	---	---
Benzo (ghi) perylene			---	---	---	---	---
Benzo (k) fluoranthene		3759.12	---	---	---	---	---
Chrysene		1.00E + 04	---	---	---	---	---
Dibenzo (a,h) anthracene		69.86	---	---	---	---	---
Fluoranthene		10000	---	---	---	---	---
Indeno (1,2,3-cd) pyrene		629.17	---	---	---	---	---
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25	<0.25
Phenanthrene		1.00E + 04	---	---	---	---	---
Pyrene		10000	---	---	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	14GP007	14GP008	14GP008	14GP008	14GP008	
	SAMPLE ID	14PS00716	14PS00804	14PS00808	14QD00808	14PS00812	
	DATE	1996 VRP	10/30/96	10/30/96	10/30/96	10/30/96	
	DEPTH (ft)	Tier II	16.00	4.00	8.00	8.00	12.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1	Primary
Acenaphthene		1.0E+04	---	---	<0.33	<0.33	---
Anthracene		1.00E+04	---	---	<0.33	<0.33	---
Benzo (a) anthracene		103.8	---	---	<0.33	<0.33	---
Benzo (b) pyrene		69.85	---	---	<0.33	<0.33	---
Benzo (b) fluoranthene		354.98	---	---	<0.33	<0.33	---
Benzo (ghi) perylene			---	---	<0.33	<0.33	---
Benzo (k) fluoranthene		3759.12	---	---	<0.33	<0.33	---
Chrysene		1.00E+04	---	---	<0.33	<0.33	---
Dibenzo (a,h) anthracene		69.86	---	---	<0.33	<0.33	---
Fluoranthene		10000	---	---	<0.33	<0.33	---
Indeno (1,2,3-cd) pyrene		629.17	---	---	<0.33	<0.33	---
Naphthalene		10000	<0.25	<0.25	<0.05#	<0.33	<0.25
Phenanthrene		1.00E+04	---	---	<0.33	<0.33	---
Pyrene		10000	---	---	<0.33	<0.33	---
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent more than one test method, highest result reported.

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CONSTITUENT (Units in mg/kg)	SITE	14GP008	14GP009	14GP009	14GP009	14GP010
	SAMPLE ID	14PS00816	14PS00902	14PS00908	14PS00915	14PS01008
DATE	1996 VRP	10/30/96	10/30/96	10/30/96	10/30/96	10/31/96
DEPTH (ft)	Tier II	16.00	2.00	8.00	15.00	4.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene	1.0E+04	---	---	---	---	---
Anthracene	1.00E+04	---	---	---	---	---
Benzo (a) anthracene	103.8	---	---	---	---	---
Benzo (b) pyrene	69.85	---	---	---	---	---
Benzo (b) fluoranthene	354.98	---	---	---	---	---
Benzo (ghi) perylene		---	---	---	---	---
Benzo (k) fluoranthene	3759.12	---	---	---	---	---
Chrysene	1.00E+04	---	---	---	---	---
Dibenzo (a,h) anthracene	69.86	---	---	---	---	---
Fluoranthene	10000	---	---	---	---	---
Indeno (1,2,3-cd) pyrene	629.17	---	---	---	---	---
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25
Phenanthrene	1.00E+04	---	---	---	---	---
Pyrene	10000	---	---	---	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	14GP010	14GP010	14GP010	14GP011	14GP011	
	SAMPLE ID	14PS01008	14PS01012	14PS01016	14PS01104	14PS01110	
	DATE	1996 VRP	10/31/96	10/31/96	10/31/96	10/31/96	
	DEPTH (ft)	Tier II	8.00	12.00	16.00	4.00	10.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene		1.0E+04	---	---	---	---	
Anthracene		1.00E+04	---	---	---	---	
Benzo (a) anthracene		103.8	---	---	---	---	
Benzo (b) pyrene		69.85	---	---	---	---	
Benzo (b) fluoranthene		354.98	---	---	---	---	
Benzo (ghi) perylene			---	---	---	---	
Benzo (k) fluoranthene		3759.12	---	---	---	---	
Chrysene		1.00E+04	---	---	---	---	
Dibenzo (a,h) anthracene		69.86	---	---	---	---	
Fluoranthene		10000	---	---	---	---	
Indeno (1,2,3-cd) pyrene		629.17	---	---	---	---	
Naphthalene		10000	<0.05	<0.25	<0.25	<0.25	
Phenanthrene		1.00E+04	---	---	---	---	
Pyrene		10000	---	---	---	---	
Sum of Concentrations			0.00	0.00	0.00	0.00	

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CONSTITUENT (Units in mg/kg)	SITE	14GP011	14GP012	14GP012	14GP012	14GP012
	SAMPLE ID	14PS01116	14PS01204	14PS01208	14PS01212	14PS01215
DATE	1996 VRP	10/31/96	10/31/96	10/31/96	10/31/96	10/31/96
DEPTH (ft)	Tier II	16.00	4.00	8.00	12.00	15.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene	1.0E+04	<0.33	---	<0.33	---	---
Anthracene	1.00E+04	<0.33	---	<0.33	---	---
Benzo (a) anthracene	103.8	<0.33	---	<0.33	---	---
Benzo (b) pyrene	69.85	<0.33	---	<0.33	---	---
Benzo (b) fluoranthene	354.98	<0.33	---	<0.33	---	---
Benzo (ghi) perylene		<0.33	---	<0.33	---	---
Benzo (k) fluoranthene	3759.12	<0.33	---	<0.33	---	---
Chrysene	1.00E+04	<0.33	---	<0.33	---	---
Dibenzo (a,h) anthracene	69.86	<0.33	---	<0.33	---	---
Fluoranthene	10000	<0.33	---	<0.33	---	---
Indeno (1,2,3-cd) pyrene	629.17	<0.33	---	<0.33	---	---
Naphthalene	10000	<0.05#	<0.25	<0.13#	<0.25	<0.25
Phenanthrene	1.00E+04	<0.33	---	<0.33	---	---
Pyrene	10000	<0.33	---	<0.33	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

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= Constituent in more than one test method, highest result reported.

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CONSTITUENT (Units in mg/kg)	SITE	14GP012	14GP012	14GP012	14GP012	14GP013	
	SAMPLE ID	14PS01218	14PS01222	14PS01226	14PS01230	14PS01304	
	DATE	1996 VRP	10/31/96	10/31/96	10/31/96	11/01/96	
	DEPTH (ft)	Tier II	18.00	22.00	26.00	30.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene		1.0E+04	---	---	---	---	---
Anthracene		1.00E+04	---	---	---	---	---
Benzo (a) anthracene		103.8	---	---	---	---	---
Benzo (b) pyrene		69.85	---	---	---	---	---
Benzo (b) fluoranthene		354.98	---	---	---	---	---
Benzo (ghi) perylene			---	---	---	---	---
Benzo (k) fluoranthene		3759.12	---	---	---	---	---
Chrysene		1.00E+04	---	---	---	---	---
Dibenzo (a,h) anthracene		69.86	---	---	---	---	---
Fluoranthene		10000	---	---	---	---	---
Indeno (1,2,3-cd) pyrene		629.17	---	---	---	---	---
Naphthalene		10000	<0.25	<0.54	<0.25	<120	<0.25
Phenanthrene		1.00E+04	---	---	---	---	---
Pyrene		10000	---	---	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	14GP013	14GP013	14GP014	14GP014	14GP014
	SAMPLE ID	14PS01312	14PS01315	14PS01404	14PS01410	14PS01415
	DATE	1996 VRP	11/01/96	11/01/96	11/01/96	11/01/96
	DEPTH (ft)	Tier II	12.00	15.00	8.00	10.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Acenaphthene		1.0E+04	---	---	---	---
Anthracene		1.00E+04	---	---	---	---
Benzo (a) anthracene		103.8	---	---	---	---
Benzo (b) pyrene		69.85	---	---	---	---
Benzo (b) fluoranthene		354.98	---	---	---	---
Benzo (ghi) perylene		---	---	---	---	---
Benzo (k) fluoranthene		3759.12	---	---	---	---
Chrysene		1.00E+04	---	---	---	---
Dibenzo (a,h) anthracene		69.86	---	---	---	---
Fluoranthene		10000	---	---	---	---
Indeno (1,2,3-cd) pyrene		629.17	---	---	---	---
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25
Phenanthrene		1.00E+04	---	---	---	---
Pyrene		10000	---	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	14GP015	14GP015	14GP015	14GP016	14GP016	
	SAMPLE ID	14PS01504	14PS01512	14PS01515	14PS01604	14PS01610	
	DATE	1996 VRP	11/01/96	11/01/96	11/01/96	11/03/96	11/03/96
	DEPTH (ft)	Tier II	8.00	12.00	15.00	4.00	10.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene		1.0E+04	---	---	---	---	---
Anthracene		1.00E+04	---	---	---	---	---
Benzo (a) anthracene		103.8	---	---	---	---	---
Benzo (b) pyrene		69.85	---	---	---	---	---
Benzo (b) fluoranthene		354.98	---	---	---	---	---
Benzo (ghi) perylene			---	---	---	---	---
Benzo (k) fluoranthene		3759.12	---	---	---	---	---
Chrysene		1.00E+04	---	---	---	---	---
Dibenzo (a,h) anthracene		69.86	---	---	---	---	---
Fluoranthene		10000	---	---	---	---	---
Indeno (1,2,3-cd) pyrene		629.17	---	---	---	---	---
Naphthalene		10000	<0.54	<0.25	<0.25	<0.25	<0.25
Phenanthrene		1.00E+04	---	---	---	---	---
Pyrene		10000	---	---	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	14GP016	14GP016	14GP017	14GP017	14GP017	
	SAMPLE ID	14PS01615	14QD01615	14PS01704	14PS01710	14PS01715	
	DATE	1996 VRP	11/03/96	11/03/96	11/04/96	11/04/96	11/04/96
	DEPTH (ft)	Tier II	15.00	15.00	4.00	10.00	15.00
	RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary	Primary
Acenaphthene	1.0E+04	---	---	---	---	---	
Anthracene	1.00E+04	---	---	---	---	---	
Benzo (a) anthracene	103.8	---	---	---	---	---	
Benzo (b) pyrene	69.85	---	---	---	---	---	
Benzo (b) fluoranthene	354.98	---	---	---	---	---	
Benzo (ghi) perylene	---	---	---	---	---	---	
Benzo (k) fluoranthene	3759.12	---	---	---	---	---	
Chrysene	1.00E+04	---	---	---	---	---	
Dibenzo (a,h) anthracene	69.86	---	---	---	---	---	
Fluoranthene	10000	---	---	---	---	---	
Indeno (1,2,3-cd) pyrene	629.17	---	---	---	---	---	
Naphthalene	10000	<0.25	<2.6	<0.25	<0.25	<0.25	
Phenanthrene	1.00E+04	---	---	---	---	---	
Pyrene	10000	---	---	---	---	---	
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

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CONSTITUENT (Units in mg/kg)	SITE	14GP017	14GP018	14GP018	14GP018	14GP019
	SAMPLE ID	14QD01715	14PS01804	14PS01810	14PS01815	14PS01906
DATE	1996 VRP	11/04/96	11/04/96	11/04/96	11/04/96	11/06/96
DEPTH (ft)	Tier II	15.00	4.00	10.00	15.00	6.00
RESULT TYPE	Non-Residential	Duplicate 1	Primary	Primary	Primary	Primary
Acenaphthene	1.0E+04	---	---	---	---	---
Anthracene	1.00E+04	---	---	---	---	---
Benzo (a) anthracene	103.8	---	---	---	---	---
Benzo (b) pyrene	69.85	---	---	---	---	---
Benzo (b) fluoranthene	354.98	---	---	---	---	---
Benzo (ghi) perylene	---	---	---	---	---	---
Benzo (k) fluoranthene	3759.12	---	---	---	---	---
Chrysene	1.00E+04	---	---	---	---	---
Dibenzo (a,h) anthracene	69.86	---	---	---	---	---
Fluoranthene	10000	---	---	---	---	---
Indeno (1,2,3-cd) pyrene	629.17	---	---	---	---	---
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25
Phenanthrene	1.00E+04	---	---	---	---	---
Pyrene	10000	---	---	---	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	14GP019	14GP019	14GP020	14GP020	14GP020
	SAMPLE ID	14PS01911	14PS01915	14PS02004	14PS02010	14PS02015
	DATE	1996 VRP	11/06/96	11/06/96	11/06/96	11/06/96
	DEPTH (ft)	Tier II	11.00	15.00	6.00	10.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Acenaphthene		1.0E+04	---	---	---	---
Anthracene		1.00E+04	---	---	---	---
Benzo (a) anthracene		103.8	---	---	---	---
Benzo (b) pyrene		69.85	---	---	---	---
Benzo (b) fluoranthene		354.98	---	---	---	---
Benzo (ghi) perylene			---	---	---	---
Benzo (k) fluoranthene		3759.12	---	---	---	---
Chrysene		1.00E+04	---	---	---	---
Dibenzo (a,h) anthracene		69.86	---	---	---	---
Fluoranthene		10000	---	---	---	---
Indeno (1,2,3-cd) pyrene		629.17	---	---	---	---
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25
Phenanthrene		1.00E+04	---	---	---	---
Pyrene		10000	---	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	14GP021	14GP021	14GP021	14GP022	14GP022
	SAMPLE ID	14PS02104	14PS02108	14PS02112	14PS02204	14PS02212
DATE	1996 VRP	12/09/96	12/09/96	12/09/96	12/12/96	12/12/96
DEPTH (ft)	Tier II	4.00	8.00	12.00	4.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene	1.0E+04	---	23# PI	---	---	---
Anthracene	1.00E+04	---	1.2# PI	---	---	---
Benzo (a) anthracene	103.8	---	8.2# PI	---	---	---
Benzo (b) pyrene	69.85	---	6.9# PI	---	---	---
Benzo (b) fluoranthene	364.98	---	6.97# PI	---	---	---
Benzo (ghi) perylene		---	9.0# PI	---	---	---
Benzo (k) fluoranthene	3759.12	---	3.47# PI	---	---	---
Chrysene	1.00E+04	---	8.7# PI	---	---	---
Dibenzo (a,h) anthracene	69.86	---	3.5# PI	---	---	---
Fluoranthene	10000	---	31# PI	---	---	---
Indeno (1,2,3-cd) pyrene	629.17	---	5.8# PI	---	---	---
Naphthalene	10000	<0.25	<0.33# PI	<0.25	<0.25	<0.25
Phenanthrene	1.00E+04	---	12# PI	---	---	---
Pyrene	10000	---	19# PI	---	---	---
Sum of Concentrations		0.00	138.60	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 # = Constituent more than one test method, highest result reported. ? = Duplicate record and, Data review required.

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CONSTITUENT (Units in mg/kg)	SITE	14GP022	14GP023	14GP023	14GP023	14GP024
	SAMPLE ID	14PS02214	14PS02304	14PS02308	14PS02314	14PS02408
DATE	1996 VRP	12/12/96	12/12/96	12/12/96	12/12/96	12/12/96
DEPTH (ft)	Tier II	14.00	4.00	8.00	14.00	8.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene	1.0E+04	---	---	---	---	---
Anthracene	1.00E+04	---	---	---	---	---
Benzo (a) anthracene	103.8	---	---	---	---	---
Benzo (b) pyrene	69.85	---	---	---	---	---
Benzo (b) fluoranthene	354.98	---	---	---	---	---
Benzo (ghi) perylene	---	---	---	---	---	---
Benzo (k) fluoranthene	3759.12	---	---	---	---	---
Chrysene	1.00E+04	---	---	---	---	---
Dibenzo (a,h) anthracene	69.86	---	---	---	---	---
Fluoranthene	10000	---	---	---	---	---
Indeno (1,2,3-cd) pyrene	629.17	---	---	---	---	---
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25
Phenanthrene	1.00E+04	---	---	---	---	---
Pyrene	10000	---	---	---	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

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Analytical Summary - PNAs in Soils
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CONSTITUENT (Units in mg/kg)	SITE	14GP025	14GP025	14GP025	14GP025	14GP025
	SAMPLE ID	14PS02504	14QD02504	14PS02508	14QD02508	14PS02512
	DATE	1996 VRP	12/13/96	12/13/96	12/13/96	12/13/96
	DEPTH (ft)	Tier II	4.00	4.00	8.00	8.00
	RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Duplicate 1
Acenaphthene		1.0E + 04	---	---	---	---
Anthracene		1.00E + 04	---	---	---	---
Benzo (a) anthracene		103.8	---	---	---	---
Benzo (b) pyrene		69.85	---	---	---	---
Benzo (b) fluoranthene		354.98	---	---	---	---
Benzo (ghi) perylene			---	---	---	---
Benzo (k) fluoranthene		3759.12	---	---	---	---
Chrysene		1.00E + 04	---	---	---	---
Dibenzo (a,h) anthracene		69.86	---	---	---	---
Fluoranthene		10000	---	---	---	---
Indeno (1,2,3-cd) pyrene		629.17	---	---	---	---
Naphthalene		10000	< 0.25	< 0.25	< 0.25	< 0.25
Phenanthrene		1.00E + 04	---	---	---	---
Pyrene		10000	---	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00

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Analytical Summary - PNAs in Soils
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CONSTITUENT (Units in mg/kg)	SITE	14GP026	14GP026	14GP026	14GP027	14GP027
	SAMPLE ID	14PS02604	14PS02608	14PS02614	14PS02704	14PS02708
	DATE	1996 VRP	12/12/96	12/12/96	12/12/96	12/12/96
	DEPTH (ft)	Tier II	4.00	8.00	14.00	4.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Acenaphthene		1.0E+04	---	---	---	---
Anthracene		1.00E+04	---	---	---	---
Benzo (a) anthracene		103.8	---	---	---	---
Benzo (b) pyrene		69.85	---	---	---	---
Benzo (b) fluoranthene		354.98	---	---	---	---
Benzo (ghi) perylene			---	---	---	---
Benzo (k) fluoranthene		3759.12	---	---	---	---
Chrysene		1.00E+04	---	---	---	---
Dibenzo (a,h) anthracene		69.86	---	---	---	---
Fluoranthene		10000	---	---	---	---
Indeno (1,2,3-cd) pyrene		629.17	---	---	---	---
Naphthalene		10000	<0.25	<0.25	1.2	<0.25
Phenanthrene		1.00E+04	---	---	---	---
Pyrene		10000	---	---	---	---
Sum of Concentrations			0.00	0.00	1.20	0.00

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Analytical Summary - PNAs in Soils
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CONSTITUENT	(Units in mg/kg)	SITE	14GP029	14GP029	14GP029	14GP030	14GP030	
		SAMPLE ID	14PS02910	14QD02910	14PS02916	14PS03004	14PS03008	
		DATE	1996 VRP	07/15/97	07/15/97	07/15/97	07/15/97	
		DEPTH (ft)	Tier II	10.00	10.00	16.00	4.00	8.00
		RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary	Primary
Acenaphthene			1.0E+04	---	---	---	---	---
Anthracene			1.00E+04	---	---	---	---	---
Benzo (a) anthracene			103.8	---	---	---	---	---
Benzo (b) pyrene			69.85	---	---	---	---	---
Benzo (b) fluoranthene			354.98	---	---	---	---	---
Benzo (ghi) perylene				---	---	---	---	---
Benzo (k) fluoranthene			3759.12	---	---	---	---	---
Chrysene			1.00E+04	---	---	---	---	---
Dibenzo (a,h) anthracene			69.86	---	---	---	---	---
Fluoranthene			10000	---	---	---	---	---
Indeno (1,2,3-cd) pyrene			629.17	---	---	---	---	---
Naphthalene			10000	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene			1.00E+04	---	---	---	---	---
Pyrene			10000	---	---	---	---	---
Sum of Concentrations				0.00	0.00	0.00	0.00	0.00

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CONSTITUENT (Units in mg/kg)	SITE	14GP030	14GP031	14GP031	14GP031	14GP031
	SAMPLE ID	14PS03015	14PS03104	14PS03108	14PS03112	14PS03116
	DATE	1996 VRP	07/15/97	07/15/97	07/15/97	07/15/97
	DEPTH (ft)	Tier II	15.00	4.00	8.00	12.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Acenaphthene		1.0E+04	<0.05	---	---	---
Anthracene		1.00E+04	---	---	---	---
Benzo (a) anthracene		103.8	---	---	---	---
Benzo (b) pyrene		69.85	---	---	---	---
Benzo (b) fluoranthene		354.98	---	---	---	---
Benzo (ghi) perylene			---	---	---	---
Benzo (k) fluoranthene		3759.12	---	---	---	---
Chrysene		1.00E+04	---	---	---	---
Dibenzo (a,h) anthracene		69.86	---	---	---	---
Fluoranthene		10000	---	---	---	---
Indeno (1,2,3-cd) pyrene		629.17	---	---	---	---
Naphthalene		10000	<0.05	<0.05	0.28	<0.05
Phenanthrene		1.00E+04	---	---	---	---
Pyrene		10000	---	---	---	---
Sum of Concentrations			0.00	0.00	0.28	0.00
						1.40

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Analytical Summary - PNAs in Soils
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CONSTITUENT (Units in mg/kg)	SITE	14GP032	14GP032	14GP032	14GP032	15GP010	
	SAMPLE ID	14PS03204	14PS03208	14PS03212	14PS03216	15PS01004	
	DATE	1996 VRP	07/15/97	07/15/97	07/15/97	07/15/97	11/08/96
	DEPTH (ft)	Tier II	4.00	8.00	12.00	16.00	4.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Acenaphthene		1.0E + 04	---	---	---	---	---
Anthracene		1.00E + 04	---	---	---	---	---
Benzo (a) anthracene		103.8	---	---	---	---	---
Benzo (b) pyrene		69.85	---	---	---	---	---
Benzo (b) fluoranthene		354.98	---	---	---	---	---
Benzo (ghi) perylene			---	---	---	---	---
Benzo (k) fluoranthene		3759.12	---	---	---	---	---
Chrysene		1.00E + 04	---	---	---	---	---
Dibenzo (a,h) anthracene		69.86	---	---	---	---	---
Fluoranthene		10000	---	---	---	---	---
Indeno (1,2,3-cd) pyrene		629.17	---	---	---	---	---
Naphthalene		10000	< 0.05	< 0.05	< 0.05	< 0.05	< 0.25
Phenanthrene		1.00E + 04	---	---	---	---	---
Pyrene		10000	---	---	---	---	---
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

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Analytical Summary - PNAs in Soils
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CONSTITUENT (Units in mg/kg)	SITE	15GP010	15GP010	15GP010	15GP010
	SAMPLE ID	15PS01008	15PS01012	15PS01015	15QD01015
DATE	1996 VRP	11/06/96	11/06/96	11/06/96	11/06/96
DEPTH (ft)	Tier II	8.00	12.00	15.00	15.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1
Acenaphthene	1.0E+04	<0.33	---	---	---
Anthracene	1.00E+04	<0.33	---	---	---
Benzo (a) anthracene	103.8	<0.33	---	---	---
Benzo (b) pyrene	69.85	<0.33	---	---	---
Benzo (b) fluoranthene	354.98	<0.33	---	---	---
Benzo (ghi) perylene		<0.33	---	---	---
Benzo (k) fluoranthene	3759.12	<0.33	---	---	---
Chrysene	1.00E+04	<0.33	---	---	---
Dibenzo (a,h) anthracene	69.86	<0.33	---	---	---
Fluoranthene	10000	<0.33	---	---	---
Indeno (1,2,3-cd) pyrene	629.17	<0.33	---	---	---
Naphthalene	10000	<0.05#	<0.25	<0.25	<0.25
Phenanthrene	1.00E+04	<0.33	---	---	---
Pyrene	10000	<0.33	---	---	---
Sum of Concentrations		0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent more than one test method, highest result reported. The following quality control exist: P, I

Analytical Summary - TPH/DROs in Soils
Area 14 - Former Painting and Degreasing Operations
Voluntary Site Investigation
AlliedSignal Industrial Complex
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SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO (mg/kg)
1996 VRPTier IINon-Residential				6000
05GP072	12/12/96	4.00	Prim	<10
05GP072	12/12/96	8.00	Prim	<10
05GP072	12/12/96	12.00	Prim	<10
14GP001	10/24/96	8.00	Prim	3800 PI
14GP001	10/24/96	12.00	Prim	4300 PI
14GP001	10/24/96	14.00	Prim	2800 PI
14GP002	10/24/96	4.00	Prim	250 PI
14GP002	10/24/96	8.00	Prim	17
14GP002	10/24/96	8.00	Dup 1	11
14GP002	10/24/96	16.00	Prim	<10
14GP003	10/25/96	4.00	Prim	26
14GP003	10/25/96	8.00	Prim	<10
14GP003	10/25/96	16.00	Prim	<10
14GP004	10/29/96	4.00	Prim	<10
14GP004	10/29/96	8.00	Prim	<10
14GP004	10/29/96	16.00	Prim	<10
14GP005	10/29/96	4.00	Prim	<10
14GP005	10/29/96	12.00	Prim	<10
14GP005	10/29/96	16.00	Prim	<10
14GP006	10/29/96	4.00	Prim	3900 PI
14GP006	10/29/96	10.00	Prim	<10
14GP006	10/29/96	16.00	Prim	<10
14GP007	10/30/96	4.00	Prim	<10
14GP007	10/30/96	10.00	Prim	<10
14GP007	10/30/96	16.00	Prim	<10
14GP008	10/30/96	4.00	Prim	<10
14GP008	10/30/96	12.00	Prim	<10
14GP008	10/30/96	16.00	Prim	<10
14GP009	10/30/96	2.00	Prim	<10
14GP009	10/30/96	8.00	Prim	<10
14GP009	10/30/96	15.00	Prim	<10
14GP010	10/31/96	4.00	Prim	2400
14GP010	10/31/96	8.00	Prim	2400 PI

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For RCL TPH/DRO

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - TPH/DROs in Soils
Area 14 - Former Painting and Degreasing Operations
Voluntary Site Investigation
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SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO (mg/kg)
1996 VRPTier II Non-Residential				6000
14GP010	10/31/96	12.00	Prim	13
14GP010	10/31/96	16.00	Prim	< 10
14GP011	10/31/96	4.00	Prim	19
14GP011	10/31/96	10.00	Prim	< 10
14GP012	10/31/96	4.00	Prim	< 10
14GP012	10/31/96	12.00	Prim	< 10
14GP012	10/31/96	15.00	Prim	< 10
14GP013	11/01/96	8.00	Prim	65
14GP013	11/01/96	12.00	Prim	< 10
14GP013	11/01/96	15.00	Prim	< 10
14GP013	11/01/96	15.00	Dup 1	< 10
14GP014	11/01/96	8.00	Prim	< 10
14GP014	11/01/96	10.00	Prim	27
14GP014	11/01/96	15.00	Prim	< 10
14GP015	11/01/96	8.00	Prim	< 10
14GP015	11/01/96	12.00	Prim	< 10
14GP015	11/01/96	15.00	Prim	< 10
14GP016	11/03/96	4.00	Prim	28
14GP016	11/03/96	10.00	Prim	270 PI
14GP016	11/03/96	15.00	Prim	280 JPI
14GP016	11/03/96	15.00	Dup 1	820
14GP017	11/04/96	4.00	Prim	13
14GP017	11/04/96	10.00	Prim	< 10
14GP017	11/04/96	15.00	Prim	270
14GP018	11/04/96	4.00	Prim	190 PI
14GP018	11/04/96	10.00	Prim	< 10
14GP018	11/04/96	15.00	Prim	< 10
14GP019	11/06/96	6.00	Prim	54
14GP019	11/06/96	11.00	Prim	< 10
14GP019	11/06/96	15.00	Prim	< 10
14GP020	11/06/96	6.00	Prim	< 10
14GP020	11/06/96	10.00	Prim	< 10
14GP020	11/06/96	15.00	Prim	< 10

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For RCL TPH/DRO

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - TPH/DROs in Soils
Area 14 - Former Painting and Degreasing Operations
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SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO (mg/kg)
1996 VRPTier II	Non-Residential			6000
14GP021	12/09/96	4.00	Prim	<10
14GP021	12/09/96	12.00	Prim	<10
14GP022	12/12/96	4.00	Prim	<10
14GP022	12/12/96	12.00	Prim	<10
14GP022	12/12/96	14.00	Prim	<10
14GP023	12/12/96	4.00	Prim	360
14GP023	12/12/96	8.00	Prim	<10
14GP023	12/12/96	14.00	Prim	1700
14GP024	12/12/96	8.00	Prim	<10
14GP025	12/13/96	4.00	Prim	11
14GP025	12/13/96	8.00	Prim	<10
14GP025	12/13/96	12.00	Prim	<10
14GP026	12/12/96	4.00	Prim	11
14GP026	12/12/96	8.00	Prim	<10
14GP026	12/12/96	14.00	Prim	2300
14GP027	12/12/96	4.00	Prim	11
14GP027	12/12/96	8.00	Prim	<10
14GP027	12/12/96	12.00	Prim	<10
14GP028	12/12/96	4.00	Prim	<10
14GP028	12/12/96	8.00	Prim	12
14GP028	12/12/96	14.00	Prim	<10
15GP010	11/06/96	4.00	Prim	<10
15GP010	11/06/96	12.00	Prim	<10
15GP010	11/06/96	15.00	Prim	<10
15GP010	11/06/96	15.00	Dup 1	<10

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The following qualifier(s) exist: P, I, J

For RCL TPH/DRO

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Soils
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CONSTITUENT (Units in mg/kg)	SITE	14GP001	14GP001	14GP001	14GP002	14GP002
	SAMPLE ID	14PS00108	14PS00112	14PS00114	14PS00208	14QD00208
	DATE	1996 VRP 10/24/96	10/24/96	10/24/96	10/24/96	10/24/96
	DEPTH (ft)	Tier II 8.00	12.00	14.00	8.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1
Arsenic, Total	438	2.2	1.3	1.2	10 J	5.8
Barium, Total	10000	55	6.2	5.1	8.5	9.9
Cadmium, Total	730.0	<1	<1	<1	<1	<1
Chromium, Total		<5	<5	<5	<5	<5
Copper, Total	1700	5.5	2.7	2.9	3.7	2.9
Lead, Total	400	<5	<5	<5	<5	<5
Mercury, Total	87.60	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, Total	10000	4.4	3.1	4.2	5	8
Selenium, Total	7300	<0.5	<0.5	<0.5	<0.5	<0.5
Silver, Total	7300	1.1	<1	<1	<1	1.2
Zinc, Total	10000	17	8.6	12	11 J	19
Sum of Concentrations		85.20	21.90	25.40	38.20	46.80

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Analytical Summary - Inorganics in Soils
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CONSTITUENT	(Units in mg/kg)	SITE	14GP002	14GP002	14GP002	14GP002	14GP003	
		SAMPLE ID	14PS00212	14PS00216	14PS00220	14PS00231	14PS00304	
		DATE	1996 VRP	10/24/96	10/24/96	11/01/96	11/01/96	10/25/96
		DEPTH (ft)	Tier II	12.00	16.00	20.00	31.00	4.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total		438	1.6	1.1	0.54	0.65	5.2	
Barium, Total		10000	4.2	5.5	4.8	4.7	52	
Cadmium, Total		730.0	<1	<1	<1	<1	<1	
Chromium, Total			<5	<5	<5	<5	<5	
Copper, Total		1700	2.8	3.2	3	3.4	5	
Lead, Total		400	<5	<5	<5	<5	5.6	
Mercury, Total		87.60	<0.1	<0.1	<0.1	<0.1	0.12	
Nickel, Total		10000	2.9	6.9	2.1	2.7	4.9	
Selenium, Total		7300	<0.5	<0.5	<0.5	<0.5 J	1	
Silver, Total		7300	<1	<1	<1	<1	1.4	
Zinc, Total		10000	8.6	12	6	11	12	
Sum of Concentrations			20.10	28.70	16.44	22.45	87.22	

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Analytical Summary - Inorganics in Soils
 Plant 1 - Former Painting and Degreasing Operations
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CONSTITUENT (Units in mg/kg)	SITE	14GP003	14GP003	14GP004	14GP004	14GP004
	SAMPLE ID	14PS00308	14PS00316	14PS00404	14PS00408	14PS00416
	DATE	1996 VRP	10/25/96	10/25/96	10/29/96	10/29/96
	DEPTH (ft)	Tier II	8.00	16.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Arsenic, Total	438	9.2	0.65	2.5	0.41	0.48
Barium, Total	10000	1.1	6.2	26	5.4	4.2
Cadmium, Total	730.0	<1	<1	<1	<1	<1
Chromium, Total		<5	<5	<5	<5	<5
Copper, Total	1700	2.8	2.6	3.2	2.5	2.3
Lead, Total	400	<5	<5	<5	<5	<5
Mercury, Total	87.60	<0.1	<0.1	1.1	0.11	1.2
Nickel, Total	10000	6.7	3.8	3.7	2.7	2.9
Selenium, Total	7300	<0.5	<0.5	<0.5	<0.5	<0.5
Silver, Total	7300	<1	<1	<1	<1	<1
Zinc, Total	10000	8.5	7.4	9.5	7.4	6.8
Sum of Concentrations		38.20	20.65	46.00	18.52	17.88

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Soils
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CONSTITUENT	(Units in mg/kg)	SITE	14GP005	14GP005	14GP005	14GP005	14GP005
		SAMPLE ID	14PS00504	14PS00508	14PS00512	14QD00512	14PS00516
		DATE	1996 VRP	10/29/96	10/29/96	10/29/96	10/29/96
		DEPTH (ft)	Tier II	4.00	8.00	12.00	12.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1
							Primary
Arsenic, Total		438	0.86	0.47	<0.25	<0.25	0.42
Barium, Total		10000	23	5.7	4.5	5.1	3.9
Cadmium, Total		730.0	<1	<1	<1	<1	<1
Chromium, Total			<5	<5	<5	<5	<5
Copper, Total		1700	3.7	3	2.3	2.3	2.9
Lead, Total		400	<5	<5	<5	<5	<5
Mercury, Total		87.60	1.3	0.11	0.14 J	0.55	1.1
Nickel, Total		10000	5.8	2.9	2.4	2.5	2.3
Selenium, Total		7300	<0.5	<0.5	<0.5	<0.5	<0.5
Silver, Total		7300	<1	<1	<1	<1	<1
Zinc, Total		10000	13	7.8	6.3	6.5	6
Sum of Concentrations			47.66	19.98	15.64	16.95	16.62

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CONSTITUENT	(Units in mg/kg)	SITE	14GP006	14GP006	14GP006	14GP007	14GP007	
		SAMPLE ID	14PS00604	14PS00610	14PS00616	14PS00704	14PS00710	
		DATE	1996 VRP	10/29/96	10/29/96	10/29/96	10/30/96	10/30/96
		DEPTH (ft)	Tier II	4.00	10.00	16.00	4.00	10.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438		1.3	0.3	0.33	4	1	
Barium, Total	10000		20	5.6	4.5	23	4.3	
Cadmium, Total	730.0		<1	<1	<1	<1	<1	
Chromium, Total			<5	<5	<5	6.2	<5	
Copper, Total	1700		2.8	3.2	2.8	4.4	3.3	
Lead, Total	400		<5	<5	<5	<5	<5	
Mercury, Total	87.60		0.73	0.13	0.11	<0.1	<0.1	
Nickel, Total	10000		2.9	3.1	2.5	7.5	3.4	
Selenium, Total	7300		<0.5	<0.5	<0.5	<0.5	<0.5	
Silver, Total	7300		<1	<1	<1	1.5	<1	
Zinc, Total	10000		7.9	8.1	6.8	12	7.2	
Sum of Concentrations			35.63	20.43	17.04	57.60	19.20	

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CONSTITUENT (Units in mg/kg)	SITE	14GP007	14GP008	14GP008	14GP008	14GP008
	SAMPLE ID	14PS00716	14PS00804	14PS00808	14QD00808	14PS00812
	DATE	1996 VRP	10/30/96	10/30/96	10/30/96	10/30/96
	DEPTH (ft)	Tier II	16.00	4.00	8.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1
						Primary
Arsenic, Total	438	0.53	1.3	0.71	0.69	0.67
Barium, Total	10000	4	3.1	4.6	4.7	5.2
Cadmium, Total	730.0	<1	<1	<1	<1	<1
Chromium, Total		<5	8.1	<5	<5	<5
Copper, Total	1700	3	5.2	3.5	3.4	3
Lead, Total	400	<5	<5	<5	<5	<5
Mercury, Total	87.60	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, Total	10000	3.2	7.3	3.5	3.5	3.5
Selenium, Total	7300	<0.5	<0.5	<0.5	<0.5	<0.5
Silver, Total	7300	<1	1.1	<1	<1	<1
Zinc, Total	10000	7.3	16	7.7	8.1	7.4
Sum of Concentrations		18.03	70.00	20.01	20.39	19.77

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CONSTITUENT (Units in mg/kg)	SITE	14GP008	14GP009	14GP009	14GP009	14GP009	14GP010
	SAMPLE ID	14PS00816	14PS00902	14PS00908	14PS00915	14PS00915	14PS01008
	DATE	1996 VRP 10/30/96	10/30/96	10/30/96	10/30/96	10/30/96	10/31/96
	DEPTH (ft)	Tier II 16.00	2.00	8.00	15.00	15.00	4.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438	0.5	0.93	0.51	0.81	0.81	1
Barium, Total	10000	4.6	34	4.3	4.6	4.6	8.6
Cadmium, Total	730.0	<1	<1	<1	<1	<1	<1
Chromium, Total		<5	<5	<5	<5	<5	<5
Copper, Total	1700	2.8	13	3.1	2.9	2.9	3
Lead, Total	400	<5	<5	<5	<5	<5	<5
Mercury, Total	87.60	<0.1	0.32	0.14	<0.1	<0.1	0.13
Nickel, Total	10000	3.2	3	3	3.4	3.4	3.6
Selenium, Total	7300	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Silver, Total	7300	<1	<1	<1	<1	<1	<1
Zinc, Total	10000	7.2	7.9	6.9	8	8	9.2
Sum of Concentrations		18.20	69.15	17.95	19.71	19.71	25.53

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CONSTITUENT (Units in mg/kg)	SITE	14GP010	14GP010	14GP010	14GP011	14GP011	
	SAMPLE ID	14PS01008	14PS01012	14PS01016	14PS01104	14PS01110	
	DATE	1996 VRP	10/31/96	10/31/96	10/31/96	10/31/96	
	DEPTH (ft)	Tier II	8.00	12.00	16.00	4.00	10.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438	1.0	1.2	0.99	2	0.81	
Barium, Total	10000	8.6	5.4	5	32	4.8	
Cadmium, Total	730.0	<1	<1	<1	<1	<1	
Chromium, Total		<5	<5	<5	<5	<5	
Copper, Total	1700	3.0	2.4	2.3	4.7	2.3	
Lead, Total	400	<5	<5	<5	10	<5	
Mercury, Total	87.60	0.13	0.24	0.18	0.13	0.1	
Nickel, Total	10000	3.6	3	2.8	3.3	2.5	
Selenium, Total	7300	<0.5?	<0.5	<0.5	<0.5	<0.5	
Silver, Total	7300	<1?	<1	<1	<1	<1	
Zinc, Total	10000	9.2?	8.1	7.3	13	7.1	
Sum of Concentrations		25.53	20.34	18.67	65.13	17.61	

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? = Duplicate records found, Data review required.

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

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CONSTITUENT	(Units in mg/kg)	SITE	14GP011	14GP012	14GP012	14GP012	14GP012
		SAMPLE ID	14PS01116	14PS01204	14PS01208	14PS01212	14PS01215
		DATE	1996 VRP	10/31/96	10/31/96	10/31/96	10/31/96
		DEPTH (ft)	Tier II	16.00	4.00	8.00	12.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Arsenic, Total	438		0.87	2.4	0.87	0.85	1.1
Barium, Total	10000		6.2	46	2.9	7.1	6.6
Cadmium, Total	730.0		<1	<1	<1	<1	<1
Chromium, Total			<5	7.1	<5	<5	<5
Copper, Total	1700		2.4	6.3	2.9	5.4	3.5
Lead, Total	400		<5	<5	<5	<5	<5
Mercury, Total	87.60		<0.1	0.11	<0.1	<0.1	<0.1
Nickel, Total	10000		2.6	9.7	3.6	3.6	4.2
Selenium, Total	7300		<0.5	<0.5	<0.5	<0.5	<0.5
Silver, Total	7300		<1	<1	<1	<1	<1
Zinc, Total	10000		8.1	20	9.1	9.1	13
Sum of Concentrations			20.17	91.61	19.27	26.05	28.30

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CONSTITUENT (Units in mg/kg)	SITE	14GP012	14GP012	14GP012	14GP012	14GP013	
	SAMPLE ID	14PS01218	14PS01222	14PS01226	14PS01230	14PS01304	
	DATE	1996 VRP	10/31/96	10/31/96	10/31/96	10/31/96	11/01/96
	DEPTH (ft)	Tier II	18.00	22.00	26.00	30.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438	0.58	1.8	3	3.5	1.8	
Barium, Total	10000	6.1	7.1	6.8	7.4	34	
Cadmium, Total	730.0	<1	<1	<1	<1	<1	
Chromium, Total		<5	5.5	<5	<5	<5	
Copper, Total	1700	2.7	7.8	4.8	5.4	4.1	
Lead, Total	400	<5	<5	<5	<5	<5	
Mercury, Total	87.60	<0.1	<0.1	<0.1	<0.1	0.17	
Nickel, Total	10000	3.5	4.8	4.9	5.3	2.7	
Selenium, Total	7300	<0.5	<0.5	<0.5	<0.5	<0.5	
Silver, Total	7300	<1	<1	<1	<1	<1	
Zinc, Total	10000	6.9	10	54	87	7.4	
Sum of Concentrations		19.78	37.00	73.50	108.60	50.17	

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CONSTITUENT (Units in mg/kg)	SITE	14GP013	14GP013	14GP013	14GP014	14GP014	
	SAMPLE ID	14PS01312	14QD01312	14PS01315	14PS01404	14PS01410	
	DATE	1996 VRP	11/01/96	11/01/96	11/01/96	11/01/96	
	DEPTH (ft)	Tier II	12.00	12.00	15.00	8.00	10.00
	RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary	Primary
Arsenic, Total	438	0.86	0.62	0.63	3.7	0.71	
Barium, Total	10000	4.6	4.9	4.9	39	7.2	
Cadmium, Total	730.0	<1	<1	<1	<1	<1	
Chromium, Total		<5	<5	<5	5.4	<5	
Copper, Total	1700	2.6	3.5	3.2	5.2	3.6	
Lead, Total	400	<5	<5	<5	<5	<5	
Mercury, Total	87.60	0.12 J	<0.1	0.26	<0.1	<0.1	
Nickel, Total	10000	2.7	2.6	3	3.3	3.5	
Selenium, Total	7300	<0.5	<0.5	<0.5	<0.5	<0.5	
Silver, Total	7300	<1	<1	<1	<1	<1	
Zinc, Total	10000	6.7	7.7	7	11	9.5	
Sum of Concentrations		17.58	19.32	18.99	67.60	24.51	

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CONSTITUENT	(Units in mg/kg)	SITE	14GP014	14GP015	14GP015	14GP015	14GP015
		SAMPLE ID	14PS01415	14PS01504	14PS01512	14PS01515	14QD01515
		DATE	1996 VRP	11/01/96	11/01/96	11/01/96	11/01/96
		DEPTH (ft)	Tier II	15.00	8.00	12.00	15.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
							Duplicate 1
Arsenic, Total	438		1.1	1.5	0.71	0.74	0.65
Barium, Total	10000		4.9	26	5.4	4.2	4.9
Cadmium, Total	730.0		<1	<1	<1	<1	<1
Chromium, Total			<5	6.7	<5	<5	<5
Copper, Total	1700		3.1	7.2	3.1	3	2.6
Lead, Total	400		<5	<5	<5	<5	<5
Mercury, Total	87.60		<0.1	<0.1	0.16	<0.1	<0.1
Nickel, Total	10000		3.6	6.2	2.6	2.7	3.1
Selenium, Total	7300		<0.5	<0.5	<0.5	<0.5	<0.5
Silver, Total	7300		<1	<1	<1	<1	<1
Zinc, Total	10000		21	16	7.1	7.3	7
Sum of Concentrations			33.70	63.60	19.07	17.94	18.25

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CONSTITUENT	(Units in mg/kg)	SITE	14GP016	14GP016	14GP016	14GP016	14GP017	
		SAMPLE ID	14PS01604	14PS01610	14PS01615	14QD01615	14PS01704	
		DATE	1996 VRP 11/03/96	11/03/96	11/03/96	11/03/96	11/04/96	
		DEPTH (ft)	Tier II 4.00	4.00	10.00	15.00	15.00	4.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1	Primary
Arsenic, Total		438	1.3	1	0.7	0.7	27	
Barium, Total		10000	28	4	4.6	4.9	42	
Cadmium, Total		730.0	<1	<1	<1	<1	<1	
Chromium, Total			5.9	<5	<5	<5	<5	
Copper, Total		1700	3.6	2.6	2.8	2.8	5.2	
Lead, Total		400	<5	<5	<5	<5	<5	
Mercury, Total		87.60	<0.1	<0.1	<0.1	<0.1	<0.1	
Nickel, Total		10000	4.4	5.1	2.6	2.9	5.9	
Selenium, Total		7300	<0.5	<0.5	<0.5	<0.5	<0.5	
Silver, Total		7300	<1	<1	<1	<1	2.3	
Zinc, Total		10000	12	12	6.2	6.3	17	
Sum of Concentrations			55.20	24.70	16.90	17.60	99.40	

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CONSTITUENT	(Units in mg/kg)	SITE	14GP017	14GP017	14GP017	14GP018	14GP018	
		SAMPLE ID	14PS01710	14PS01715	14QD01715	14PS01804	14PS01810	
		DATE	1996 VRP	11/04/96	11/04/96	11/04/96	11/04/96	
		DEPTH (ft)	Tier II	10.00	15.00	15.00	4.00	10.00
		RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Primary	Primary
Arsenic, Total		438	1.4	1.2	1	22	1.7	
Barium, Total		10000	3.9	4.3	4.2	142	4.2	
Cadmium, Total		730.0	<1	<1	<1	8.2	<1	
Chromium, Total			<5	<5	<5	41	<5	
Copper, Total		1700	1.9	2.1	2.1	56	1.8	
Lead, Total		400	<5	<5	<5	55	<5	
Mercury, Total		87.60	<0.1	<0.1	<0.1	0.47	<0.1	
Nickel, Total		10000	2.6	2.7	3.6	13	2.1	
Selenium, Total		7300	<0.5	<0.5	<0.5	0.71	<0.5	
Silver, Total		7300	<1	<1	<1	2.1	<1	
Zinc, Total		10000	6.5	7.6	8.7	140	5.8	
Sum of Concentrations			16.30	17.90	19.60	480.48	15.60	

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CONSTITUENT (Units in mg/kg)	1996 VRP	SITE	14GP018	14GP019	14GP019	14GP019	14GP020
		SAMPLE ID	14PS01815	14PS01906	14PS01911	14PS01915	14PS02004
DATE	Tier II	11/04/96	11/06/96	11/06/96	11/06/96	11/06/96	
DEPTH (ft)	Non-Residential	15.00	6.00	11.00	15.00	6.00	
RESULT TYPE	Primary	Primary	Primary	Primary	Primary	Primary	
Arsenic, Total	438	0.72	9	0.5	0.53	2.18	
Barium, Total	10000	6.7	70	4.5	6.9	69	
Cadmium, Total	730.0	<1	2.5	<1	<1	1.3	
Chromium, Total		<5	9.3	<5	<5	5.5	
Copper, Total	1700	3.1	11	2.5	2.4	4.1	
Lead, Total	400	<5	6.5	<5	<5	13	
Mercury, Total	87.60	<0.1	<0.1	<0.1	<0.1	<0.1	
Nickel, Total	10000	6.5	8	2.2	2.1	3.9	
Selenium, Total	7300	<0.5	<0.5	<0.5	<0.5	<0.5	
Silver, Total	7300	<1	2.1	<1	<1	1.1	
Zinc, Total	10000	9.3	31	7	7.3	36	
Sum of Concentrations		26.32	149.40	16.70	19.23	136.08	

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CONSTITUENT	(Units in mg/kg)	SITE	14GP020	14GP020	14GP021	14GP021	14GP021
		SAMPLE ID	14PS02010	14PS02015	14PS02104	14PS02108	14PS02112
		DATE	1996 VRP	11/06/96	11/06/96	12/09/96	12/09/96
		DEPTH (ft)	Tier II	10.00	15.00	4.00	8.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Arsenic, Total		438	0.55	0.78	1.9	1.4	0.81
Barium, Total		10000	3.5	5.8	33	24	3.8
Cadmium, Total		730.0	<1	<1	1	<1	<1
Chromium, Total			<5	<5	<5	<5	<5
Copper, Total		1700	2.8	3.4	6.8	7.7	2.7
Lead, Total		400	<5	<5	24	17	<5
Mercury, Total		87.60	<0.1	<0.1	0.2	0.11	<0.1
Nickel, Total		10000	3.2	3.6	4.7	4.7	3.3
Selenium, Total		7300	<0.5	<0.5	<0.5	<0.5	<0.5
Silver, Total		7300	<1	<1	<1	<1	<1
Zinc, Total		10000	8.7	11	21	20	7.9
Sum of Concentrations			18.75	24.58	92.60	74.91	18.51

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CONSTITUENT (Units in mg/kg)	SITE	14GP022	14GP022	14GP022	14GP023	14GP023	
	SAMPLE ID	14PS02204	14PS02212	14PS02214	14PS02304	14PS02308	
	DATE	1996 VRP	12/12/96	12/12/96	12/12/96	12/12/96	
	DEPTH (ft)	Tier II	4.00	12.00	14.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438	1.6	0.65	0.58	1.7	1.4	
Barium, Total	10000	8.3	10	4.8	37	8.1	
Cadmium, Total	730.0	<1	<1	<1	<1	<1	
Chromium, Total		<5	<5	<5	<5	<5	
Copper, Total	1700	4.2	4.4	2.9	5.8	3.2	
Lead, Total	400	<5	<5	<5	15	<5	
Mercury, Total	87.60	<0.1	<0.1	<0.1	<0.1	<0.1	
Nickel, Total	10000	4.9	3.9	3	3.5	3.1	
Selenium, Total	7300	<0.5	<0.5	<0.5	<0.5	<0.5	
Silver, Total	7300	<1	<1	<1	<1	<1	
Zinc, Total	10000	12	13	7.5	12	8.6	
Sum of Concentrations		31.00	31.95	18.78	75.00	24.40	

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CONSTITUENT (Units in mg/kg)	SITE	14GP023	14GP025	14GP025	14GP025	14GP025
	SAMPLE ID	14PS02314	14PS02504	14PS02508	14PS02512	14QD02512
	DATE	1996 VRP	12/12/96	12/13/96	12/13/96	12/13/96
	DEPTH (ft)	Tier II	14.00	4.00	8.00	12.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
						Duplicate 1
Arsenic, Total	438	0.88	8.5	2.9	1.1 J	8.6
Barium, Total	10000	10	16	94	7.8 J	21
Cadmium, Total	730.0	<1	<1	<1	<1	<1
Chromium, Total		13	<5	<5	<5 UJ	7.9
Copper, Total	1700	5.2	3.6	6.2	2.8	4.2
Lead, Total	400	<5	<5	<5	<5	<5
Mercury, Total	87.60	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, Total	10000	4.3	4	5.6	5.1	5.3
Selenium, Total	7300	<0.5	<0.5	<0.5	<0.5	<0.5
Silver, Total	7300	<1	1.1	1.1	<1 UJ	1.1
Zinc, Total	10000	14	14	15	11	14
Sum of Concentrations		47.38	47.20	124.80	27.80	62.10

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CONSTITUENT (Units in mg/kg)	SITE	14GP027	14GP028	14GP028	14GP028
	SAMPLE ID	14PS02712	14PS02804	14PS02808	14PS02814
	DATE	1996 VRP	12/12/96	12/12/96	12/12/96
	DEPTH (ft)	Tier II	12.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary
Arsenic, Total	438	1	1.3	1.4	1.3
Barium, Total	10000	5.7	15	90	11
Cadmium, Total	730.0	<1	<1	<1	<1
Chromium, Total		<5	<5	<5	11
Copper, Total	1700	3.2	5.4	6.3	3.5
Lead, Total	400	<5	<5	<5	<5
Mercury, Total	87.60	<0.1	<0.1	<0.1	<0.1
Nickel, Total	10000	4	4	5.7	4.9
Selenium, Total	7300	<0.5	<0.5	<0.5	<0.5
Silver, Total	7300	<1	<1	<1	<1
Zinc, Total	10000	9.4	12	17	9.8
Sum of Concentrations		23.30	37.70	120.40	41.50

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following qualifier(s) exist: J, U

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Plant 1 - Former Painting and Degreasing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE		14GP003	14GP004	14GP009	14GP011	14GP021
	SAMPLE ID	1996 VRP	14PW00322	14PW00419	14PW00921	14PW01120	14PW02119
	DATE	Tier II	10/25/96	10/29/96	10/30/96	10/31/96	12/09/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 10	7	[39]	< 2	< 2
Toluene		20440	< 5	< 5	< 5	< 5	< 5
Xylene (total)		204400	< 10	< 5	< 5	< 5	6.5 JB
1,2,4-Trimethylbenzene		5.11E+3	< 1	< 5	< 5	< 5	< 5
1,1-Dichloroethane		10220	33 J	68	210	< 5	< 5
1,1-Dichloroethene		7	< 5	< 5	[12]	< 5	< 5
cis-1,2-Dichloroethene		1022	400 J	200	76	< 5	20
trans-1,2-Dichloroethene		2040	< 5	5.3	< 5	< 5	< 5 UJ
1,1,1-Trichloroethane		9198	< 5	27	270	< 5	< 5
Tetrachloroethene		56.1	< 5	< 5	< 5	< 5	< 5
Trichloroethene		260	130 J	160 B	[370]	< 5	140
Sum of Concentrations			563.00	467.30	977.00	0.00	166.50

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Plant 1 - Former Painting and Degreasing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	14GP028	14GP029	14GP031	14GP031	14GP032	
	SAMPLE ID	1996 VRP	14PW02819	14PW02919	14PW03119	14QD03119	14PW03219
	DATE	Tier II	12/12/96	07/15/97	07/15/97	07/15/97	07/15/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1	Primary
Vinyl chloride		10	[32]	<2	[18]	[17]	<2
Toluene		20440	17	<5	<5	<5	<5
Xylene (total)		204400	<5	<5	<5	<5	<5
1,2,4-Trimethylbenzene		5.11E+3	<5	<5	5.3	<5	<5
1,1-Dichloroethane		10220	6.3	71	100	97	180
1,1-Dichloroethene		7	<5	<5	<5	<5	<5
cis-1,2-Dichloroethene		1022	5.8	220	9.3	8.3	41
trans-1,2-Dichloroethene		2040	<5	<5	<5	<5	<5
1,1,1-Trichloroethane		9198	<5	48	7.1	6.6	71
Tetrachloroethene		56.1	<5	<5	<5	<5	<5
Trichloroethene		260	20	210	<5	<5	54
Sum of Concentrations			81.10	549.00	139.70	128.90	346.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Plant 1 - Former Painting and Degreasing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE SAMPLE ID	1996 VRP Tier II	86-10 03/12/96	86-10 06/04/96	86-10 09/04/96	86-10 12/10/96	86-10 03/18/97
		Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	<2	<2	<2	<2	<10
Toluene		20440	<5	<5	<5	<5	<5
Xylene (total)		204400	<5	<5	<5	<5	<10
1,2,4-Trimethylbenzene		5.11E+3	<400	<400			
1,1-Dichloroethane		10220	<5	<5	<5	<5	<5
1,1-Dichloroethene		7	<5	<5	<5	<5	<5
cis-1,2-Dichloroethene		1022	77	75	78	88	76
trans-1,2-Dichloroethene		2040	16	9.2	7.5	12	9.6
1,1,1-Trichloroethane		9198	10	6.4	22	7.2	<5
Tetrachloroethene		56.1	<5	<5	<5	<5	<5
Trichloroethene		260	120	94	120	100	88
Sum of Concentrations			223.00	187.10	232.40	207.20	173.60

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Plant 1 - Former Painting and Degreasing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	86-10	86-10	86-10	86-15	86-15	
	SAMPLE ID	1996 VRP	86-10	86-10	86-10	86-15	
	DATE	Tier II	06/05/97	09/25/97	12/09/97	03/12/96	06/04/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 2	< 10 E	< 10	< 2	< 2
Toluene		20440	< 5	< 5.0 E	< 5.0	< 5	< 5
Xylene (total)		204400	< 5	< 10 E	< 10	< 5	< 5
1,2,4-Trimethylbenzene		5.11E+3	---	---	---	< 400	< 400
1,1-Dichloroethane		10220	< 5	< 5.0 E	< 5.0	< 5	< 5
1,1-Dichloroethene		7	< 5	< 5.0 E	< 5.0	< 5	< 5
cis-1,2-Dichloroethene		1022	95	92 J	98	49	40
trans-1,2-Dichloroethene		2040	12	12 J	12	66	50
1,1,1-Trichloroethane		9198	< 5	< 5.0 E	< 5.0	< 5	< 5
Tetrachloroethene		56.1	< 5	< 5.0 E	< 5.0	< 5	< 5
Trichloroethene		260	100	120 J	120	[400]	[310]
Sum of Concentrations			207.00	224.00	230.00	515.00	400.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[J] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Plant 1 - Former Painting and Degreasing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	86-15	86-15	86-15	86-15	86-15
	SAMPLE ID	1996 VRP	86-15	86-15	86-15	86-15
	DATE	Tier II	09/04/96	12/10/96	03/18/97	06/05/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
						Duplicate 1
Vinyl chloride	10	<2	<2	<10	<2	<2
Toluene	20440	<5	<5	<5	<5	<5
Xylene (total)	204400	<5	<5	<10	<5	<5
1,2,4-Trimethylbenzene	5.11E+3	---	---	---	---	---
1,1-Dichloroethane	10220	<5	<5	<5	<5	<5
1,1-Dichloroethene	7	<5	<5	<5	<5	<5
cis-1,2-Dichloroethane	1022	<5	32	35	38	33
trans-1,2-Dichloroethane	2040	44	49	60	58	53
1,1,1-Trichloroethane	9198	<5	<5	<5	<5	<5
Tetrachloroethene	58.1	<5	<5	<5	<5	<5
Trichloroethene	260	[350]	[320]	[330]	[330]	[290]
Sum of Concentrations		394.00	401.00	425.00	426.00	376.00

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[] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Plant 1 - Former Painting and Degreasing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	86-15	86-15	MW-7	MW-7	MW-7	
	SAMPLE ID	1996 VRP	86-15	86-15	MW-7	MW-7	
	DATE	Tier II	09/25/97	12/09/97	12/19/96	03/18/97	06/05/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 10	< 10	[94]	[63]	[120]
Toluene		20440	< 5.0	< 5.0	< 5	< 5	< 5
Xylene (total)		204400	< 10	< 10	< 5	< 10	< 5
1,2,4-Trimethylbenzene		5.11E+3	---	---	< 400	---	---
1,1-Dichloroethane		10220	< 5.0	< 5.0	29	15	28
1,1-Dichloroethane		7	< 5.0	< 5.0	< 5	< 5	< 5
cis-1,2-Dichloroethane		1022	32	33	280 J	230	350
trans-1,2-Dichloroethane		2040	48	50	< 5	< 5	< 5
1,1,1-Trichloroethane		9198	< 5.0	< 5.0	< 5	< 5	< 5
Tetrachloroethane		56.1	< 5.0	< 5.0	< 5	< 5	< 5
Trichloroethane		260	[260]	[290]	18	< 5	< 5
Sum of Concentrations			340.00	373.00	421.00	308.00	498.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Groundwater
 Plant 1 - Former Painting and Degreasing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	14GP003	14GP011	86-10	86-10	86-10	
	SAMPLE ID	1996 VRP	14PW00322	14PW01120	86-10	86-10	
	DATE	Tier II	10/25/96	10/31/96	09/04/96	03/18/97	09/25/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Cyanide		2044	---	---	ND	< 5	6
Arsenic, Dissolved (Filtered)		50	2	< 1	---	---	---
Barium, Dissolved (Filtered)		7154	44	153	---	---	---
Copper, Dissolved (Filtered)		3800	< 10	< 10	---	---	---
Lead, Dissolved (Filtered)		1.50E + 1	< 1	< 1	---	---	---
Nickel, Dissolved (Filtered)		2040	< 10	< 10	---	---	---
Chromium, Total			---	---	13	< 5	---
Lead, Total			---	---	2.7	2.4	---
Nickel, Total			---	---	5.4	< 20	---
Sum of Concentrations			46.00	153.00	21.10	2.40	6.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Groundwater
 Plant 1 - Former Painting and Degreasing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	86-15	86-15	86-15	MW-7	MW-7	
	SAMPLE ID	1996 VRP	86-15	86-15	MW-7	MW-7	
	DATE	Tier II	09/04/96	03/18/97	09/25/97	12/19/96	03/18/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Cyanide		2044	ND	<5	<5	ND	<5
Arsenic, Dissolved (Filtered)		50	---	---	---	<1	---
Barium, Dissolved (Filtered)		7154	---	---	---	56	---
Copper, Dissolved (Filtered)		3800	---	---	---	<10	---
Lead, Dissolved (Filtered)		1.50E+1	---	---	---	<1	---
Nickel, Dissolved (Filtered)		2040	---	---	---	<10	---
Chromium, Total			4.8	<5	---	---	75
Lead, Total			5.8	6.4	---	---	85
Nickel, Total			11	<20	---	---	110
Sum of Concentrations			21.60	6.40	0.00	56.00	270.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Det

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Groundwater
 Plant 1 - Former Painting and Degreasing Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	MW-7	MW-8	MW-8	
	SAMPLE ID	1996 VRP		MW-8	
	DATE	Tier II	09/25/97	12/19/96	03/18/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary
Cyanide		2044	< 5	5	6
Arsenic, Dissolved (Filtered)		50	---	20	---
Barium, Dissolved (Filtered)		7154	---	150	---
Copper, Dissolved (Filtered)		3800	---	10	---
Lead, Dissolved (Filtered)		1.50E + 1	---	1.1	---
Nickel, Dissolved (Filtered)		2040	---	190	---
Chromium, Total			---	---	< 5
Lead, Total			---	---	12
Nickel, Total			---	---	150
Sum of Concentrations			0.00	376.10	168.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	14GP011	14GP011	14GP011	14GP019	14GP019	
	SAMPLE ID	14PS01104	14PS01110	14PS01118	14PS01906	14PS01911	
	DATE	1996 VRP	10/31/96	10/31/96	10/31/96	11/06/96	11/06/96
	DEPTH (ft)	Tier II	4.00	10.00	16.00	6.00	11.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.05	<0.25	<0.25	
Ethyl benzene	1000	<0.25	<0.25	<0.05	<0.25	<0.25	
Xylene (total)	1000	<0.25	<0.25	<0.1	<0.25	<0.25	
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.01	<0.25	<0.25	
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.01	<0.25	<0.25	
Naphthalene	10000	<0.25	<0.25	<0.05#	<0.25	<0.25	
2-Methylnaphthalene	10000	<0.5	<0.5	<0.1	<0.5	<0.5	
1,1-Dichloroethane	1000	<0.1	<0.1	<0.05	<0.1	<0.1	
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.05	<0.1	<0.1	
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.05	<0.1	<0.1	
Tetrachloroethene	8.01	<0.1	<0.1	<0.05	<0.1	<0.1	
Trichloroethene	25.73	<0.1	<0.1	<0.05	<0.1	<0.1	
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent analyzed by more than one test method, highest result reported.

Analytical Summary - VOCs in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	14GP019	14GP024	14GP031	14GP031	14GP031	
	SAMPLE ID	14PS01915	14PS02408	14PS03104	14PS03108	14PS03112	
	DATE	1996 VRP	11/06/96	12/12/96	07/15/97	07/15/97	07/15/97
	DEPTH (ft)	Tier II	15.00	8.00	4.00	8.00	12.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.05	<0.05	<0.05	
Ethyl benzene	1000	<0.25	<0.25	<0.05	<0.05	<0.05	
Xylene (total)	1000	<0.25	<0.25	<0.05	<0.05	<0.05	
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	0.077	<0.05	<0.05	
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	0.19	<0.05	<0.05	
Naphthalene	10000	<0.25	<0.25	<0.05	0.28	<0.05	
2-Methylnaphthalene	10000	<0.5	<0.5	<0.1	0.69	<0.1	
1,1-Dichloroethane	1000	<0.1	<0.1	<0.05	<0.05	<0.05	
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.05	<0.05	<0.05	
1,1,1-Trichloroethane	1000	<0.1	<0.1	0.066	<0.05	0.10	
Tetrachloroethene	8.01	<0.1	<0.1	<0.05	0.12	<0.05	
Trichloroethene	25.73	<0.1	<0.1	<0.05	<0.05	0.11	
Sum of Concentrations		0.00	0.00	0.33	1.09	0.21	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	14GP031	14GP032	14GP032	14GP032	14GP032
	SAMPLE ID	14PS03116	14PS03204	14PS03208	14PS03212	14PS03216
	DATE	1996 VRP	07/15/97	07/15/97	07/15/97	07/15/97
	DEPTH (ft)	Tier II	16.00	4.00	8.00	12.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Toluene	1000	0.28	<0.05	<0.05	<0.05	<0.05
Ethyl benzene	1000	0.51	<0.05	<0.05	<0.05	<0.05
Xylene (total)	1000	2.0	<0.05	<0.05	<0.05	<0.05
1,3,5-Trimethylbenzene	1.00E+03	<0.05	<0.05	<0.05	<0.05	<0.05
1,2,4-Trimethylbenzene	1.00E+3	<0.05	<0.05	<0.05	<0.05	<0.05
Naphthalene	10000	1.4	<0.05	<0.05	<0.05	<0.05
2-Methylnaphthalene	10000	4.1	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethane	1000	0.10	<0.05	<0.05	<0.05	<0.05
cis-1,2-Dichloroethane	102.49	0.15	<0.05	<0.05	<0.05	<0.05
1,1,1-Trichloroethane	1000	1.3	<0.05	<0.05	<0.05	<0.05
Tetrachloroethene	8.01	0.51	<0.05	<0.05	<0.05	<0.05
Trichloroethene	25.73	0.62	<0.05	<0.05	<0.05	<0.05
Sum of Concentrations		10.97	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	15GP001	15GP001	15GP001	15GP002	15GP002
	SAMPLE ID	15PS00104	15PS00110	15PS00115	15PS00206	15PS00210
DATE	1996 VRP	11/04/96	11/04/96	11/04/96	11/04/96	11/04/96
DEPTH (ft)	Tier II	4.00	10.00	15.00	6.00	10.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene	25.73	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	15GP002	15GP003	15GP003	15GP003	15GP004
	SAMPLE ID	15PS00216	15PS00306	15PS00310	15PS00316	15PS00404
	DATE	1996 VRP	11/04/96	11/04/96	11/04/96	11/04/96
	DEPTH (ft)	Tier II	16.00	6.00	10.00	16.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Toluene	1000	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Ethyl benzene	1000	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Xylene (total)	1000	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
1,3,5-Trimethylbenzene	1.00E+03	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
1,2,4-Trimethylbenzene	1.00E+3	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Naphthalene	10000	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
2-Methylnaphthalene	10000	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloroethane	1000	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
cis-1,2-Dichloroethene	102.49	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,1,1-Trichloroethane	1000	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tetrachloroethene	8.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Trichloroethene	25.73	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	15GP004	15GP004	15GP004	15GP005	15GP005
	SAMPLE ID	15PS00408	15PS00408	15PS00415	15PS00508	15PS00510
	DATE	1996 VRP	11/04/96	11/04/96	11/04/96	11/05/96
	DEPTH (ft)	Tier II	6.00	8.00	15.00	6.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Toluene	1000	0.093 J	<0.25	<0.25	<0.25 E	<0.25
Ethyl benzene	1000	<0.05	<0.25	<0.25	<0.25 E	<0.25
Xylene (total)	1000	<0.05	<0.25	<0.25	<0.25 E	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.05	<0.25	<0.25	<0.25 E	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.05	<0.25	<0.25	<0.25 E	<0.25
Naphthalene	10000	<0.33#	<0.25	<0.25	<0.25 E	<0.25
2-Methylnaphthalene	10000	<0.33#	<0.5	<0.5	<0.5 E	<0.5
1,1-Dichloroethane	1000	<0.05	<0.1	<0.1	0.68 J	<0.1
cis-1,2-Dichloroethane	102.49	<0.05	<0.1	<0.1	<0.1 E	<0.1
1,1,1-Trichloroethane	1000	<0.05	<0.1	<0.1	<0.1 E	0.8
Tetrachloroethene	8.01	<0.05	<0.1	<0.1	<0.1 E	0.17
Trichloroethene	26.73	0.35 J	<0.1	<0.1	0.14 J	0.17
Sum of Concentrations		0.44	0.00	0.00	0.82	1.14

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Analytical Summary - VOCs in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	15GP005	15GP006	15GP006	15GP006	15GP007
		SAMPLE ID	15PS00515	15PS00606	15PS00610	15PS00617	15PS00704
DATE	1996 VRP	11/05/96	11/05/96	11/05/96	11/05/96	11/05/96	
DEPTH (ft)	Tier II	15.00	6.00	10.00	17.00	6.00	
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary	
Toluene	1000	<0.25	<0.25	<0.25	<0.25	<0.25	
Ethyl benzene	1000	<0.25	<0.25	<0.25	<0.25	<0.25	
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.25	<0.25	
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25	
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25	
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.5	
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1	
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.1	<0.1	
1,1,1-Trichloroethane	1000	0.15	<0.1	<0.1	<0.1	<0.1	
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	0.13	
Trichloroethene	25.73	<0.1	<0.1	<0.1	<0.1	<0.1	
Sum of Concentrations		0.15	0.00	0.00	0.00	0.13	

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Analytical Summary - VOCs in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	15GP007	15GP007	15GP008	15GP008	15GP008
	SAMPLE ID	15PS00711	15PS00718	15PS00804	15PS00808	15PS00812
DATE	1996 VRP	11/05/96	11/05/96	11/05/96	11/05/96	11/05/96
DEPTH (ft)	Tier II	10.00	18.00	6.00	8.00	12.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.25	<0.25	<0.05
Ethyl benzene	1000	<0.25	<0.25	<0.25	<0.25	<0.05
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.25	<0.1
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.01
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.01
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.05#
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.1
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.05
cis-1,2-Dichloroethene	102.49	<0.1	<0.1	<0.1	<0.1	<0.05
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.05
Tetrachloroethene	8.01	0.19	<0.1	<0.1	<0.1	<0.05
Trichloroethene	25.73	<0.1	<0.1	<0.1	<0.1	<0.05
Sum of Concentrations		0.19	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	15GP008	15GP008	15GP009	15GP009	15GP009	
	SAMPLE ID	15PS00815	15QD00808	15PS00904	15PS00912	15PS00916	
	DATE	1996-VRP	11/05/96	11/05/96	11/06/96	11/06/96	11/06/96
	DEPTH (ft)	Tier II	15.00	16.00	4.00	12.00	16.00
	RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary	Primary
Toluene	1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
2-Methylnaphthalene	10000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,2-Dichloroethane	102.49	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethane	25.73	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	15GP010	15GP010	15GP010	15GP010	15GP010
	SAMPLE ID	15PS01004	15PS01008	15PS01012	15PS01015	15QD01016
DATE	1996 VRP	11/06/96	11/06/96	11/06/96	11/06/96	11/06/96
DEPTH (ft)	Tier II	4.00	8.00	12.00	15.00	15.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Duplicate 1
Toluene	1000	<0.25	<0.05	<0.25	<0.25	<0.25
Ethyl benzene	1000	<0.25	<0.05	<0.25	<0.25	<0.25
Xylene (total)	1000	<0.25	<0.1	<0.25	<0.25	<0.25
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.01	<0.25	<0.25	<0.25
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.01	<0.25	<0.25	<0.25
Naphthalene	10000	<0.25	<0.05#	<0.25	<0.25	<0.25
2-Methylnaphthalene	10000	<0.5	<0.1	<0.5	<0.5	<0.5
1,1-Dichloroethane	1000	<0.1	<0.05	<0.1	<0.1	<0.1
cis-1,2-Dichloroethene	102.49	<0.1	<0.05	<0.1	<0.1	<0.1
1,1,1-Trichloroethane	1000	<0.1	<0.05	<0.1	<0.1	<0.1
Tetrachloroethene	8.01	<0.1	<0.05	<0.1	<0.1	<0.1
Trichloroethene	25.73	0.16	0.19	0.24	0.39	0.29
Sum of Concentrations		0.16	0.19	0.24	0.39	0.29

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 # = Constituent in more than one test method, highest result reported.

Analytical Summary - VOCs in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	15GP011	15GP012	15GP012	15GP012	15GP013	
	SAMPLE ID	15PS01108	15PS01208	15PS01214	15PS01216	15PS013	
	DATE	1996 VRP	12/12/96	07/15/97	07/15/97	07/15/97	
	DEPTH (ft)	Tier II	8.00	8.00	14.00	16.00	4.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Toluene	1000	<0.25	<0.05	<0.05	<0.05	<0.05	
Ethyl benzene	1000	<0.25	<0.05	<0.05	<0.05	<0.05	
Xylene (total)	1000	<0.25	<0.05	<0.05	1.0	<0.05	
1,3,5-Trimethylbenzene	1.00E+03	<0.25	<0.05	<0.05	<0.05	<0.05	
1,2,4-Trimethylbenzene	1.00E+3	<0.25	<0.05	<0.05	<0.05	<0.05	
Naphthalene	10000	<0.25	<0.05	<0.05	1.5	<0.05	
2-Methylnaphthalene	10000	<0.5	<0.1	<0.1	12	<0.1	
1,1-Dichloroethane	1000	<0.1	<0.05	<0.05	<0.05	<0.05	
cis-1,2-Dichloroethane	102.49	<0.1	<0.05	<0.05	0.53	<0.05	
1,1,1-Trichloroethane	1000	<0.1	<0.05	<0.05	2.2	<0.05	
Tetrachloroethene	8.01	<0.1	2.8	0.29	[35]	0.41	
Trichloroethene	25.73	<0.1	0.86	<0.05	5.0	<0.05	
Sum of Concentrations		0.00	3.66	0.29	57.23	0.41	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[I] = Greater than Action Level

Analytical Summary - VOCs in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	15GP013	15GP013	
		SAMPLE ID	15PS01310	15PS01314	
		DATE	1996 VRP	07/15/97	07/15/97
		DEPTH (ft)	Tier II	10:00	14:00
		RESULT TYPE	Non-Residential	Primary	Primary
Toluene		1000	<0.05	<0.05	
Ethyl benzene		1000	<0.05	<0.05	
Xylene (total)		1000	0.57	0.43	
1,3,5-Trimethylbenzene		1.00E+03	<0.05	<0.05	
1,2,4-Trimethylbenzene		1.00E+3	<0.05	<0.05	
Naphthalene		10000	<0.05	<0.05	
2-Methylnaphthalene		10000	<0.1	<0.1	
1,1-Dichloroethane		1000	<0.05	<0.05	
cis-1,2-Dichloroethene		102.49	0.16	0.14	
1,1,1-Trichloroethane		1000	0.99	0.75	
Tetrachloroethene		8.01	6.6	5.9	
Trichloroethene		25.73	0.73	0.66	
Sum of Concentrations			9.05	7.88	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following qualifier(s) exist: J, E

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - PNAs in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	14GP019	14GP024	14GP031	14GP031	14GP031
	SAMPLE ID	14PS01915	14PS02408	14PS03104	14PS03108	14PS03112
	DATE	1996 VRP 11/06/96	12/12/96	07/15/97	07/15/97	07/15/97
	DEPTH (ft)	Tier II 15.00	8.00	4.00	8.00	12.00
	RESULT TYPE	Non-Residential Primary	Primary	Primary	Primary	Primary
Naphthalene	10000	<0.25	<0.25	<0.05	0.28	<0.05
Sum of Concentrations		0.00	0.00	0.00	0.28	0.00

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Analytical Summary - PNAs in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	14GP031	14GP032	14GP032	14GP032	14GP032
		SAMPLE ID	14PS03116	14PS03204	14PS03208	14PS03212	14PS03216
		DATE	1996 VRP 07/15/97	07/15/97	07/15/97	07/15/97	07/15/97
		DEPTH (ft)	Tier II 16.00	4.00	8.00	12.00	16.00
		RESULT TYPE	Non-Residential Primary	Primary	Primary	Primary	Primary
Naphthalene		10000	1.4	<0.05	<0.05	<0.05	<0.05
Sum of Concentrations			1.40	0.00	0.00	0.00	0.00

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Analytical Summary - PNAs in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	15GP001	15GP001	15GP001	15GP002	15GP002
		SAMPLE ID	15PS00104	15PS00110	15PS00115	15PS00206	15PS00210
		DATE	1996 VRP 11/04/96	11/04/96	11/04/96	11/04/96	11/04/96
		DEPTH (ft)	Tier II 4.00	10.00	15.00	6.00	10.00
		RESULT TYPE	Non-Residential Primary	Primary	Primary	Primary	Primary
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25	<0.25
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

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Analytical Summary - PNAs in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	15GP002	15GP003	15GP003	15GP003	15GP004
		SAMPLE ID	15PS00215	15PS00306	15PS00310	15PS00316	15PS00404
		DATE	1996 VRP 11/04/96	11/04/96	11/04/96	11/04/96	11/04/96
		DEPTH (ft)	Tier II 15.00	6.00	10.00	16.00	4.00
		RESULT TYPE	Non-Residential Primary	Primary	Primary	Primary	Primary
Naphthalene		10000	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

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Analytical Summary - PNAs in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	15GP004	15GP004	15GP004	15GP005	15GP005	
	SAMPLE ID	15PS00406	15PS00408	15PS00415	15PS00506	15PS00510	
	DATE	1996 VRP	11/04/96	11/04/96	11/04/96	11/05/96	11/05/96
	DEPTH (ft)	Tier II	6.00	8.00	15.00	6.00	10.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Naphthalene	10000	<0.33#	<0.25	<0.25	<0.25 E	<0.25	
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

For RCL PNA

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - PNAs in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	15GP005	15GP006	15GP006	15GP006	15GP007
		SAMPLE ID	15PS00515	15PS00606	15PS00610	15PS00617	15PS00704
		DATE	1996.VRP	11/05/96	11/05/96	11/05/96	11/05/96
		DEPTH (ft)	Tier II	15.00	6.00	10.00	17.00
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Naphthalene		10000	<0.25	<0.25	<0.25	<0.25	<0.25
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - PNAs in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in mg/kg)	SITE	15GP007	15GP007	15GP008	15GP008	15GP008
		SAMPLE ID	15PS00711	15PS00718	15PS00804	15PS00808	15PS00812
		DATE	1996 VRP 11/05/96	11/05/96	11/05/96	11/05/96	11/05/96
		DEPTH (ft)	Tier II 10.00	18.00	6.00	8.00	12.00
		RESULT TYPE	Non-Residential Primary	Primary	Primary	Primary	Primary
Naphthalene		10000	< 0.25	< 0.25	< 0.25	< 0.25	< 0.05#
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported.

Analytical Summary - PNAs in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	15GP008	15GP008	15GP009	15GP009	15GP009
	SAMPLE ID	15PS00815	15QD00808	15PS00904	15PS00912	15PS00916
	DATE	1996 VRP	11/05/96	11/05/96	11/06/96	11/06/96
	DEPTH (ft)	Tier II	15.00	15.00	4.00	12.00
	RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary
Naphthalene	10000	<0.25	<0.25	<0.25	<0.25	<0.25
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - PNAs in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	15GP011	15GP012	15GP012	15GP012	15GP013	
	SAMPLE ID	15PS01108	15PS01208	15PS01214	15PS01218	15PS013	
	DATE	1996 VRP	12/12/96	07/15/97	07/15/97	07/15/97	
	DEPTH (ft)	Tier II	8.00	8.00	14.00	16.00	
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	
Naphthalene		10000	<0.25	<0.05	<0.05	1.5	<0.05
Sum of Concentrations			0.00	0.00	0.00	1.50	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - TPH/DROs in Soils
Area 15 - Former Metal Stamping Operations
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO (mg/kg)
1996 VRPTier II Non-Residential				6000
14GP011	10/31/96	4.00	Prim	19
14GP011	10/31/96	10.00	Prim	< 10
14GP019	11/06/96	6.00	Prim	54
14GP019	11/06/96	11.00	Prim	< 10
14GP019	11/06/96	15.00	Prim	< 10
14GP024	12/12/96	8.00	Prim	< 10
15GP001	11/04/96	4.00	Prim	15
15GP001	11/04/96	10.00	Prim	< 10
15GP001	11/04/96	15.00	Prim	11
15GP002	11/04/96	6.00	Prim	< 10
15GP002	11/04/96	10.00	Prim	< 10
15GP002	11/04/96	15.00	Prim	< 10
15GP003	11/04/96	6.00	Prim	< 10
15GP003	11/04/96	10.00	Prim	140
15GP003	11/04/96	16.00	Prim	580 PI
15GP004	11/04/96	4.00	Prim	[7000] PI
15GP004	11/04/96	8.00	Prim	< 10
15GP004	11/04/96	15.00	Prim	< 10
15GP005	11/05/96	6.00	Prim	< 10
15GP005	11/05/96	10.00	Prim	4200 PI
15GP005	11/05/96	15.00	Prim	20
15GP006	11/05/96	6.00	Prim	< 10
15GP006	11/05/96	10.00	Prim	< 10
15GP006	11/05/96	17.00	Prim	< 10
15GP007	11/05/96	6.00	Prim	99 PI
15GP007	11/05/96	10.00	Prim	< 10
15GP007	11/05/96	18.00	Prim	< 10
15GP008	11/05/96	6.00	Prim	< 10
15GP008	11/05/96	8.00	Prim	< 10
15GP008	11/05/96	15.00	Prim	< 10
15GP008	11/05/96	15.00	Dup 1	< 10
15GP009	11/06/96	4.00	Prim	< 10
15GP009	11/06/96	12.00	Prim	< 10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL TPH/DRO

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - TPH/DROs in Soils
 Area 15 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

SITE	DATE	DEPTH (ft)	RESULT TYPE	TPH/DRO (mg/kg)
1996 VRPTier II Non-Residential				6000
15GP009	11/06/96	16.00	Prim	< 10
15GP010	11/06/96	4.00	Prim	< 10
15GP010	11/06/96	12.00	Prim	< 10
15GP010	11/06/96	15.00	Prim	< 10
15GP010	11/06/96	15.00	Dup 1	< 10
15GP011	12/12/96	8.00	Prim	< 10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following qualifier(s) exist: P, I

For RCL TPH/DRO

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	14GP011	14GP011	14GP011	14GP019	14GP019	
	SAMPLE ID	14PS01104	14PS01110	14PS01116	14PS01906	14PS01911	
	DATE	1996 VRP	10/31/96	10/31/96	10/31/96	11/06/96	11/06/96
	DEPTH (ft)	Tier II	4.00	10.00	16.00	6.00	11.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total		438	2	0.81	0.87	9	0.5
Barium, Total		10000	32	4.8	6.2	70	4.5
Cadmium, Total		730.0	<1	<1	<1	2.5	<1
Chromium, Total			<5	<5	<5	9.3	<5
Copper, Total		1700	4.7	2.3	2.4	11	2.5
Lead, Total		400	10	<5	<5	6.5	<5
Mercury, Total		87.60	0.13	0.1	<0.1	<0.1	<0.1
Nickel, Total		10000	3.3	2.5	2.6	8	2.2
Silver, Total		7300	<1	<1	<1	2.1	<1
Zinc, Total		10000	13	7.1	8.1	31	7
Sum of Concentrations			65.13	17.61	20.17	149.40	16.70

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Soils
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	1996 VRP	DATE
	14GP019		11/06/96
	SAMPLE ID		14PS01915
	DEPTH (ft)	Tier II	15.00
	RESULT TYPE	Non-Residential	Primary
Arsenic, Total		438	0.53
Barium, Total		10000	6.9
Cadmium, Total		730.0	< 1
Chromium, Total			< 5
Copper, Total		1700	2.4
Lead, Total		400	< 5
Mercury, Total		87.60	< 0.1
Nickel, Total		10000	2.1
Silver, Total		7300	< 1
Zinc, Total		10000	7.3
Sum of Concentrations			19.23

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	14GP011	14GP031	14GP031	14GP032	15GP005
	SAMPLE ID	14PW01120	14PW03119	14QD03119	14PW03219	15PW00521
	DATE	10/31/96	07/15/97	07/15/97	07/15/97	11/05/96
	RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Primary
1996 VRP	Tier II					
Vinyl chloride	10	< 2	[18]	[17]	< 2	< 2
Toluene	20440	< 5	< 5	< 5	< 5	< 5
1,2,4-Trimethylbenzene	5.11E+3	< 5	5.3	< 5	< 5	< 5
1,1-Dichloroethane	10220	< 5	100	97	180	57
1,1-Dichloroethene	7	< 5	< 5	< 5	< 5	< 5
1,2-Dichloroethane	31.4	< 5	< 5	< 5	< 5	< 5
cis-1,2-Dichloroethene	1022	< 5	9.3	8.3	41	19
trans-1,2-Dichloroethene	2040	< 5	< 5	< 5	< 5	< 5
1,1,1-Trichloroethane	9198	< 5	7.1	6.6	71	15
Tetrachloroethane	56.1	< 5	< 5	< 5	< 5	< 5
Trichloroethene	260	< 5	< 5	< 5	54	8.1 B
Sum of Concentrations		0.00	139.70	128.90	346.00	99.10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For BCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	15GP006	15GP007	15GP008	15GP013	MW-8	
	SAMPLE ID	1996 VRP	15PW00620	15PW00721	15PW00821	15PW01319	
	DATE	Tier II	11/05/96	11/05/96	11/05/96	07/15/97	12/19/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	<2	[1300]	<10	<2	<2
Toluene		20440	<5	<130	<5	<5	17
1,2,4-Trimethylbenzene		5.11E+3	<5	<130	<1	<400	<400
1,1-Dichloroethane		10220	41	140	6.7	2700	430
1,1-Dichloroethene		7	<5	<130	<5	<5	<5
1,2-Dichloroethane		31.4	<5	<130	<5	<5	<5
cis-1,2-Dichloroethene		1022	12	[2600]	5.5	[13000]	900
trans-1,2-Dichloroethene		2040	<5	<130	<5	<5	6.7
1,1,1-Trichloroethane		9198	<5	<130	<5	2700	8
Tetrachloroethene		56.1	35	<130	<5	<5	18
Trichloroethene		260	73 B	[380]	17	<5	200
Sum of Concentrations			161.00	4420.00	29.20	18400.00	1584.70

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	MW-8	MW-8	S4A	S4A	S4A
	SAMPLE ID	MW-8	MW-8	S4A	S4A	S4A
	DATE	03/18/97	06/05/97	03/12/96	06/04/96	09/05/96
	RESULT TYPE	Primary	Primary	Primary	Primary	Primary
	1996 VRP					
	Tier II					
	Non-Residential					
Vinyl chloride	10	[14]	<2	<2	<2	<2
Toluene	20440	<5	<5	<5	<5	<5
1,2,4-Trimethylbenzene	5.11E+3	---	---	<400	<400	---
1,1-Dichloroethane	10220	330	440	23	25	16
1,1-Dichloroethene	7	5.3	<5	<5	5.2	<5
1,2-Dichloroethane	31.4	<5	<5	<5	<5	<5
cis-1,2-Dichloroethene	1022	1000	[1400]	310	250	150
trans-1,2-Dichloroethene	2040	9	<5	14	5.2	<5
1,1,1-Trichloroethane	9198	7.6	<5	<5	<5	<5
Tetrachloroethene	56.1	19	<5	<5	<5	<5
Trichloroethene	260	78	140	10	7.9	<5
Sum of Concentrations		1462.90	1980.00	357.00	293.30	166.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For BCL VOC1

Critical Comparison on 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	1996 VRP	S4A	S4A	S4A	S4A	S4A
	SAMPLE ID	Tier II	12/10/96	03/21/97	06/03/97	09/23/97	12/09/97
	DATE	Non-Residential	Primary	Primary	Primary	Primary	Primary
	RESULT TYPE						
Vinyl chloride		10	< 2	< 10	< 2	< 10	< 10
Toluene		20440	< 5	< 5	< 5	< 5.0	< 5.0
1,2,4-Trimethylbenzene		5.11E+3	---	---	---	---	---
1,1-Dichloroethane		10220	< 5	14	31	24	23
1,1-Dichloroethene		7	< 5	< 5	< 5	< 5.0	< 5.0
1,2-Dichloroethane		31.4	[270]	< 5	< 5	< 5.0	< 5.0
cis-1,2-Dichloroethene		1022	42	210	300	220	210
trans-1,2-Dichloroethene		2040	< 5	< 5	< 5	< 5.0	< 5.0
1,1,1-Trichloroethane		9198	< 5	< 5	< 5	< 5.0	< 5.0
Tetrachloroethene		56.1	< 5	< 5	< 5	< 5.0	< 5.0
Trichloroethene		260	< 5	6.6	< 5	< 5.0	< 5.0
Sum of Concentrations			315.10	230.60	331.00	244.00	233.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level The following qualifier(s) exist: B

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Groundwater
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	14GP011	MW-8	MW-8	S4A	S4A	
	SAMPLE ID	1996 VRP	14PW01120	MW-8		S4A	
	DATE	Tier II	10/31/96	12/19/96	03/18/97	09/05/96	03/21/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Cyanide		2044	---	5	6	---	< 5
Arsenic, Dissolved (Filtered)		50	< 1	20	---	---	---
Barium, Dissolved (Filtered)		7154	153	150	---	---	---
Copper, Dissolved (Filtered)		3800	< 10	10	---	---	---
Lead, Dissolved (Filtered)		1.50E + 1	< 1	1.1	---	---	---
Nickel, Dissolved (Filtered)		2040	< 10	190	---	---	---
Chromium, Total			---	---	< 5	43	16
Lead, Total			---	---	12	63	26
Nickel, Total			---	---	150	81	< 20
Sum of Concentrations			153.00	376.10	168.00	177.00	42.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Groundwater
 Plant 1 - Former Metal Stamping Operations
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	1996 VRP	S4A
	SAMPLE ID	Tier II	09/23/97
	DATE	Non-Residential	Primary
	RESULT TYPE		
Cyanide		2044	< 5
Arsenic, Dissolved (Filtered)		50	---
Barium, Dissolved (Filtered)		7154	---
Copper, Dissolved (Filtered)		3800	---
Lead, Dissolved (Filtered)		1.50E + 1	---
Nickel, Dissolved (Filtered)		2040	---
Chromium, Total			---
Lead, Total			---
Nickel, Total			---
Sum of Concentrations			0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOC in Soils
 Area 17 - Plant 6 CARDOX Building
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	1996 VRP	17GP001	17GP001	17GP001	17GP001	17GP002
			SAMPLE ID	17PS00104	17PS00108	17PS00112	17PS00118
	DATE		11/12/96	11/12/96	11/12/96	11/12/96	12/13/96
	DEPTH (ft)	Tier II	4.00	8.00	12.00	18.00	4.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Benzene	4.77	<0.1	<0.05	<0.1	[80]	<0.1	
Toluene	1000	<0.25	<0.05	<0.25	700	<0.25	
Ethyl benzene	1000	<0.25	<0.05	<0.25	280	<0.25	
Xylene (total)	1000	<0.25	<0.1	<0.25	720	<0.25	
1,2,4-Trimethylbenzene	1.00E + 3	<0.25	<0.01	<0.25	<29	<0.25	
Sum of Concentrations		0.00	0.00	0.00	1780.00	0.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

Analytical Summary - VOC in Soils
 Area 17 - Plant 6 CARDOX Building
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	17GP002	17GP002	17GP003	17GP003	17GP003	
	SAMPLE ID	17PS00208	17PS00212	17PS00304	17PS00308	17PS00314	
	DATE	1996 VRP	12/13/96	12/13/96	12/16/96	12/16/96	12/16/96
	DEPTH (ft)	Tier II	8.00	12.00	4.00	8.00	14.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Benzene	4.77	<0.1	<0.05 E	<0.1	<0.1	<0.05	
Toluene	1000	<0.25	<0.05 E	<0.25	<0.25	<0.05	
Ethyl benzene	1000	<0.25	<0.05 E	<0.25	<0.25	<0.05	
Xylene: (total)	1000	<0.25	<0.1 E	<0.25	<0.25	<0.05	
1,2,4-Trimethylbenzene	1.00E + 3	<0.25	0.065 J	<0.25	<0.25	<0.05	
Sum of Concentrations		0.00	0.07	0.00	0.00	0.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following qualifier(s) exist: E, J

For RCL VOC

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Soils
 Area 17 - Plant 6 CARDOX Building
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	17GP001	17GP001	17GP001	17GP001	17GP002	
	SAMPLE ID	17PS00104	17PS00108	17PS00112	17PS00118	17PS00204	
	DATE	1996 VRP	11/12/96	11/12/96	11/12/96	11/12/96	12/13/96
	DEPTH (ft)	Tier II	4.00	8.00	12.00	18.00	4.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438	1.7	4.6	0.64	0.67	0.89	
Barium, Total	10000	16	22	6.6	6.9	4.8	
Cadmium, Total	730.0	<1	<1	<1	<1	<1	
Chromium, Total		7	<6	<6	<6	<6	
Copper, Total	1700	4.6	4.8	2.9	3	3.1	
Lead, Total	400	6.1	<6	<6	6.4	<6	
Mercury, Total	87.60	<0.1	<0.1	<0.1	<0.1	<0.1	
Nickel, Total	10000	4.8	6.7	3.4	2.6	4.6	
Selenium, Total	7300	<0.6	<0.6	<0.6	<0.6	<0.6	
Silver, Total	7300	<1	<1	<1	<1	<1	
Zinc, Total	10000	12	12	9.2	8.1	12	
Sum of Concentrations		51.10	60.10	22.64	26.67	26.39	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Soils
 Area 17 - Plant 6 CARDOX Building
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	17GP002	17GP002	17GP003	17GP003	17GP003
	SAMPLE ID	17PS00208	17PS00212	17PS00304	17PS00308	17PS00314
	DATE	1996 VRP	12/13/96	12/13/96	12/16/96	12/16/96
	DEPTH (ft)	Tier II	8.00	12.00	4.00	8.00
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Arsenic, Total	438	0.99	0.47	8.5	1.9	0.50
Barium, Total	10000	5	6.1	89	10	4.6
Cadmium, Total	730.0	<1	<1	3	<1	<1
Chromium, Total		<5	<5	8.7	<5	<5
Copper, Total	1700	2.9	2.8	28	2.8	1.8
Lead, Total	400	<5	<5	50	<5	<5
Mercury, Total	87.60	<0.1	<0.1	2.2	<0.1	<0.1
Nickel, Total	10000	4.6	3.5	9.2	4	2.8
Selenium, Total	7300	<0.5	<0.5	0.75	<0.5	<0.5?
Silver, Total	7300	<1	<1	2	<1	<1?
Zinc, Total	10000	13	11	124	11	7.0?
Sum of Concentrations:		26.49	23.87	325.35	29.70	16.70

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 ? = Duplicate records found, Data review required.

Analytical Summary - VOCs in Groundwater
 Area 17 - Plant 6 CARDOX Building
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	1996 VRP	17GP001
	SAMPLE ID		17PW00120
	DATE	Tier: II	11/12/96
	RESULT TYPE	Non-Residential	Primary
Benzene		98.6	[15000] J
Ethylbenzene		10220	2100 J
Toluene		20440	11000 J
Xylene (total)		204400	6500 J
1,2,4-Trimethylbenzene		5.11E+3	560 J
1,1-Dichloroethane		10220	2000 J
cis-1,2-Dichloroethene		1022	[5500] J
Sum of Concentrations			42660.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level The following qualifier(s) exist: J

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Soils
 Area 18/19 - Plant 11 Electroplating/Chromium Exhaust
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	07GP009	18HA002	18HA003
	SAMPLE ID	1996 VRP	12/17/96	12/18/96
	DATE	1996 VRP	12/17/96	12/18/96
	DEPTH (ft)	Tier II	12.00	1.00
	RESULT TYPE	Non-Residential	Primary	Primary
Tetrachloroethene		8.01	0.10	<0.25
Sum of Concentrations			0.10	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Soils
 Area 18/19 - Plant 11 Electroplating/Chromium Exhaust
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in mg/kg)	SITE	07GP009	18HA001	18HA002	18HA003	18SS001
	SAMPLE ID		18HA00101			18SS0100
DATE	1996 VRP	12/17/96	10/24/96	12/18/96	12/18/96	11/21/96
DEPTH (ft)	Tier II	12.00	1.00	1.00	1.00	0.00
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Arsenic, Total	438	0.53	---	1.4	0.49	<0.25
Barium, Total	10000	7.5	---	14	7.7	<1
Cadmium, Total	730.0	<1	---	6.1	67	<1
Chromium, Total		<5	1530	68	600	313000? PI
Chromium (VI)	7300	---	<0.2	---	---	[212000]
Copper, Total	1700	3.6	---	17	32	<1
Lead, Total	400	<5	---	27	<5	<5
Nickel, Total	10000	4.2	---	4.1	4.9	<1
Silver, Total	7300	<17	---	1.17	<17	<17
Zinc, Total	10000	117	---	157	237	<57
Sum of Concentrations		26.83	1530.00	153.70	735.09	525000.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 ? = Duplicate records found, Data review required. [] = Greater than Action Level The following qualifier(s) exist: P, I

Analytical Summary - VOCs in Groundwater
 Area 18/19 - Plant 11 Electroplating/Chromium Exhaust
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	MW-5	MW-5	MW-5	MW-5	MW-5	
	SAMPLE ID	1996 VRP	01QD0522	MW-5			
	DATE	Tier II	12/20/96	12/20/96	03/18/97	06/05/97	09/26/97
	RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary	Primary
Vinyl chloride		10	[13]	[19]	[13]	[12]	[13]
Naphthalene		4088	ND#	ND#	---	---	---
cis-1,2-Dichloroethene		1022	14	13	9.8	11	11
1,1,1-Trichloroethane		9198	12	11	9	11	16
Tetrachloroethene		56.1	< 5	< 5	5.8	8.4	13
Trichloroethene		260	29	29	24	28	42
Sum of Concentrations			68.00	72.00	61.60	70.40	95.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 # = Constituent in more than one test method, highest result reported. [] = Greater than Action Level ND = Not Detected

Analytical Summary - VOCs in Groundwater
 Area 18/19 - Plant 11 Electroplating/Chromium Exhaust
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	MW-5	
	SAMPLE ID	1996 VRP	
	DATE	Tier II	12/10/97
	RESULT TYPE	Non-Residential	Primary
Vinyl chloride		10	< 10
Naphthalene		4088	---
cis-1,2-Dichloroethene		1022	11
1,1,1-Trichloroethane		9198	33
Tetrachloroethene		56.1	8.8
Trichloroethene		260	18
Sum of Concentrations			70.80

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Groundwater
 Area 18/19 - Plant 11 Electroplating/Chromium Exhaust
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	MW-5	MW-5	MW-5	MW-5
	SAMPLE ID	1996 VRP	01QD0522	MW-5	MW-5
	DATE	Tier II	12/20/96	12/20/96	03/18/97
	RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary
Cyanide		2044	9	---	< 5
Arsenic, Dissolved (Filtered)		50	1.6	1.5	---
Barium, Dissolved (Filtered)		7154	100	99	---
Chromium, Total			---	---	290
Lead, Total			---	---	152
Nickel, Total			---	---	82
Sum of Concentrations			110.60	100.50	534.00
					0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
Area 1 - On-site Groundwater VOCs and Naphtha Releases
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	01CPT001	01CPT002	01CPT002	01CPT004	01CPT005	
	SAMPLE ID	1996 VRP	01CPW00177	01CPW00287	01CPW00297	01CPW00458	01CPW00521
	DATE	Tier II	11/19/96	11/19/96	11/19/96	11/21/96	12/04/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride	10	<2	<2	<2	<2	<10	
Benzene	98.6	<5	<5	<5	<5	<5	
Ethylbenzene	10220	<5	<5	<5	<5	<5	
Methyl(tert)butyl Ether	6950	<50	<50	<50	<50	<50	
Toluene	20440	<5	<5	<5	<5	<5	
Xylene (total)	204400	<5	<5	<5	<5	<10	
Acetone	10220	<100	<100	<100	<100	<100	
Isopropylbenzene	1.02E+4	<5	<5	<5	<5	<1	
2-Methylnaphthalene	2040.00	<10	<10	<10	<10	<10	
Naphthalene	4088	<5	<5	<5	<5	<5	
1,2,4-Trimethylbenzene	5.11E+3	<5	<5	<5	<5	<1	
1,3,5-Trimethylbenzene	5.11E+3	<5	<5	<5	<5	<1	
1,1-Dichloroethane	10220	<5	<5	<5	<5	<5	
1,1-Dichloroethene	7	<5	<5	<5	<5	<5	
1,2-Dichloroethane	31.4	<5	<5	<5	<5	<5	
cis-1,2-Dichloroethene	1022	<5	<5	<5	<5	<5	
trans-1,2-Dichloroethene	2040	<5	<5	<5	<5	<5	
1,2-Dichloroethene (Total)							
1,2-Dichloropropane	4.21E+1	<5	<5	<5	<5	<5	
1,1,1-Trichloroethane	9198	<5	<5	<5	<5	<5	
Tetrachloroethene	56.1	<5	<5	<5	<5	<5	
Trichloroethene	260	<5	<5	<5	<5	<5	
Chloroethane	9.86E+2	<10	<10	<10	<10	<10	
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
Area 1 - On-site Groundwater VOCs and Naphtha Releases
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

CONSTITUENT	(Units in ug/l)	SITE	01CPT005	01CPT008	01CPT008	01CPT008	01CPT009	
		SAMPLE ID	1996 VRP	01CPW00585	01CPW00623	01CPW00844	01CQD00844	01CPW00920
		DATE	Tier II	12/04/96	12/04/96	12/05/96	12/05/96	12/06/96
		RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1	Primary
Vinyl chloride		10	< 10	< 10	< 10	< 10	< 2	< 10
Benzene		98.6	< 5	< 5	< 5	< 5	< 5	< 5
Ethylbenzene		10220	< 5	< 5	< 5	< 5	< 5	< 5
Methyl(tert)butyl Ether		6950	< 50	< 50	< 50	< 50	< 50	< 50
Toluene		20440	< 5	< 5	< 5	< 5	< 5	< 5
Xylene (total)		204400	< 10	< 10	< 10	< 5	< 5	< 10
Acetone		10220	< 100	< 100	< 100	< 100	< 100	< 100
Isopropylbenzene		1.02E+4	< 1	< 1	< 1	< 5	< 5	< 1
2-Methylnaphthalene		2040.00	< 10	< 10	< 10	< 10	< 10	< 10
Naphthalene		4088	< 5	< 5	< 5	< 5	< 5	< 5
1,2,4-Trimethylbenzene		5.11E+3	< 1	18 J	< 1	< 400	< 400	< 1
1,3,5-Trimethylbenzene		5.11E+3	< 1	< 1	< 1	< 5	< 5	< 1
1,1-Dichloroethane		10220	< 5	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethene		7	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dichloroethane		31.4	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,2-Dichloroethene		1022	< 5	< 5	760	590	590	< 5
trans-1,2-Dichloroethene		2040	< 5	< 5	190	150	150	< 5
1,2-Dichloroethene (Total)			---	---	---	---	---	---
1,2-Dichloropropane		4.21E+1	< 5	< 5	< 5	< 5	< 5	< 5
1,1,1-Trichloroethane		9198	< 5	< 5	< 5	< 5	< 5	< 5
Tetrachloroethene		56.1	< 5	< 5	< 5	< 5	< 5	< 5
Trichloroethene		260	< 5	< 5	< 5	< 5	< 5	< 5
Chloroethane		9.86E+2	< 10	< 10	< 10	< 10	< 10	< 10
Sum of Concentrations			0.00	18.00	950.00	740.00	740.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	01CPT009	01CPT009	01CPT009	01CPT009	01CPT009	
	SAMPLE ID	1996 VRP	01CPW00988	01CPW00940	01CPW00950	01CPW00960	01CPW00973
	DATE	Tier II	12/06/96	07/24/97	07/24/97	07/24/97	07/24/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 10	< 1	< 1	< 1	< 1
Benzene		98.6	< 5	< 1	< 1	< 1	< 1
Ethylbenzene		10220	< 5	< 1	< 1	< 1	< 1
Methyl(tert)butyl Ether		6950	< 50	---	---	---	---
Toluene		20440	< 5	< 1	< 1	< 1	< 1
Xylene (total)		204400	< 10	< 3	< 3	< 3	< 3
Acetone		10220	< 100	< 50	< 50	< 50	< 50
Isopropylbenzene		1.02E+4	< 1	---	---	---	---
2-Methylnaphthalene		2040.00	< 10	---	---	---	---
Naphthalene		4088	< 5	---	---	---	---
1,2,4-Trimethylbenzene		5.11E+3	< 1	---	---	---	---
1,3,5-Trimethylbenzene		5.11E+3	< 1	---	---	---	---
1,1-Dichloroethane		10220	< 5	< 1	< 1	< 1	< 1
1,1-Dichloroethene		7	< 5	< 1	< 1	< 1	< 1
1,2-Dichloroethane		31.4	< 5	< 1	< 1	< 1	< 1
cis-1,2-Dichloroethene		1022	< 5	---	---	---	---
trans-1,2-Dichloroethene		2040	< 5	---	---	---	---
1,2-Dichloroethene (Total)				< 2	< 2	< 2	< 2
1,2-Dichloropropane		4.21E+1	< 5	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane		9198	< 5	< 1	< 1	< 1	< 1
Tetrachloroethene		56.1	< 5	< 1	< 1	< 1	< 1
Trichloroethene		260	< 5	< 1	< 1	< 1	< 1
Chloroethane		9.86E+2	< 10	< 1	< 1	< 1	< 1
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	01CPT010	01CPT010	01CPT011	01CPT011	01CPT012	
	SAMPLE ID	1996 VRP	01CPW01022	01CPW01070	01CPW01137	01CPW01147	01CPW01230
	DATE	Tier II	12/06/96	12/06/96	02/10/97	02/11/97	02/12/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 10	< 10	< 10	< 20	< 10
Benzene		98.6	< 5	< 5	< 5	< 10	< 5
Ethylbenzene		10220	< 5	< 5	< 5	< 10	< 5
Methyl(tert)butyl Ether		6950	< 50	< 50	< 50	< 100	< 50
Toluene		20440	< 5	< 5	< 5	< 10	< 5
Xylene (total)		204400	< 10	< 10	< 10	< 20	< 10
Acetone		10220	< 100	< 100	< 100	< 200	< 100
Isopropylbenzene		1.02E+4	< 1	< 1	< 1	< 2	< 1
2-Methylnaphthalene		2040.00	< 10	< 10	< 10	< 20	< 10
Naphthalene		4088	< 5	< 5	< 5	< 10	< 5
1,2,4-Trimethylbenzene		5.11E+3	< 1	< 1	< 1	< 2	< 1
1,3,5-Trimethylbenzene		5.11E+3	< 1	< 1	< 1	< 2	< 1
1,1-Dichloroethane		10220	< 5	< 5	< 5	< 10	110
1,1-Dichloroethene		7	< 5	< 5	< 5	< 10	[7.8]
1,2-Dichloroethane		31.4	< 5	< 5	< 5	< 10	< 5
cis-1,2-Dichloroethene		1022	< 5	< 5	120	350	130
trans-1,2-Dichloroethene		2040	< 5	< 5	17	58	6.8
1,2-Dichloroethene (Total)							
1,2-Dichloropropane		4.21E+1	< 5	< 5	< 5	< 10	< 5
1,1,1-Trichloroethane		9198	< 5	< 5	< 5	< 10	50
Tetrachloroethene		56.1	< 5	< 5	< 5	< 10	< 5
Trichloroethene		260	< 5	< 5	< 5	< 10	88
Chloroethane		9.86E+2	< 10	< 10	< 10	< 20	< 10
Sum of Concentrations			0.00	0.00	137.00	408.00	372.60

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

|| = Greater than Action Level

--- RCL VOCs

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	1996 VRP	01CPT012	01CPT012	01CPT012	01CPT013	01CPT013
SAMPLE ID	1996 VRP	01QD01230	01CPW01240	01CPW01250	01CPW01322	01CPW01331	
DATE	Tier II	02/12/97	02/12/97	02/12/97	02/13/97	02/14/97	
RESULT TYPE	Non-Residential	Duplicate 1	Primary	Primary	Primary	Primary	
Vinyl chloride	10	<20	<20	[16]	<10	<10	
Benzene	98.6	<10	<10	<5	<5	<5	
Ethylbenzene	10220	<10	<10	<5	<5	<5	
Methyl(tert)butyl Ether	6950	<100	<100	<50	<50	<50	
Toluene	20440	<10	<10	<5	<5	<5	
Xylene (total)	204400	<20	<20	<10	<10	<10	
Acetone	10220	<200	<200	<100	<100	<100	
Isopropylbenzene	1.02E+4	<2	<2	<1	<1	<1	
2-Methylnaphthalene	2040.00	<20	<20	12	<10	<10	
Naphthalene	4088	<10	<10	<5	<5	<5	
1,2,4-Trimethylbenzene	5.11E+3	<2	<2	1.6	<1	<1	
1,3,5-Trimethylbenzene	5.11E+3	<2	<2	<1	<1	<1	
1,1-Dichloroethane	10220	97	100	<5	<5	<5	
1,1-Dichloroethene	7	<10	<10	<5	<5	<5	
1,2-Dichloroethane	31.4	<10	<10	<5	<5	<5	
cis-1,2-Dichloroethene	1022	230	240	6.4	25	61	
trans-1,2-Dichloroethene	2040	34	39	<5	55	120	
1,2-Dichloroethene (Total)							
1,2-Dichloropropane	4.21E+1	<10	<10	<5	<5	<5	
1,1,1-Trichloroethane	9198	<10	<10	<5	<5	<5	
Tetrachloroethene	56.1	<10	<10	<5	<5	<5	
Trichloroethene	260	14	16	<5	56	8.1	
Chloroethane	9.86E+2	<20	<20	<10	<10	<10	
Sum of Concentrations		375.00	395.00	36.00	136.00	189.10	

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[] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	01CPT013	01CPT014	01CPT014	01CPT014	01CPT014	
	SAMPLE ID	1996 VRP	01CPW01345	01CPW01425	01CPW01435	01CQD01435	01CPW01445
	DATE	Tier II	02/14/97	07/23/97	07/23/97	07/23/97	07/23/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1	Primary
Vinyl chloride		10	< 10	< 1	< 1	< 1	< 1
Benzene		98.6	< 5	< 1	< 1	< 1	< 1
Ethylbenzene		10220	< 5	< 1	< 1	< 1	< 1
Methyl(tert)butyl Ether		6950	< 50	---	---	---	---
Toluene		20440	< 5	1.3	< 1	< 1	< 1
Xylene (total)		204400	< 10	< 3	< 3	< 3	< 3
Acetone		10220	< 100	62	< 50	< 50	< 50
Isopropylbenzene		1.02E+4	< 1	---	---	---	---
2-Methylnaphthalene		2040.00	< 10	---	---	---	---
Naphthalene		4088	< 5	---	---	---	---
1,2,4-Trimethylbenzene		5.11E+3	< 1	---	---	---	---
1,3,5-Trimethylbenzene		5.11E+3	< 1	---	---	---	---
1,1-Dichloroethane		10220	< 5	< 1	< 1	< 1	< 1
1,1-Dichloroethene		7	< 5	< 1	< 1	< 1	< 1
1,2-Dichloroethane		31.4	< 5	< 1	< 1	< 1	< 1
cis-1,2-Dichloroethene		1022	< 5	---	---	---	---
trans-1,2-Dichloroethene		2040	< 5	---	---	---	---
1,2-Dichloroethene (Total)			---	< 2	< 2	< 2	< 2
1,2-Dichloropropane		4.21E+1	< 5	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane		9198	< 5	< 1	< 1	< 1	< 1
Tetrachloroethene		56.1	< 5	< 1	< 1	< 1	< 1
Trichloroethene		260	< 5	< 1	< 1	< 1	< 1
Chloroethane		9.86E+2	< 10	< 1	< 1	< 1	< 1
Sum of Concentrations			0.00	63.30	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
Area 1 - On-site Groundwater VOCs and Naphtha Releases
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

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Date: 09/30/99

CONSTITUENT (Units in ug/l)	SITE	01CPT014	01CPT014	01CPT014	01CPT014	01CPT015	
	SAMPLE ID	1996 VRP	01CPW01455	01CPW01465	01CPW01493	01CPW01478	01CPW01584
	DATE	Tier II	07/23/97	07/24/97	07/24/97	07/24/97	07/22/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride	10	<1	<1	<1	<1	<1	<1
Benzene	98.6	<1	<1	<1	<1	<1	<1
Ethylbenzene	10220	<1	<1	<1	<1	<1	<1
Methyl(tert)butyl Ether	6950	---	---	---	---	---	---
Toluene	20440	<1	<1	<1	<1	<1	<1
Xylene (total)	204400	<3	<3	<3	<3	<3	<3
Acetone	10220	<50	<50	<50	<50	<50	<50
Isopropylbenzene	1.02E+4	---	---	---	---	---	---
2-Methylnaphthalene	2040.00	---	---	---	---	---	---
Naphthalene	4088	---	---	---	---	---	---
1,2,4-Trimethylbenzene	5.11E+3	---	---	---	---	---	---
1,3,5-Trimethylbenzene	5.11E+3	---	---	---	---	---	---
1,1-Dichloroethane	10220	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	7	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	31.4	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	1022	---	---	---	---	---	---
trans-1,2-Dichloroethene	2040	---	---	---	---	---	---
1,2-Dichloroethene (Total)		<2	<2	<2	<2	<2	<2
1,2-Dichloropropane	4.21E+1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	9198	<1	<1	<1	<1	<1	<1
Tetrachloroethene	56.1	<1	<1	<1	<1	<1	<1
Trichloroethene	260	<1	<1	<1	<1	<1	<1
Chloroethane	9.86E+2	<1	<1	<1	<1	<1	<1
Sum of Concentrations		0:00	0:00	0:00	0:00	0:00	0:00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	01CPT015	01CPT015	01CPT016	01CPT016	01CPT016	
	SAMPLE ID	1996 VRP	01CPW01564	01CPW01574	01CPW01631	01CPW01643	01CPW01655
	DATE	Tier II	07/23/97	07/23/97	07/25/97	07/25/97	07/25/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride	10	<1	<1	<1	4.2	[140]	
Benzene	98.6	<1	<1	42	46	<100	
Ethylbenzene	10220	<1	<1	1.7	<1	<100	
Methyl(tert)butyl Ether	6950	---	---	---	---	---	
Toluene	20440	<1	<1	<1	<1	<100	
Xylene (total)	204400	<3	<3	<3	<3	<300	
Acetone	10220	<50	<50	<50	<50	<5000	
Isopropylbenzene	1.02E+4	---	---	---	---	---	
2-Methylnaphthalene	2040.00	---	---	---	---	---	
Naphthalene	4088	---	---	---	---	---	
1,2,4-Trimethylbenzene	5.11E+3	---	---	---	---	---	
1,3,5-Trimethylbenzene	5.11E+3	---	---	---	---	---	
1,1-Dichloroethane	10220	<1	<1	<1	6.2	<100	
1,1-Dichloroethene	7	<1	<1	<1	<1	<100	
1,2-Dichloroethane	31.4	<1	<1	<1	6.0	[6300]	
cis-1,2-Dichloroethene	1022	---	---	---	---	---	
trans-1,2-Dichloroethene	2040	---	---	---	---	---	
1,2-Dichloroethene (Total)		<2	<2	6.0	36	240	
1,2-Dichloropropane	4.21E+1	<1	<1	<1	<1	[150]	
1,1,1-Trichloroethane	9198	<1	<1	<1	<1	<100	
Tetrachloroethene	56.1	<1	<1	2.0	<1	<100	
Trichloroethene	260	<1	<1	1.1	2.3	<100	
Chloroethane	9.86E+2	<1	<1	3.7	<1	<100	
Sum of Concentrations		0.00	0.00	56.50	100.70	6830.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1 Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
Area 1 - On-site Groundwater VOCs and Naphtha Releases
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	01CPT016	01GP001	01GP002	01GP003	01GP004	
	SAMPLE ID	1996 VRP	01CQD01655	01PW00121	01PW00221	01PW00321	01PW00421
	DATE	Tier II	07/25/97	11/05/96	11/05/96	11/06/96	11/15/96
	RESULT TYPE	Non-Residential	Duplicate 1	Primary	Primary	Primary	Primary
Vinyl chloride	10	[110]	< 10	[36]	[66]	< 2	
Benzene	98.6	< 100	< 5	< 5	< 25	< 5	
Ethylbenzene	10220	< 100	< 5	< 5	< 25	< 5	
Methyl(tert)butyl Ether	6950	---	< 50	< 50	< 250	< 50	
Toluene	20440	< 100	< 5	< 5	< 25	< 5	
Xylene (total)	204400	< 300	< 10	< 5	< 25	< 5	
Acetone	10220	< 5000	< 100	---	---	---	
Isopropylbenzene	1.02E+4	---	< 1	< 5	< 25	< 5	
2-Methylnaphthalene	2040.00	---	< 10	< 10	< 50	< 10	
Naphthalene	4088	---	< 5	< 5	< 25	< 5	
1,2,4-Trimethylbenzene	5.11E+3	---	< 1	< 5	< 25	< 5	
1,3,5-Trimethylbenzene	5.11E+3	---	< 1	< 5	< 25	< 5	
1,1-Dichloroethane	10220	< 100	33	< 5	340	< 5	
1,1-Dichloroethene	7	< 100	< 5	< 5	< 25	< 5	
1,2-Dichloroethane	31.4	[6300]	< 5	< 5	< 25	< 5	
cis-1,2-Dichloroethene	1022	---	12	< 5	280	41	
trans-1,2-Dichloroethene	2040	---	< 5	< 5	< 25	< 5	
1,2-Dichloroethene (Total)		230	---	---	---	---	
1,2-Dichloropropane	4.21E+1	[160]	< 5	---	---	---	
1,1,1-Trichloroethane	9198	< 100	< 5	< 5	150	< 5	
Tetrachloroethene	56.1	< 100	< 5	< 5	< 25	< 5	
Trichloroethene	260	< 100	9.9	< 5	[550]	< 5	
Chloroethane	9.86E+2	< 100	< 10	---	---	---	
Sum of Concentrations		6800.00	54.90	36.00	1366.00	41.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
[] = Greater than Action Level
For RCL VOC1 Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
Area 1 - On-site Groundwater VOCs and Naphtha Releases
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	01GP005	02GP001	03GP005	03GP008	03GP011	
	SAMPLE ID	1996 VRP	01PW00517	02PW00119	03PW00521	03PW0620	03PW1125
	DATE	Tier II	11/17/96	11/16/96	10/25/96	10/01/96	10/02/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride	10	[19]	< 2	< 10	< 2	< 2	
Benzene	98.6	< 5	8.9	< 5	< 5	< 5	
Ethylbenzene	10220	< 5	9.5	< 5	< 5	< 5	
Methyl(tert)butyl Ether	6950	< 50	< 50	< 50	< 50	< 50	
Toluene	20440	< 5	< 5	< 5	< 5	< 5	
Xylene (total)	204400	< 5	< 5	< 10	< 5	< 5	
Acetone	10220	---	---	< 100	---	---	
Isopropylbenzene	1.02E+4	< 5	14	< 1	< 5	< 5	
2-Methylnaphthalene	2040.00	< 10	< 10	< 10	< 10	< 10	
Naphthalene	4088	14	< 5	< 5	< 5	< 5	
1,2,4-Trimethylbenzene	5.11E+3	< 5	11	< 1	< 5	< 5	
1,3,5-Trimethylbenzene	5.11E+3	< 5	< 5	< 1	< 5	< 5	
1,1-Dichloroethane	10220	< 5	< 5	< 5	< 5	< 5	
1,1-Dichloroethene	7	< 5	< 5	< 5	< 5	< 5	
1,2-Dichloroethane	31.4	< 5	< 5	< 5	< 5	< 5	
cis-1,2-Dichloroethene	1022	100	< 5	< 5	< 5	< 5	
trans-1,2-Dichloroethene	2040	< 5	< 5	< 5	< 5	< 5	
1,2-Dichloroethane (Total)		---	---	---	---	---	
1,2-Dichloropropane	4.21E+1	---	---	< 5	---	---	
1,1,1-Trichloroethane	9198	< 5	< 5	< 5	< 5	< 5	
Tetrachloroethene	56.1	< 5	< 5	< 5	< 5	< 5	
Trichloroethene	260	< 5	< 5	< 5	180	< 5	
Chloroethane	9.86E+2	---	---	< 10	---	---	
Sum of Concentrations			133.00	43.40	0.00	180.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
[] = Greater than Action Level
For RCL VOC1 Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
Area 1 - On-site Groundwater VOCs and Naphtha Releases
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	03GP012	03GP024	03GP025	03GP026	03GP028	
	SAMPLE ID	1996 VRP	03PW1223	03PW02418	03PW02518	03PW02618	03PW02819
	DATE	Tier II	10/02/96	10/29/96	10/29/96	10/30/96	10/30/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride	10	< 2	[130]	< 2	9.9	[16]	
Benzene	98.6	< 5	< 5	< 5	< 5	< 5	
Ethylbenzene	10220	< 5	120	< 5	< 5	< 5	
Methyl(tert)butyl Ether	6950	< 50	130	< 50	< 50	< 50	
Toluene	20440	< 5	< 5	< 5	< 5	< 5	
Xylene (total)	204400	< 5	< 5	< 5	< 5	< 5	
Acetone	10220	---	---	---	---	---	
Isopropylbenzene	1.02E+4	< 5	90	< 5	< 5	< 5	
2-Methylnaphthalene	2040.00	< 10	20	< 10	< 10	< 10	
Naphthalene	4088	< 5	20	< 5	< 5	< 5	
1,2,4-Trimethylbenzene	5.11E+3	< 400	62	< 5	< 5	< 5	
1,3,5-Trimethylbenzene	5.11E+3	< 5	< 5	< 5	< 5	< 5	
1,1-Dichloroethane	10220	< 5	60	< 5	< 5	< 5	
1,1-Dichloroethene	7	< 5	[15]	< 5	< 5	< 5	
1,2-Dichloroethane	31.4	< 5	< 5	< 5	< 5	< 5	
cis-1,2-Dichloroethene	1022	100	200	< 5	< 5	< 5	
trans-1,2-Dichloroethene	2040	< 5	< 5	< 5	< 5	< 5	
1,2-Dichloroethene (Total)		---	---	---	---	---	
1,2-Dichloropropane	4.21E+1	---	---	---	---	---	
1,1,1-Trichloroethane	9198	17	94	< 5	< 5	< 5	
Tetrachloroethene	56.1	< 5	< 5	< 5	< 5	< 5	
Trichloroethene	260	< 5	160 B	< 5	< 5	< 5	
Chloroethane	9.86E+2	---	---	---	---	---	
Sum of Concentrations		117.00	1101.00	0.00	9.90	16.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[I] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	03GP029	03GP036	04GP001	04GP004	05GP048	
	SAMPLE ID	1996 VRP	03PW02916	03PW03622	04PW00120	04PS00421	05PW04821
	DATE	Tier II	04/22/97	04/23/97	10/22/96	10/23/96	11/11/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride	10	< 2	< 2	< 10	< 10	< 2000	
Benzene	98.6	< 5	< 5	< 5	< 5	< 5000	
Ethylbenzene	10220	< 5	< 5	< 5	190 J	< 5000	
Methyl(tert)butyl Ether	6950	< 50	< 50	< 50	< 50	< 50000	
Toluene	20440	34	< 5	< 5	< 5	< 5000	
Xylene (total)	204400	< 5	< 5	< 10	190 J	< 5000	
Acetone	10220	< 100	< 100	< 100	< 100	---	
Isopropylbenzene	1.02E+4	< 5	< 5	< 1	110 J	< 5000	
2-Methylnaphthalene	2040.00	< 10	< 10	< 10	< 10	< 10000	
Naphthalene	4088	< 5	< 5	< 5	< 5	< 5000	
1,2,4-Trimethylbenzene	5.11E+3	< 5	< 5	< 1	< 1	< 5000	
1,3,5-Trimethylbenzene	5.11E+3	< 5	< 5	< 1	4 J	< 5000	
1,1-Dichloroethane	10220	< 5	< 5	< 5	< 5	< 5000	
1,1-Dichloroethene	7	[100]	< 5	< 5	< 5	< 5000	
1,2-Dichloroethane	31.4	< 5	< 5	< 5	10 J	< 5000	
cis-1,2-Dichloroethene	1022	[1200]	< 5	< 5	< 5	[88000]	
trans-1,2-Dichloroethene	2040	43	< 5	< 5	< 5	< 5000	
1,2-Dichloroethene (Total)							
1,2-Dichloropropane	4.21E+1	< 5	< 5	< 5	< 5	---	
1,1,1-Trichloroethane	9198	540	< 5	< 5	< 5	< 5000	
Tetrachloroethane	56.1	< 5	< 5	< 5	< 5	< 5000	
Trichloroethane	260	[1400]	< 5	< 5	< 5	[13000]	
Chloroethane	9.86E+2	< 10	< 10	< 10	< 10	---	
Sum of Concentrations		3317.00	0.00	0.00	504.00	101000.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For BCL VOC1 Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
Area 1 - On-site Groundwater VOCs and Naphtha Releases
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	05GP049	05GP052	05GP054	05GP055	05GP057	
	SAMPLE ID	1996 VRP	05PW04920	05PW05219	05PW05421	05PW05518	05PW05718
	DATE	Tier II	11/12/96	11/12/96	11/13/96	11/13/96	11/13/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride	10	< 500	< 20	< 10	< 2	< 10	
Benzene	98.6	< 1300	68 J	< 5	< 5	< 5	
Ethylbenzene	10220	1500 J	< 50 UJ	< 5	< 5	< 5	
Methyl(tert)butyl Ether	6950	< 13000	< 500	< 50	< 50	< 50	
Toluene	20440	< 1300	100 J	< 5	< 5	< 5	
Xylene (total)	204400	7400 J	81 J	< 10	< 5	< 10	
Acetone	10220	---	---	< 100	---	< 100	
Isopropylbenzene	1.02E+4	< 1300	86 J	< 1	< 5	< 1	
2-Methylnaphthalene	2040.00	< 2500	< 100	< 10	< 10	< 10	
Naphthalene	4088	1700 J	< 50	< 5	< 5	< 5	
1,2,4-Trimethylbenzene	5.11E+3	< 1300	340 J	19	< 5	< 1	
1,3,5-Trimethylbenzene	5.11E+3	< 1300	< 50	< 1	< 5	< 1	
1,1-Dichloroethane	10220	< 1300	< 50	< 5	< 5	12	
1,1-Dichloroethene	7	< 1300	< 50	< 5	< 5	< 5	
1,2-Dichloroethane	31.4	< 1300	< 50	< 5	< 5	< 5	
cis-1,2-Dichloroethene	1022	< 1300	< 50	< 5	< 5	< 5	
trans-1,2-Dichloroethene	2040	< 1300	< 50	< 5	< 5	< 5	
1,2-Dichloroethene (Total)		---	---	---	---	---	
1,2-Dichloropropane	4.21E+1	---	---	< 5	---	< 5	
1,1,1-Trichloroethane	9198	< 1300	< 50	< 5	< 5	30	
Tetrachloroethene	56.1	< 1300	< 50	< 5	< 5	< 5	
Trichloroethene	260	< 1300	< 50 UJ	< 5	< 5	< 5	
Chloroethane	9.86E+2	---	---	< 10	---	< 10	
Sum of Concentrations		10600.00	675.00	19.00	0.00	42.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

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CONSTITUENT (Units in ug/l)	SITE	05GP060	05GP063	05GP065	05GP069	05GP071	
	SAMPLE ID	1996 VRP	05PW06021	05PW06320	05PW06520	05PW06920	05PW07119
	DATE	Tier II	11/14/96	11/15/96	12/17/96	12/13/96	12/09/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride	10	< 10	< 200	< 20	3.4	[23]	
Benzene	98.6	< 5	[1600]	< 50	9.7	< 5	
Ethylbenzene	10220	< 5	2900	< 50	< 5	< 5	
Methyl(tert)butyl Ether	6950	< 50	< 5000	< 500	< 50	< 50	
Toluene	20440	< 5	2400	< 50	< 5	< 5	
Xylene (total)	204400	< 10	8700	78	< 5	12 B	
Acetone	10220	< 100	---	---	< 100	---	
Isopropylbenzene	1.02E + 4	< 1	< 500	68	< 5	< 5	
2-Methylnaphthalene	2040.00	< 10	< 1000	< 100	< 10	< 10	
Naphthalene	4088	< 5	< 500	< 50	< 5	< 5	
1,2,4-Trimethylbenzene	5.11E + 3	< 1	1500	200	< 400	5.4	
1,3,5-Trimethylbenzene	5.11E + 3	< 1	< 500	< 50	< 5	< 5	
1,1-Dichloroethane	10220	< 5	< 500	< 50	7.0	< 5	
1,1-Dichloroethene	7	< 5	< 500	< 50	< 5	< 5	
1,2-Dichloroethane	31.4	< 5	< 500	< 50	< 5	< 5	
cis-1,2-Dichloroethene	1022	< 5	< 500	< 50	9.2	43	
trans-1,2-Dichloroethene	2040	< 5	< 500	< 50	< 5	7.9	
1,2-Dichloroethene (Total)							
1,2-Dichloropropane	4.21E + 1	< 5	---	---	< 5	---	
1,1,1-Trichloroethane	9198	< 5	< 500	< 50	< 5	< 5	
Tetrachloroethene	56.1	< 5	< 500	< 50	< 5	< 5	
Trichloroethene	260	< 5	< 500	< 50	< 5	210	
Chloroethane	9.86E + 2	< 10	---	---	< 10	---	
Sum of Concentrations		0.00	17100.00	346.00	29.30	301.30	

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[] = Greater than Action Level

For RCL VOC1 Criterium Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
Area 1 - On-site Groundwater VOCs and Naphtha Releases
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

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CONSTITUENT (Units in ug/l)	SITE	06GP003	06GP004	06GP005	07GP005	08GP002	
	SAMPLE ID	1996 VRP	06PW00320	06PW00420	06PW00521	07PW00521	08PW00223
	DATE	Tier II	11/12/96	11/13/96	11/13/96	11/14/96	10/08/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 10	< 10	< 10	8.2	< 10
Benzene		98.6	< 5	< 5	< 5	37	< 5
Ethylbenzene		10220	< 5	< 5	< 5	< 5	< 5
Methyl(tert)butyl Ether		6950	< 50	< 50	< 50	< 50	< 50
Toluene		20440	< 5	< 5	< 5	< 5	< 5
Xylene (total)		204400	< 10	< 10	< 10	< 5	< 10
Acetone		10220	< 100	< 100	< 100	---	< 100
Isopropylbenzene		1.02E+4	< 1	< 1	< 1	< 5	< 1
2-Methylnaphthalene		2040.00	< 10	< 10	< 10	< 10	< 10
Naphthalene		4088	< 5	< 5	< 5	< 5	< 5
1,2,4-Trimethylbenzene		5.11E+3	< 1	< 1	< 1	< 5	7.6
1,3,5-Trimethylbenzene		5.11E+3	< 1	< 1	< 1	< 5	3.1
1,1-Dichloroethane		10220	< 5	5.3	< 5	6.4	230
1,1-Dichloroethene		7	< 5	< 5	< 5	< 5	< 5
1,2-Dichloroethane		31.4	< 5	< 5	< 5	< 5	< 5
cis-1,2-Dichloroethene		1022	190	< 5	20	43	140
trans-1,2-Dichloroethene		2040	< 5	< 5	< 5	< 5	< 5
1,2-Dichloroethene (Total)			---	---	---	---	---
1,2-Dichloropropane		4.21E+1	< 5	< 5	< 5	---	< 5
1,1,1-Trichloroethane		9198	< 5	< 5	< 5	< 5	100
Tetrachloroethene		56.1	< 5	< 5	< 5	< 5	< 5
Trichloroethene		260	81 J	< 5	21	67	< 5
Chloroethane		9.86E+2	< 10	< 10	< 10	---	38
Sum of Concentrations			271.00	5.30	41.00	161.60	518.70

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	08GP003	08GP004	08GP005	08GP006	08GP007
	SAMPLE ID	08PW00319	08PW00422	08PW00518	08PW00618	08PW00718
	DATE	10/08/96	10/08/96	10/09/96	10/09/96	10/09/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Vinyl chloride	10	<2	<10	<2	<2	<2
Benzene	98.6	<5	<5	<5	<5	<5
Ethylbenzene	10220	<5	<5	<5	<5	<5
Methyl(tert)butyl Ether	6950	<50	<50	<50	<50	<50
Toluene	20440	<5	<5	<5	<5	<5
Xylene (total)	204400	<5	<10	<5	<5	<5
Acetone	10220	---	<100	---	---	---
Isopropylbenzene	1.02E+4	<5	<1	<5	<5	<5
2-Methylnaphthalene	2040.00	<10	<10	<10	<10	<10
Naphthalene	4088	<5	<5	<5	<5	<5
1,2,4-Trimethylbenzene	5.11E+3	<5	<1	<1	<1	<1
1,3,5-Trimethylbenzene	5.11E+3	<5	<1	<5	<5	<5
1,1-Dichloroethane	10220	94	<5	44	<5	<5
1,1-Dichloroethene	7	<5	<5	<5	<5	<5
1,2-Dichloroethane	31.4	<5	<5	<5	<5	<5
cis-1,2-Dichloroethene	1022	<5	<5	<5	<5	<5
trans-1,2-Dichloroethene	2040	<5	<5	<5	<5	<5
1,2-Dichloroethene (Total)			---	---	---	---
1,2-Dichloropropane	4.21E+1	---	<5	---	---	---
1,1,1-Trichloroethane	9198	30	<5	72	<5	<5
Tetrachloroethene	56.1	<5	<5	<5	<5	<5
Trichloroethene	260	20.8	<5	78.8	<5	<5
Chloroethane	9.86E+2	---	<10	---	---	---
Sum of Concentrations		144.00	0.00	194.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 For PCL VOC1 [redacted] Criteria Comparison 1996 MGP Tier II Non-Residential [redacted]

Analytical Summary - VOCs in Groundwater
Area 1 - On-site Groundwater VOCs and Naphtha Releases
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	08GP008	08GP009	08GP010	08GP012	08GP012	
	SAMPLE ID	1996 VRP	08PW00821	08PW00920	08PW01018	08PW01219	08QD01219
	DATE	Tier II	10/14/96	10/21/96	10/21/96	10/22/96	10/22/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Duplicate 1
Vinyl chloride	10	[25]	< 2	< 10	< 2	< 2	
Benzene	98.6	< 5	< 5	< 25	< 5	< 5	
Ethylbenzene	10220	< 5	< 5	280	< 5	< 5	
Methyl(tert)butyl Ether	6950	< 50	< 50	< 250	< 50	< 50	
Toluene	20440	< 5	< 5	< 25	< 5	< 5	
Xylene (total)	204400	< 5	< 5	190	< 5	< 5	
Acetone	10220	< 100	---	---	---	---	
Isopropylbenzene	1.02E+4	< 5	< 5	100	< 5	< 5	
2-Methylnaphthalene	2040.00	< 10	13	< 50	< 10	< 10	
Naphthalene	4088	< 5	14	< 25	< 5	< 5	
1,2,4-Trimethylbenzene	5.11E+3	< 400	5.1	340	< 5	< 5	
1,3,5-Trimethylbenzene	5.11E+3	< 5	< 5	29	< 5	< 5	
1,1-Dichloroethane	10220	< 5	< 5	< 25	< 5	< 5	
1,1-Dichloroethene	7	< 5	< 5	< 25	< 5	< 5	
1,2-Dichloroethane	31.4	< 5	< 5	< 25	< 5	< 5	
cis-1,2-Dichloroethene	1022	< 5	8.8	< 25	< 5	< 5	
trans-1,2-Dichloroethene	2040	< 5	< 5	< 25	< 5	< 5	
1,2-Dichloroethene (Total)							
1,2-Dichloropropane	4.21E+1	< 5	---	---	---	---	
1,1,1-Trichloroethane	9198	< 5	< 5	< 25	< 5	< 5	
Tetrachloroethane	56.1	< 5	< 5	< 25	< 5	< 5	
Trichloroethene	260	< 5	< 5	< 25	< 5	< 5	
Chloroethane	9.86E+2	< 10	---	---	---	---	
Sum of Concentrations			25.00	40.90	939.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	09GP002	09GP004	09GP005	09GP006	09GP007	
	SAMPLE ID	1996 VRP	09PW00421	09PW00521	09PW00620	09PW00720	
	DATE	Tier II	11/17/96	07/16/97	07/16/97	07/17/97	
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	
Vinyl chloride		10	< 200	[850]	[47]	< 10	< 2
Benzene		98.6	[6500]	< 500	[930]	< 25	< 5
Ethylbenzene		10220	< 500	< 500	< 50	< 25	< 5
Methyl(tert)butyl Ether		6950	< 5000	< 5000	< 500	< 250	< 50
Toluene		20440	< 500	< 500	< 50	< 25	< 5
Xylene (total)		204400	< 500	< 500	< 50	< 25	< 5
Acetone		10220	< 10000	< 10000	< 1000	< 500	< 100
Isopropylbenzene		1.02E+4	< 500	< 500	< 50	< 25	< 5
2-Methylnaphthalene		2040.00	< 1000	< 1000	< 100	< 50	< 10
Naphthalene		4088	< 500	< 500	< 50	< 25	< 5
1,2,4-Trimethylbenzene		5.11E+3	< 500	< 500	< 50	< 25	< 5
1,3,5-Trimethylbenzene		5.11E+3	< 500	< 500	< 50	< 25	< 5
1,1-Dichloroethane		10220	< 500	< 500	< 50	40	< 5
1,1-Dichloroethane		7	< 500	< 500	< 50	< 25	< 5
1,2-Dichloroethane		31.4	< 500	< 500	< 50	< 25	< 5
cis-1,2-Dichloroethane		1022	< 500	[4200]	< 50	57	< 5
trans-1,2-Dichloroethane		2040	< 500	< 500	< 50	< 25	< 5
1,2-Dichloroethane (Total)							
1,2-Dichloropropane		4.21E+1	< 500	< 500	< 50	< 25	< 5
1,1,1-Trichloroethane		9198	< 500	< 500	< 50	< 25	18
Tetrachloroethene		56.1	< 500	< 500	< 50	< 25	< 5
Trichloroethene		260	< 500	[6100]	< 50	[340]	120
Chloroethane		9.86E+2	< 1000	< 1000	< 100	< 50	< 10
Sum of Concentrations:			6500.00	11150.00	977.00	437.00	138.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than A Level

For BCL VOC1 Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
Area 1 - On-site Groundwater VOCs and Naphtha Releases
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	09GP008	10GP001	11GP001	11GP003	11GP006
	SAMPLE ID	09PW00820	10PW00122	11PW0115	11PW00316	11PW00617
	DATE	07/18/97	11/14/96	10/03/96	10/04/96	10/04/96
	RESULT TYPE	Primary	Primary	Primary	Primary	Primary
	1996 VRP	1996 VRP	1996 VRP	1996 VRP	1996 VRP	1996 VRP
	Tier II	Tier II	Tier II	Tier II	Tier II	Tier II
	Non-Residential	Non-Residential	Non-Residential	Non-Residential	Non-Residential	Non-Residential
Vinyl chloride	10	[410]	< 10	< 100	< 10	[130]
Benzene	98.6	[870]	< 5	< 250	< 5	< 5
Ethylbenzene	10220	540	< 5	< 250	6.4	< 5
Methyl(tert)butyl Ether	6950	< 500	< 50	< 2500	< 50	< 50
Toluene	20440	200	< 5	< 250	< 5	< 5
Xylene (total)	204400	630	< 10	< 250	< 10	< 10
Acetone	10220	< 1000	< 100	---	< 100	< 100
Isopropylbenzene	1.02E+4	280	< 1	< 250	< 1	< 1
2-Methylnaphthalene	2040.00	< 100	< 10	< 500	< 10	< 10
Naphthalene	4088	80	< 5	< 250	< 5	< 5
1,2,4-Trimethylbenzene	5.11E+3	140	< 1	< 20000	< 1	< 1
1,3,5-Trimethylbenzene	5.11E+3	65	< 1	< 250	< 1	< 1
1,1-Dichloroethane	10220	< 50	< 5	< 250	7.7	25
1,1-Dichloroethene	7	< 50	< 5	< 250	< 5	< 5
1,2-Dichloroethane	31.4	< 50	< 5	< 250	< 5	< 5
cis-1,2-Dichloroethene	1022	370	16	[2500]	< 5	79
trans-1,2-Dichloroethene	2040	< 50	< 5	< 250	< 5	< 5
1,2-Dichloroethene (Total)						
1,2-Dichloropropane	4.21E+1	< 50	< 5	---	< 5	< 5
1,1,1-Trichloroethane	9198	< 50	< 5	440	< 5	24
Tetrachloroethene	56.1	< 50	< 5	< 250	< 5	< 5
Trichloroethene	260	[300]	75	< 250	< 5	< 5
Chloroethane	9.86E+2	< 100	< 10	---	< 10	< 10
Sum of Concentrations		3885.00	91.00	2940.00	14.10	258.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	11GP009	12GP001	13GP001	13GP003	13GP004
	SAMPLE ID	11PW00918	12PW00121	13PW00119	13PW00319	13PW00419
	DATE	11/13/96	11/12/96	10/23/96	11/01/96	11/01/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
Vinyl chloride	10	[20]	< 10	< 10	< 250	< 10
Benzene	98.6	< 5	< 5	< 5	< 130	< 5
Ethylbenzene	10220	< 5	< 5	< 5	< 130	< 5
Methyl(tert)butyl Ether	6950	< 50	< 50	< 50	< 1300	< 50
Toluene	20440	< 5	< 5	< 5	< 130	< 5
Xylene (total)	204400	< 10	< 10	< 10	< 250	< 10
Acetone	10220	< 100	< 100	< 100	< 2500	< 100
Isopropylbenzene	1.02E+4	< 1	< 1	< 1	< 25	< 1
2-Methylnaphthalene	2040.00	< 10	< 10	< 10	< 250	< 10
Naphthalene	4088	< 5	< 5	< 5	< 130	< 5
1,2,4-Trimethylbenzene	5.11E+3	< 1	< 1	< 1	< 25	< 1
1,3,5-Trimethylbenzene	5.11E+3	< 1	< 1	< 1	< 25	< 1
1,1-Dichloroethane	10220	26	13	< 5	1300	32 J
1,1-Dichloroethene	7	< 5	< 5	< 5	[180]	< 5
1,2-Dichloroethane	31.4	7.6	< 5	< 5	< 130	< 5
cis-1,2-Dichloroethene	1022	310	130	< 5	380	< 5
trans-1,2-Dichloroethane	2040	< 5	< 5	< 5	< 130	< 5
1,2-Dichloroethene (Total)						
1,2-Dichloropropane	4.21E+1	< 5	< 5	< 5	< 130	< 5
1,1,1-Trichloroethane	9198	56	93	< 5	2700	< 5
Tetrachloroethene	56.1	< 5	< 5	< 5	< 130	< 5
Trichloroethane	260	< 5	150	< 5	[2100]	< 5
Chloroethane	9.86E+2	< 10	< 10	< 10	< 250	330 J
Sum of Concentrations		419.60	386.00	0.00	6660.00	362.00

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[] = Greater than A Level

Analytical Summary - VOCs in Groundwater
Area 1 - On-site Groundwater VOCs and Naphtha Releases
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

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Date: 09/30/99

CONSTITUENT (Units in ug/l)	SITE	13GP004	13GP005	13GP006	13GP006	14GP003	
	SAMPLE ID	1996 VRP	13QD00419	13PW00520	13PW00620	13QD00620	14PW00322
	DATE	Tier II	11/01/96	11/03/96	11/15/96	11/15/96	10/25/96
	RESULT TYPE	Non-Residential	Duplicate 1	Primary	Primary	Duplicate 1	Primary
Vinyl chloride	10	< 10	< 100	< 2	< 2	< 10	
Benzene	98.6	< 5	< 50	< 5	< 5	< 5	
Ethylbenzene	10220	< 5	< 50	< 5	< 5	< 5	
Methyl(tert)butyl Ether	6950	< 50	< 500	< 50	< 50	< 50	
Toluene	20440	< 5	< 50	< 5	< 5	< 5	
Xylene (total)	204400	< 10	< 100	< 5	< 5	< 10	
Acetone	10220	< 100	< 1000	< 100	< 100	< 100	
Isopropylbenzene	1.02E+4	< 1	< 10	< 5	< 5	< 1	
2-Methylnaphthalene	2040.00	< 10	< 100	< 10	< 10	< 10	
Naphthalene	4088	< 5	< 50	< 5	< 5	< 5	
1,2,4-Trimethylbenzene	5.11E+3	< 1	< 10	< 5	< 5	< 1	
1,3,5-Trimethylbenzene	5.11E+3	< 1	< 10	< 5	< 5	< 1	
1,1-Dichloroethane	10220	29	< 50	190 J	< 5	33 J	
1,1-Dichloroethene	7	< 5	< 50	< 5	< 5	< 5	
1,2-Dichloroethane	31.4	< 5	< 50	< 5	< 5	< 5	
cis-1,2-Dichloroethene	1022	< 5	< 50	150 J	< 5	400 J	
trans-1,2-Dichloroethene	2040	< 5	< 50	< 5	< 5	< 5	
1,2-Dichloroethene (Total)							
1,2-Dichloropropane	4.21E+1	< 5	< 50	< 5	< 5	< 5	
1,1,1-Trichloroethane	9198	< 5	< 50	250	290	< 5	
Tetrachloroethene	56.1	< 5	< 50	< 5	< 5	< 5	
Trichloroethene	260	< 5	[960] J	[1500]	[1600]	130 J	
Chloroethane	9.86E+2	300	< 100	< 10	< 10	< 10	
Sum of Concentrations		329.00	960.00	2090.00	1890.00	563.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
Area 1 - On-site Groundwater VOCs and Naphtha Releases
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	14GP004	14GP009	14GP011	14GP021	14GP028
	SAMPLE ID	14PW00419	14PW00921	14PW01120	14PW02119	14PW02819
	DATE	10/29/96	10/30/96	10/31/96	12/09/96	12/12/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary
	1996 VRP					
	Tier II					
Vinyl chloride	10	7	[39]	< 2	< 2	[32]
Benzene	98.6	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	10220	< 5	< 5	< 5	< 5	< 5
Methyl(tert)butyl Ether	6950	< 50	< 50	< 50	< 50	< 50
Toluene	20440	< 5	< 5	< 5	< 5	17
Xylene (total)	204400	< 5	< 5	< 5	6.5 JB	< 5
Acetone	10220	---	---	---	---	---
Isopropylbenzene	1.02E+4	< 5	< 5	< 5	< 5	< 5
2-Methylnaphthalene	2040.00	< 10	< 10	< 10	< 10	< 10
Naphthalene	4088	< 5	< 5	< 5	< 5	< 5
1,2,4-Trimethylbenzene	5.11E+3	< 5	< 5	< 5	< 5	< 5
1,3,5-Trimethylbenzene	5.11E+3	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethane	10220	68	210	< 5	< 5	6.3
1,1-Dichloroethene	7	< 5	[12]	< 5	< 5	< 5
1,2-Dichloroethane	31.4	< 5	< 5	< 5	< 5	< 5
cis-1,2-Dichloroethene	1022	200	76	< 5	20	6.8
trans-1,2-Dichloroethene	2040	5.3	< 5	< 5	< 5 UJ	< 5
1,2-Dichloroethene (Total)		---	---	---	---	---
1,2-Dichloropropane	4.21E+1	---	---	---	---	---
1,1,1-Trichloroethane	9198	27	270	< 5	< 5	< 5
Tetrachloroethene	56.1	< 5	< 5	< 5	< 5	< 5
Trichloroethene	260	160 B	[370]	< 5	140	20
Chloroethane	9.86E+2	---	---	---	---	---
Sum of Concentrations		467.30	977.00	0.00	166.50	81.10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
[] = Greater than A Level
For BCL VOC1 Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
Area 1 - On-site Groundwater VOCs and Naphtha Releases
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

CONSTITUENT	(Units in ug/l)	SITE	14GP029	14GP031	14GP031	14GP032	15GP005	
		SAMPLE ID	1996 VRP	14PW02919	14PW03119	14QD03119	14PW03219	15PW00521
		DATE	Tier II	07/15/97	07/15/97	07/15/97	07/15/97	11/05/96
		RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Primary	Primary
Vinyl chloride			10	<2	[18]	[17]	<2	<2
Benzene			98.6	<5	<5	<5	<5	<5
Ethylbenzene			10220	<5	<5	<5	<5	<5
Methyl(tert)butyl Ether			6950	<50	<50	<50	<50	<50
Toluene			20440	<5	<5	<5	<5	<5
Xylene (total)			204400	<5	<5	<5	<5	<5
Acetone			10220	<100	<100	<100	<100	---
Isopropylbenzene			1.02E+4	<5	<5	<5	<5	<5
2-Methylnaphthalene			2040.00	<10	<10	<10	<10	<10
Naphthalene			4088	<5	<5	<5	<5	<5
1,2,4-Trimethylbenzene			5.11E+3	<5	5.3	<5	<5	<5
1,3,5-Trimethylbenzene			5.11E+3	<5	<5	<5	<5	<5
1,1-Dichloroethane			10220	71	100	97	180	57
1,1-Dichloroethene			7	<5	<5	<5	<5	<5
1,2-Dichloroethane			31.4	<5	<5	<5	<5	<5
cis-1,2-Dichloroethene			1022	220	9.3	8.3	41	18
trans-1,2-Dichloroethene			2040	<5	<5	<5	<5	<5
1,2-Dichloroethene (Total)				---	---	---	---	---
1,2-Dichloropropane			4.21E+1	<5	<5	<5	<5	---
1,1,1-Trichloroethane			9198	48	7.1	6.6	71	15
Tetrachloroethene			56.1	<5	<5	<5	<5	<5
Trichloroethene			260	210	<5	<5	54	8.1 B
Chloroethane			9.86E+2	<10	<10	<10	<10	---
Sum of Concentrations				549.00	139.70	128.90	346.00	99.10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	15GP006	15GP007	15GP008	15GP013	17GP001	
	SAMPLE ID	1996 VRP	15PW00620	15PW00721	15PW00821	15PW01319	17PW00120
	DATE	Tier II	11/05/96	11/05/96	11/05/96	07/15/97	11/12/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	<2	[1300]	<10	<2	<1000
Benzene		98.6	<5	<130	<5	<5	[15000] J
Ethylbenzene		10220	<5	<130	<5	<5	2100 J
Methyl(tert)butyl Ether		6950	<50	<1300	<50	<50	<5000
Toluene		20440	<5	<130	<5	<5	11000 J
Xylene (total)		204400	<5	<130	<10	<5	6500 J
Acetone		10220	---	---	<100	<100	<10000
Isopropylbenzene		1.02E+4	<5	<130	<1	<5	<100
2-Methylnaphthalene		2040.00	<10	<250	<10	<10	<1000
Naphthalene		4088	<5	<130	<5	<5	<500
1,2,4-Trimethylbenzene		5.11E+3	<5	<130	<1	<400	560 J
1,3,5-Trimethylbenzene		5.11E+3	<5	<130	<1	<5	<100
1,1-Dichloroethane		10220	41	140	6.7	2700	2000 J
1,1-Dichloroethene		7	<5	<130	<5	<5	<500
1,2-Dichloroethane		31.4	<5	<130	<5	<5	<500
cis-1,2-Dichloroethene		1022	12	[2600]	5.5	[13000]	[5500] J
trans-1,2-Dichloroethene		2040	<5	<130	<5	<5	<500
1,2-Dichloroethene (Total)			---	---	---	---	---
1,2-Dichloropropane		4.21E+1	---	---	<5	<5	<500
1,1,1-Trichloroethane		9198	<5	<130	<5	2700	<500
Tetrachloroethene		56.1	35	<130	<5	<5	<500
Trichloroethene		260	73 B	[380]	17	<5	<500
Chloroethane		9.86E+2	---	---	<10	<10	<1000
Sum of Concentrations			161.00	4420.00	29.20	18400.00	42660.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

II = Greater than A Level The following qualifier(s) exist: J, B, U

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	1D	1D	1D	1D	1D	
	SAMPLE ID	1996 VRP	1D	1D	1D	1D	
	DATE	Tier II	09/04/96	12/10/96	03/21/97	06/05/97	09/25/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 2	< 10	< 10	< 2	< 10 E
Benzene		98.6	< 5	< 5.0	< 5	< 5	< 5.0 E
Ethylbenzene		10220	< 5	< 5.0	< 5	< 5	< 5.0 E
Toluene		20440	< 5	< 5.0	< 5	< 5	< 5.0 E
Xylene (total)		204400	< 5	< 10	< 10	< 5	< 10 E
Naphthalene		4088	---	---	---	---	---
1,2,4-Trimethylbenzene		5.11E+3	---	---	---	---	---
1,1-Dichloroethane		10220	< 5	< 5.0	< 5	< 5	< 5.0 E
1,1-Dichloroethene		7	< 5	< 5.0	< 5	< 5	< 5.0 E
1,2-Dichloroethane		31.4	< 5	< 5.0	< 5	< 5	< 5.0 E
cis-1,2-Dichloroethene		1022	< 5	< 5.0	< 5	< 5	< 5.0 E
trans-1,2-Dichloroethene		2040	< 5	< 5.0	< 5	< 5	< 5.0 E
1,2-Dichloroethene (Total)			---	---	---	---	---
1,1,1-Trichloroethane		9198	< 5	< 5.0	< 5	< 5	< 5.0 E
Tetrachloroethene		56.1	< 5	< 5.0	< 5	< 5	< 5.0 E
Trichloroethene		260	< 5	< 5.0	< 5	< 5	< 5.0 E
Sum of Concentrations			0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	1D	2D	2D	2D	2D	
	SAMPLE ID	1996 VRP					
	DATE	Tier II	12/09/97	09/05/96	12/12/96	03/22/97	06/03/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 10	< 2	< 2	< 10	< 2
Benzene		98.6	< 5.0	< 5	< 5	< 5	< 5
Ethylbenzene		10220	< 5.0	< 5	< 5	< 5	< 5
Toluene		20440	< 5.0	< 5	< 5	< 5	< 5
Xylene (total)		204400	< 10	< 5	< 5	< 10	< 5
Naphthalene		4088	---	---	---	---	---
1,2,4-Trimethylbenzene		5.11E+3	---	---	---	---	---
1,1-Dichloroethane		10220	< 5.0	< 5	< 5	< 5	< 5
1,1-Dichloroethene		7	< 5.0	< 5	< 5	< 5	< 5
1,2-Dichloroethane		31.4	< 5.0	14	15	12	16
cis-1,2-Dichloroethene		1022	< 5.0	11	13	10	17
trans-1,2-Dichloroethene		2040	< 5.0	< 5	< 5	< 5	< 5
1,2-Dichloroethene (Total)			---	---	---	---	---
1,1,1-Trichloroethane		9198	< 5.0	< 5	< 5	< 5	< 5
Tetrachloroethene		56.1	< 5.0	< 5	< 5	< 5	< 5
Trichloroethene		260	< 5.0	< 5	< 5	< 5	< 5
Sum of Concentrations			0.00	25.00	28.00	22.00	33.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	2D	2D	7-25	7-25	7-25	
	SAMPLE ID	1996 VRP	09/23/97	12/08/97	12/20/96	03/18/97	06/03/97
	DATE	Tier II	Primary	Primary	Primary	Primary	Primary
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 10	< 10	< 2	< 10	< 2
Benzene		98.6	< 5.0	< 5.0	< 5	< 5	< 5
Ethylbenzene		10220	< 5.0	< 5.0	< 5	< 5	< 5
Toluene		20440	< 5.0	< 5.0	< 5	< 5	< 5
Xylene (total)		204400	< 10	< 10	< 5	< 10	< 5
Naphthalene		4088	---	---	< 5	---	---
1,2,4-Trimethylbenzene		5.11E + 3	---	---	< 5	---	---
1,1-Dichloroethane		10220	< 5.0	< 5.0	< 5	< 5	< 5
1,1-Dichloroethene		7	< 5.0	< 5.0	< 5	< 5	< 5
1,2-Dichloroethane		31.4	14	10	< 5	< 5	< 5
cis-1,2-Dichloroethene		1022	16	15	< 5	< 5	< 5
trans-1,2-Dichloroethene		2040	< 5.0	< 5.0	< 5	< 5	< 5
1,2-Dichloroethene (Total)			---	---	---	---	---
1,1,1-Trichloroethane		9198	< 5.0	< 5.0	< 5	< 5	< 5
Tetrachloroethene		56.1	< 5.0	< 5.0	< 5	< 5	< 5
Trichloroethene		260	< 5.0	< 5.0	< 5	< 5	< 5
Sum of Concentrations			30.00	25.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	7-25	7-25	7-25	7-50	7D	
	SAMPLE ID	1996 VRP	7-25	7-25	7-50	7D	
	DATE	Tier II	07/18/97	09/25/97	12/08/97	07/18/97	09/05/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride	10	<2	<10	<10	<2	<2	
Benzene	98.6	<5	<5.0	<5.0	<5	<5	
Ethylbenzene	10220	<5	<5.0	<5.0	<5	<5	
Toluene	20440	<5	<5.0	<5.0	<5	<5	
Xylene (total)	204400	<5	<10	<10	<5	<5	
Naphthalene	4088	---	---	---	---	---	
1,2,4-Trimethylbenzene	5.11E+3	---	---	---	---	---	
1,1-Dichloroethane	10220	<5	<5.0	<5.0	<5	<5	
1,1-Dichloroethene	7	<5	<5.0	<5.0	<5	<5	
1,2-Dichloroethane	31.4	<5	<5.0	<5.0	<5	<5	
cis-1,2-Dichloroethene	1022	<5	<5.0	<5.0	<5	20	
trans-1,2-Dichloroethene	2040	<5	<5.0	<5.0	<5	<5	
1,2-Dichloroethene (Total)		2.2	---	---	<2	---	
1,1,1-Trichloroethane	9198	<5	<5.0	<5.0	<5	<5	
Tetrachloroethene	56.1	<5	<5.0	<5.0	<5	<5	
Trichloroethene	280	<5	<5.0	<5.0	<5	<5	
Sum of Concentrations		3.40	0.00	0.00	0.00	27.70	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
Area 1 - On-site Groundwater VOCs and Naphtha Releases
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

CONSTITUENT	(Units in ug/l)	SITE	7D	7D	7D	7D	7D	
		SAMPLE ID	1996 VRP	7D	7D	7D	MW-101	7D
		DATE	Tier II	03/21/97	03/21/97	06/03/97	06/03/97	09/24/97
		RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Duplicate 1	Primary
Vinyl chloride			10	<10	<10	<2	<2	<10
Benzene			98.6	<5	<5	<5	<5	<5.0
Ethylbenzene			10220	<5	<5	<5	<5	<5.0
Toluene			20440	<5	<5	<5	<5	<5.0
Xylene (total)			204400	<10	<10	<5	<5	<10
Naphthalene			4088	---	---	---	---	---
1,2,4-Trimethylbenzene			5.11E+3	---	---	---	---	---
1,1-Dichloroethane			10220	<5	<5	<5	<5	<5.0
1,1-Dichloroethene			7	<5	<5	<5	<5	<5.0
1,2-Dichloroethane			31.4	<5	<5	<5	<5	<5.0
cis-1,2-Dichloroethene			1022	24	22	35	37	37
trans-1,2-Dichloroethene			2040	<5	<5	6.2	7.8	5.3
1,2-Dichloroethene (Total)				---	---	---	---	---
1,1,1-Trichloroethane			9198	<5	<5	<5	<5	<5.0
Tetrachloroethene			56.1	<5	<5	<5	<5	<5.0
Trichloroethene			260	5.4	5	9.3	12	9.0
Sum of Concentrations				29.40	27.00	50.50	56.80	51.30

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
Area 1 - On-site Groundwater VOCs and Naphtha Releases
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	7D	7D	86-10	86-10	86-10	
	SAMPLE ID	1996-VRP					
	DATE	Tier II	09/24/97	12/08/97	09/04/96	12/10/96	03/18/97
	RESULT TYPE	Non-Residential	Duplicate 1	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 10	< 10	< 2	< 2	< 10
Benzene		98.6	< 5.0	< 5.0	< 5	< 5	< 5
Ethylbenzene		10220	< 5.0	< 5.0	< 5	< 5	< 5
Toluene		20440	< 5.0	< 5.0	< 5	< 5	< 5
Xylene (total)		204400	< 10	< 10	< 5	< 5	< 10
Naphthalene		4088	---	---	---	---	---
1,2,4-Trimethylbenzene		5.11E+3	---	---	---	---	---
1,1-Dichloroethane		10220	< 5.0	< 5.0	< 5	< 5	< 5
1,1-Dichloroethene		7	< 5.0	< 5.0	< 5	< 5	< 5
1,2-Dichloroethane		31.4	< 5.0	< 5.0	< 5	< 5	< 5
cis-1,2-Dichloroethene		1022	37	22	78	88	76
trans-1,2-Dichloroethene		2040	5.6	< 5.0	7.5	12	9.6
1,2-Dichloroethene (Total)			---	---	---	---	---
1,1,1-Trichloroethane		9198	< 5.0	< 5.0	22	7.2	< 5
Tetrachloroethene		56.1	< 5.0	< 5.0	< 5	< 5	< 5
Trichloroethene		260	8.8	< 5.0	120	100	88
Sum of Concentrations			51.40	22.00	232.40	207.20	173.60

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	86-10	86-10	86-10	86-15	86-15	
	SAMPLE ID	1996 VRP					
	DATE	Tier II	06/05/97	09/25/97	12/09/97	09/04/96	12/10/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	<2	<10 E	<10	<2	<2
Benzene		98.6	<5	<5.0 E	<5.0	<5	<5
Ethylbenzene		10220	<5	<5.0 E	<5.0	<5	<5
Toluene		20440	<5	<5.0 E	<5.0	<5	<5
Xylene (total)		204400	<5	<10 E	<10	<5	<5
Naphthalene		4088	---	---	---	---	---
1,2,4-Trimethylbenzene		5.11E+3	---	---	---	---	---
1,1-Dichloroethane		10220	<5	<5.0 E	<5.0	<5	<5
1,1-Dichloroethene		7	<5	<5.0 E	<5.0	<5	<5
1,2-Dichloroethane		31.4	<5	<5.0 E	<5.0	<5	<5
cis-1,2-Dichloroethene		1022	95	92 J	98	<5	32
trans-1,2-Dichloroethene		2040	12	12 J	12	44	49
1,2-Dichloroethene (Total)			---	---	---	---	---
1,1,1-Trichloroethane		9198	<5	<5.0 E	<5.0	<5	<5
Tetrachloroethene		56.1	<5	<5.0 E	<5.0	<5	<5
Trichloroethene		260	100	120 J	120	[350]	[320]
Sum of Concentrations			207.00	224.00	230.00	394.00	401.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	86-15	86-15	86-15	86-15	86-15	
	SAMPLE ID	1996 VRP	86-15	86-15	86-15	86-15	
	DATE	Tier II	03/18/97	06/05/97	06/05/97	09/25/97	12/09/97
	RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Primary	Primary
Vinyl chloride		10	< 10	< 2	< 2	< 10	< 10
Benzene		98.6	< 5	< 5	< 5	< 5.0	< 5.0
Ethylbenzene		10220	< 5	< 5	< 5	< 5.0	< 5.0
Toluene		20440	< 5	< 5	< 5	< 5.0	< 5.0
Xylene (total)		204400	< 10	< 5	< 5	< 10	< 10
Naphthalene		4088	---	---	---	---	---
1,2,4-Trimethylbenzene		5.11E+3	---	---	---	---	---
1,1-Dichloroethane		10220	< 5	< 5	< 5	< 5.0	< 5.0
1,1-Dichloroethene		7	< 5	< 5	< 5	< 5.0	< 5.0
1,2-Dichloroethane		31.4	< 5	< 5	< 5	< 5.0	< 5.0
cis-1,2-Dichloroethene		1022	35	38	33	32	33
trans-1,2-Dichloroethene		2040	60	58	63	48	50
1,2-Dichloroethene (Total)			---	---	---	---	---
1,1,1-Trichloroethane		9198	< 5	< 5	< 5	< 5.0	< 5.0
Tetrachloroethene		56.1	< 5	< 5	< 5	< 5.0	< 5.0
Trichloroethene		260	[330]	[330]	[290]	[260]	[290]
Sum of Concentrations			425.00	426.00	376.00	340.00	373.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1 Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE SAMPLE ID	1996 VRP Tier II	86-4 Primary	8D Primary	8D Primary	8D Primary	8D Primary
	DATE	Non-Residential	12/19/96	09/05/96	03/21/97	06/03/97	09/24/97
	RESULT TYPE						
Vinyl chloride		10	[10]	< 2	< 10	< 2	< 10
Benzene		98.6	< 5	< 5	< 5	< 5	< 5.0
Ethylbenzene		10220	< 5	< 5	< 5	< 5	< 5.0
Toluene		20440	< 5	< 5	< 5	< 5	< 5.0
Xylene (total)		204400	< 5	< 5	< 10	< 5	< 10
Naphthalene		4088	< 5	---	---	---	---
1,2,4-Trimethylbenzene		5.11E+3	< 400	---	---	---	---
1,1-Dichloroethane		10220	< 5	< 5	< 5	< 5	< 5.0
1,1-Dichloroethene		7	< 5	< 5	< 5	< 5	< 5.0
1,2-Dichloroethane		31.4	< 5	< 5	< 5	< 5	< 5.0
cis-1,2-Dichloroethene		1022	< 5	240	230	310	240
trans-1,2-Dichloroethene		2040	< 5	23	27	35	23
1,2-Dichloroethene (Total)			---	---	---	---	---
1,1,1-Trichloroethane		9198	< 5	< 5	< 5	< 5	< 5.0
Tetrachloroethene		56.1	< 5	< 5	< 5	< 5	< 5.0
Trichloroethene		260	< 5	< 5	< 5	< 5	< 5.0
Sum of Concentrations			10.00	263.00	267.00	345.00	263.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	8D	9-33	9-33	9-33	9-33	
	SAMPLE ID	1996 VRP	9-33	9-33	9-33	9-33	
	DATE	Tier II	12/08/97	09/05/96	03/19/97	06/04/97	09/26/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 10	< 2	< 10	< 2	< 10
Benzene		98.6	< 5.0	< 5	< 5	< 5	< 5.0
Ethylbenzene		10220	< 5.0	< 5	< 5	< 5	< 5.0
Toluene		20440	< 5.0	< 5	< 5	< 5	< 5.0
Xylene (total)		204400	< 10	< 5	< 10	< 5	< 10
Naphthalene		4088	---	---	---	---	---
1,2,4-Trimethylbenzene		5.11E+3	---	---	---	---	---
1,1-Dichloroethane		10220	< 5.0	< 5	< 5	< 5	< 5.0
1,1-Dichloroethene		7	< 5.0	< 5	< 5	< 5	< 5.0
1,2-Dichloroethane		31.4	< 5.0	< 5	< 5	< 5	< 5.0
cis-1,2-Dichloroethene		1022	220	< 5	< 5	< 5	< 5.0
trans-1,2-Dichloroethene		2040	21	< 5	< 5	< 5	< 5.0
1,2-Dichloroethene (Total)			---	---	---	---	---
1,1,1-Trichloroethane		9198	< 5.0	< 5	< 5	< 5	< 5.0
Tetrachloroethene		56.1	< 5.0	< 5	< 5	< 5	< 5.0
Trichloroethene		260	< 5.0	< 5	< 5	< 5	< 5.0
Sum of Concentrations			241.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
Area 1 - On-site Groundwater VOCs and Naphtha Releases
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	9-33	D7	D7	D7	D7	
	SAMPLE ID	1996 VRP					
	DATE	Tier II	09/26/97	09/04/96	03/22/97	06/03/97	09/24/97
	RESULT TYPE	Non-Residential	Duplicate 1	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 10	< 2	< 10	< 2	< 10
Benzene		98.6	< 5.0	< 5	< 5	< 5	< 5.0
Ethylbenzene		10220	< 5.0	< 5	< 5	< 5	< 5.0
Toluene		20440	< 5.0	< 5	< 5	< 5	< 5.0
Xylene (total)		204400	< 10	< 5	< 10	< 5	< 10
Naphthalene		4088	---	---	---	---	---
1,2,4-Trimethylbenzene		5.11E+3	---	---	---	---	---
1,1-Dichloroethane		10220	< 5.0	< 5	< 5	< 5	< 5.0
1,1-Dichloroethene		7	< 5.0	< 5	< 5	< 5	< 5.0
1,2-Dichloroethane		31.4	< 5.0	15	13	14	14
cis-1,2-Dichloroethene		1022	< 5.0	< 5	< 5	< 5	< 5.0
trans-1,2-Dichloroethene		2040	< 5.0	< 5	< 5	< 5	< 5.0
1,2-Dichloroethene (Total)			---	---	---	---	---
1,1,1-Trichloroethane		9198	< 5.0	< 5	< 5	< 5	< 5.0
Tetrachloroethene		56.1	< 5.0	< 5	< 5	< 5	< 5.0
Trichloroethene		260	< 5.0	< 5	< 5	< 5	< 5.0
Sum of Concentrations			0.00	15.00	13.00	14.00	14.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE		D7	MW-1	MW-1	MW-1	MW-1
	SAMPLE ID	1996 VRP			MW-1		
	DATE	Tier II	12/11/97	12/20/96	03/18/97	06/05/97	09/26/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 10	< 2	< 10	< 2	< 10
Benzene		98.6	< 5.0	< 5	< 5	< 5	< 5.0
Ethylbenzene		10220	< 5.0	< 5	< 5	< 5	< 5.0
Toluene		20440	< 5.0	< 5	< 5	< 5	< 5.0
Xylene (total)		204400	< 10	< 5	< 10	< 5	< 10
Naphthalene		4088	---	< 5	---	---	---
1,2,4-Trimethylbenzene		5.11E+3	---	< 400	---	---	---
1,1-Dichloroethane		10220	< 5.0	< 5	< 5	< 5	< 5.0
1,1-Dichloroethene		7	< 5.0	< 5	< 5	< 5	< 5.0
1,2-Dichloroethane		31.4	14	< 5	< 5	< 5	< 5.0
cis-1,2-Dichloroethene		1022	< 5.0	< 5	< 5	< 5	< 5.0
trans-1,2-Dichloroethene		2040	< 5.0	< 5	< 5	< 5	< 5.0
1,2-Dichloroethene (Total)			---	---	---	---	---
1,1,1-Trichloroethane		9198	< 5.0	< 5	< 5	< 5	< 5.0
Tetrachloroethene		56.1	< 5.0	< 5	< 5	< 5	< 5.0
Trichloroethene		260	< 5.0	< 5	< 5	< 5	< 5.0
Sum of Concentrations			14.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	MW-1	MW-2	MW-2	MW-2	MW-2	
	SAMPLE ID	1996 VRP	MW-2	MW-2	MW-2	MW-2	
	DATE	Tier II	12/10/97	12/20/96	03/18/97	06/05/97	09/26/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 10	< 2	< 250	< 2	[70]
Benzene		98.6	< 5.0	< 5	< 130	< 5	< 25
Ethylbenzene		10220	< 5.0	< 5	< 130	< 5	< 25
Toluene		20440	< 5.0	< 5	< 130	< 5	< 25
Xylene (total)		204400	< 10	< 5	< 250	< 5	< 50
Naphthalene		4088	---	ND#	---	---	---
1,2,4-Trimethylbenzene		5.11E+3	---	< 5	---	---	---
1,1-Dichloroethane		10220	< 5.0	7.0	< 130	260	190
1,1-Dichloroethene		7	< 5.0	< 5	< 130	< 5	< 25
1,2-Dichloroethane		31.4	< 5.0	< 5	< 130	< 5	[49]
cis-1,2-Dichloroethene		1022	< 5.0	140	[2400]	[3500]	[2600]
trans-1,2-Dichloroethene		2040	< 5.0	< 5	< 130	< 5	< 25
1,2-Dichloroethene (Total)			---	---	---	---	---
1,1,1-Trichloroethane		9198	< 5.0	34	880	960	500
Tetrachloroethene		56.1	< 5.0	< 5	< 130	< 5	< 25
Trichloroethene		260	< 5.0	< 5	170	< 5	36
Sum of Concentrations			0.00	181.00	3450.00	4720.00	3445.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported. [] = Greater than Action Level ND = Not Detected

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units: in ug/l)	SITE SAMPLE ID DATE RESULT TYPE	1996 VRP Tier II Non-Residential	MW-3 09/26/97 Primary	MW-3 12/10/97 Primary	MW-3 12/10/97 Duplicate 1	MW-4 12/19/96 Primary	MW-4 MW-4 03/18/97 Primary
Vinyl chloride		10	< 10	< 10	< 10	< 2	< 10
Benzene		98.6	< 5.0	< 5.0	< 5.0	< 5	< 5
Ethylbenzene		10220	< 5.0	< 5.0	< 5.0	< 5	< 5
Toluene		20440	< 5.0	< 5.0	< 5.0	< 5	< 5
Xylene (total)		204400	< 10	< 10	< 10	< 5	< 10
Naphthalene		4088	---	---	---	< 5	---
1,2,4-Trimethylbenzene		5.11E+3	---	---	---	< 400	---
1,1-Dichloroethane		10220	5.0	5.1	5.2	< 5	< 5
1,1-Dichloroethene		7	< 5.0	< 5.0	< 5.0	< 5	< 5
1,2-Dichloroethane		31.4	< 5.0	< 5.0	< 5.0	< 5	< 5
cis-1,2-Dichloroethene		1022	57	60	62	23	11
trans-1,2-Dichloroethene		2040	< 5.0	< 5.0	< 5.0	< 5	< 5
1,2-Dichloroethene (Total)			---	---	---	---	---
1,1,1-Trichloroethane		9198	8.6	6.9	7.1	< 5	< 5
Tetrachloroethene		56.1	< 5.0	< 5.0	< 5.0	< 5	< 5
Trichloroethene		260	8.4	5.7	5.8	13	13
Sum of Concentrations			79.00	77.70	80.10	36.00	24.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE SAMPLE ID	1996 VRP	MW-4	MW-4	MW-4	MW-5	MW-5
	DATE	Tier II	06/04/97	09/26/97	12/10/97	12/20/96	12/20/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Duplicate 1
Vinyl chloride		10	<2	<10	<10	[13]	[19]
Benzene		98.6	<5	<5.0	<5.0	<5	<5
Ethylbenzene		10220	<5	<5.0	<5.0	<5	<5
Toluene		20440	<5	<5.0	<5.0	<5	<5
Xylene (total)		204400	<5	<10	<10	<5	<5
Naphthalene		4088	---	---	---	ND#	ND#
1,2,4-Trimethylbenzene		5.11E+3	---	---	---	<400	<400
1,1-Dichloroethane		10220	<5	5.6	6.5	<5	<5
1,1-Dichloroethane		7	<5	<5.0	<5.0	<5	<5
1,2-Dichloroethane		31.4	<5	<5.0	<5.0	<5	<5
cis-1,2-Dichloroethane		1022	5.4	10	5.2	14	13
trans-1,2-Dichloroethane		2040	<5	<5.0	<5.0	<5	<5
1,2-Dichloroethane (Total)			---	---	---	---	---
1,1,1-Trichloroethane		9198	<5	<5.0	<5.0	12	11
Tetrachloroethene		56.1	<5	<5.0	<5.0	<5	<5
Trichloroethene		260	17	20	21	29	29
Sum of Concentrations			22.40	35.60	32.70	68.00	72.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 # = Constituent more than one test method, highest result reported. [] = Greater than Action Level ND = Not Detected
 For RCL VOCs Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE		MW-5	MW-5	MW-5	MW-5	MW-6
	SAMPLE ID	1996 VRP	MW-5				
	DATE	Tier II	03/18/97	06/05/97	09/26/97	12/10/97	12/19/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	[13]	[12]	[13]	< 10	< 200 JHT
Benzene		98.6	< 5	< 5	< 5.0	< 5.0	[9800] JHT
Ethylbenzene		10220	< 5	< 5	< 5.0	< 5.0	2000 JHT
Toluene		20440	< 5	< 5	< 5.0	< 5.0	17000 JHT
Xylene (total)		204400	< 10	< 5	< 10	< 10	7900 JHT
Naphthalene		4088	---	---	---	---	< 500 JHT
1,2,4-Trimethylbenzene		5.11E+3	---	---	---	---	1500 JHT
1,1-Dichloroethane		10220	< 5	< 5	< 5.0	< 5.0	2200 JHT
1,1-Dichloroethene		7	< 5	< 5	< 5.0	< 5.0	< 500 JHT
1,2-Dichloroethane		31.4	< 5	< 5	< 5.0	< 5.0	< 500 JHT
cis-1,2-Dichloroethene		1022	9.8	11	11	11	[120000] JHT
trans-1,2-Dichloroethene		2040	< 5	< 5	< 5.0	< 5.0	< 500 JHT
1,2-Dichloroethene (Total)			---	---	---	---	---
1,1,1-Trichloroethane		9198	9	11	16	33	< 500 JHT
Tetrachloroethene		56.1	5.8	8.4	13	8.8	< 500 JHT
Trichloroethene		260	24	28	42	18	[19000] JHT
Sum of Concentrations			61.60	70.40	95.00	70.80	179400.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	MW-7	MW-7	MW-7	MW-7	MW-7
	SAMPLE ID	1996 VRP	MW-7	MW-7	MW-7	MW-7
DATE	Tier II	12/19/96	03/18/97	06/05/97	09/25/97	12/09/97
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride	10	[94]	[63]	[120]	[81]	[95]
Benzene	98.6	<5	<5	<5	<5.0	<5.0
Ethylbenzene	10220	<5	<5	<5	<5.0	<5.0
Toluene	20440	<5	<5	<5	<5.0	<5.0
Xylene (total)	204400	<5	<10	<5	<10	<10
Naphthalene	4088	<5	---	---	---	---
1,2,4-Trimethylbenzene	5.11E+3	<400	---	---	---	---
1,1-Dichloroethane	10220	29	15	28	19	16
1,1-Dichloroethene	7	<5	<5	<5	<5.0	<5.0
1,2-Dichloroethane	31.4	<5	<5	<5	<5.0	<5.0
cis-1,2-Dichloroethene	1022	280 J	230	350	290	270
trans-1,2-Dichloroethene	2040	<5	<5	<5	<5.0	<5.0
1,2-Dichloroethene (Total)		---	---	---	---	---
1,1,1-Trichloroethane	9198	<5	<5	<5	<5.0	<5.0
Tetrachloroethene	56.1	<5	<5	<5	<5.0	<5.0
Trichloroethene	260	18	<5	<5	<5.0	<5.0
Sum of Concentrations		421.00	308.00	498.00	390.00	381.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[I] = Greater than Action Level

U.S. EPA

Concentration 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE		MW-8	MW-8	MW-8	MW-9	MW-9
	SAMPLE ID	1996 VRP	MW-8	MW-8	MW-8	MW-9	MW-9
	DATE	Tier II	12/19/96	03/18/97	06/05/97	12/20/96	03/18/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 2	[14]	< 2	< 2	< 10
Benzene		98.6	< 5	< 5	< 5	< 5	< 5
Ethylbenzene		10220	< 5	< 5	< 5	< 5	< 5
Toluene		20440	17	< 5	< 5	< 5	< 5
Xylene (total)		204400	< 5	< 10	< 5	< 5	< 10
Naphthalene		4088	< 5	---	---	< 5	---
1,2,4-Trimethylbenzene		5.11E+3	< 400	---	---	< 400	---
1,1-Dichloroethane		10220	430	330	440	< 5	< 5
1,1-Dichloroethene		7	< 5	5.3	< 5	< 5	< 5
1,2-Dichloroethane		31.4	< 5	< 5	< 5	< 5	< 5
cis-1,2-Dichloroethene		1022	900	1000	[1400]	< 5	< 5
trans-1,2-Dichloroethene		2040	6.7	9	< 5	< 5	< 5
1,2-Dichloroethene (Total)			---	---	---	---	---
1,1,1-Trichloroethane		9198	8	7.6	< 5	< 5	< 5
Tetrachloroethene		56.1	18	19	< 5	< 5	< 5
Trichloroethene		260	200	78	140	< 5	< 5
Sum of Concentrations			1584.70	1462.90	1980.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units: in ug/l)	SITE	MW-9	MW-9	MW-9	S1	S1	
	SAMPLE ID	1996 VRP					
	DATE	Tier II	06/03/97	09/25/97	12/08/97	09/05/96	03/19/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride	10	<2	<10	<10	<2	<10	
Benzene	98.6	<5	<5.0	<5.0	<5	<5	
Ethylbenzene	10220	<5	<5.0	<5.0	<5	<5	
Toluene	20440	<5	<5.0	<5.0	<5	<5	
Xylene (total)	204400	<5	<10	<10	<5	<10	
Naphthalene	4088	---	---	---	---	---	
1,2,4-Trimethylbenzene	5.11E+3	---	---	---	---	---	
1,1-Dichloroethane	10220	<5	<5.0	<5.0	<5	<5	
1,1-Dichloroethene	7	<5	<5.0	<5.0	<5	<5	
1,2-Dichloroethane	31.4	<5	<5.0	<5.0	<5	<5	
cis-1,2-Dichloroethene	1022	<5	<5.0	<5.0	6.4	6.8	
trans-1,2-Dichloroethene	2040	<5	<5.0	<5.0	<5	<5	
1,2-Dichloroethene (Total)		---	---	---	---	---	
1,1,1-Trichloroethane	9198	<5	<5.0	<5.0	<5	<5	
Tetrachloroethene	56.1	<5	<5.0	<5.0	<5	<5	
Trichloroethene	260	<5	<5.0	<5.0	<5	<5	
Sum of Concentrations		0.00	0.00	0.00	9.80	6.80	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE SAMPLE ID	1996 VRP	S1 06/04/97	S1 09/23/97	S1 12/09/97	S14 09/04/96	S14 12/10/96
	DATE	Tier II	06/04/97	09/23/97	12/09/97	09/04/96	12/10/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 2	< 10	< 10	< 2	[23]
Benzene		98.6	< 5	< 5.0	< 5.0	< 5	< 5
Ethylbenzene		10220	< 5	< 5.0	< 5.0	< 5	< 5
Toluene		20440	< 5	< 5.0	< 5.0	< 5	< 5
Xylene (total)		204400	< 5	< 10	< 10	< 5	< 5
Naphthalene		4088	---	---	---	---	---
1,2,4-Trimethylbenzene		5.11E+3	---	---	---	---	---
1,1-Dichloroethane		10220	< 5	< 5.0	< 5.0	22	15
1,1-Dichloroethene		7	< 5	< 5.0	< 5.0	< 5	< 5
1,2-Dichloroethane		31.4	< 5	< 5.0	< 5.0	[180]	< 5
cis-1,2-Dichloroethene		1022	6.3	5.8	6.4	80	8.2
trans-1,2-Dichloroethene		2040	< 5	< 5.0	< 5.0	< 5	< 5
1,2-Dichloroethene (Total)			---	---	---	---	---
1,1,1-Trichloroethane		9198	< 5	< 5.0	< 5.0	22	< 5
Tetrachloroethene		56.1	6.0	7.7	7.5	< 5	< 5
Trichloroethene		260	< 5	< 5.0	< 5.0	38	< 5
Sum of Concentrations			12.30	13.50	13.90	350.30	50.10

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 [] = Greater than Action Level

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	S14	S14	S14	S14	S15	
	SAMPLE ID	1996 VRP	S14	S14	S14	S15	
	DATE	Tier II	03/19/97	06/05/97	09/24/97	12/11/97	09/04/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 10	< 2	< 10	< 10	< 2
Benzene		98.6	< 5	< 5	< 5.0	< 5.0	< 5
Ethylbenzene		10220	< 5	< 5	< 5.0	< 5.0	< 5
Toluene		20440	< 5	< 5	< 5.0	< 5.0	< 5
Xylene (total)		204400	< 10	< 5	< 10	< 10	< 5
Naphthalene		4088	---	---	---	---	---
1,2,4-Trimethylbenzene		5.11E+3	---	---	---	---	---
1,1-Dichloroethane		10220	21	21	44	61	13
1,1-Dichloroethene		7	5.3	< 5	6.3	[7.8]	< 5
1,2-Dichloroethane		31.4	12	17	11	11	[32]
cis-1,2-Dichloroethene		1022	66	71	110	140	30
trans-1,2-Dichloroethene		2040	5	5.1	7.6	10	< 5
1,2-Dichloroethene (Total)			---	---	---	---	---
1,1,1-Trichloroethane		9198	21	21	35	34	< 5
Tetrachloroethene		56.1	< 5	< 5	< 5.0	< 5.0	< 5
Trichloroethene		260	40	44	64	77	< 5
Sum of Concentrations			170.30	179.10	277.90	340.80	75.00

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For RCL VOCs

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	S15	S15	S15	S15	S15	
	SAMPLE ID	1996 VRP	S15	S15	S15	MW-101	
	DATE	Tier II	03/21/97	06/05/97	09/24/97	09/24/97	12/08/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1	Primary
Vinyl chloride	10	[18]	[30]	[31]	[32]	[25]	
Benzene	98.6	<5	<5	<5.0	<5.0	<5.0	
Ethylbenzene	10220	<5	<5	<5.0	<5.0	<5.0	
Toluene	20440	<5	<5	<5.0	<5.0	<5.0	
Xylene (total)	204400	<10	<5	<10	<10	<10	
Naphthalene	4088	---	---	---	---	---	
1,2,4-Trimethylbenzene	5.11E+3	---	---	---	---	---	
1,1-Dichloroethane	10220	<5	14	14	14	14	
1,1-Dichloroethene	7	<5	<5	<5.0	<5.0	<5.0	
1,2-Dichloroethane	31.4	24	[41]	<5.0	<5.0	<5.0	
cis-1,2-Dichloroethene	1022	18	35	22	23	<5.0	
trans-1,2-Dichloroethene	2040	<5	6.3	5.4	5.8	<5.0	
1,2-Dichloroethene (Total)		---	---	---	---	---	
1,1,1-Trichloroethane	9198	<5	<5	<5.0	<5.0	<5.0	
Tetrachloroethene	56.1	<5	<5	<5.0	<5.0	<5.0	
Trichloroethene	260	<5	<5	<5.0	<5.0	<5.0	
Sum of Concentrations		60.00	126.30	72.40	74.80	39.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naptha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	S16	S16	S16	S16	S16
	SAMPLE ID	1996 VRP	S16	S16	S16	S16
DATE	Tier II	09/04/96	03/20/97	06/03/97	09/24/97	12/08/97
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride	10	< 2	< 10	< 2	< 10	< 10
Benzene	98.6	< 5	< 5	< 5	< 5.0	< 5.0
Ethylbenzene	10220	< 5	< 5	< 5	< 5.0	< 5.0
Toluene	20440	< 5	< 5	< 5	< 5.0	< 5.0
Xylene (total)	204400	< 5	< 10	< 5	< 10	< 10
Naphthalene	4088	---	---	---	---	---
1,2,4-Trimethylbenzene	5.11E+3	---	---	---	---	---
1,1-Dichloroethane	10220	< 5	< 5	< 5	< 5.0	< 5.0
1,1-Dichloroethene	7	[16]	[28]	< 5	< 5.0	< 5.0
1,2-Dichloroethane	31.4	< 5	< 5	< 5	< 5.0	< 5.0
cis-1,2-Dichloroethene	1022	180	150	120	91	73
trans-1,2-Dichloroethene	2040	17	11	< 5	18	19
1,2-Dichloroethene (Total)		---	---	---	---	---
1,1,1-Trichloroethane	9198	27	26	37	27	20
Tetrachloroethene	56.1	< 5	< 5	< 5	< 5.0	< 5.0
Trichloroethene	260	[360]	[380]	[650]	[660]	[470]
Sum of Concentrations		599.00	594.00	807.00	696.00	582.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

--- RCL VOCs

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

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 Date: 09/30/99

CONSTITUENT (Units in ug/l)	SITE	S17	S17	S17	S17	S17	
	SAMPLE ID	1996 VRP	S17	S17	S17	S17	
	DATE	Tier II	09/04/96	03/20/97	06/03/97	09/24/97	12/11/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 2	< 10	< 2	< 10	< 10
Benzene		98.6	< 5	< 5	< 5	< 5.0	< 5.0
Ethylbenzene		10220	< 5	< 5	< 5	< 5.0	< 5.0
Toluene		20440	< 5	< 5	< 5	< 5.0	< 5.0
Xylene (total)		204400	< 5	< 10	< 5	< 10	< 10
Naphthalene		4088	---	---	---	---	---
1,2,4-Trimethylbenzene		5.11E+3	---	---	---	---	---
1,1-Dichloroethane		10220	< 5	< 5	< 5	< 5.0	< 5.0
1,1-Dichloroethane		7	< 5	< 5	< 5	< 5.0	< 5.0
1,2-Dichloroethane		31.4	< 5	< 5	< 5	< 5.0	< 5.0
cis-1,2-Dichloroethane		1022	< 5	< 5	< 5	< 5.0	< 5.0
trans-1,2-Dichloroethane		2040	< 5	< 5	< 5	< 5.0	< 5.0
1,2-Dichloroethane (Total)			---	---	---	---	---
1,1,1-Trichloroethane		9198	74	34	40	51	37
Tetrachloroethene		56.1	< 5	< 5	< 5	< 5.0	< 5.0
Trichloroethene		260	22	16	25	28	25
Sum of Concentrations			103.40	50.00	65.00	79.00	62.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	S26	S26	S26	S26	S26	
	SAMPLE ID	1996 VRP	S26	S26	S26	S26	
	DATE	Tier II	09/05/96	12/10/96	03/20/97	06/03/97	09/23/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 2	< 2	< 10	< 2	< 10
Benzene		98.6	< 5	< 5	< 5	< 5	< 5.0
Ethylbenzene		10220	< 5	< 5	< 5	< 5	< 5.0
Toluene		20440	< 5	< 5	< 5	< 5	< 5.0
Xylene (total)		204400	< 5	< 5	< 10	< 5	< 10
Naphthalene		4088	---	---	---	---	---
1,2,4-Trimethylbenzene		5.11E+3	---	---	---	---	---
1,1-Dichloroethane		10220	< 5	< 5	< 5	< 5	< 5.0
1,1-Dichloroethene		7	< 5	< 5	< 5	< 5	< 5.0
1,2-Dichloroethane		31.4	< 5	< 5	< 5	< 5	< 5.0
cis-1,2-Dichloroethene		1022	14	14	12	18	21
trans-1,2-Dichloroethene		2040	< 5	< 5	< 5	< 5	< 5.0
1,2-Dichloroethene (Total)			---	---	---	---	---
1,1,1-Trichloroethane		9198	< 5	< 5	< 5	< 5	< 5.0
Tetrachloroethene		56.1	< 5	< 5	< 5	< 5	< 5.0
Trichloroethene		260	35	38	35	51	66
Sum of Concentrations			54.30	57.80	47.00	69.00	87.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	S26	S28	S4A	S4A	S4A	
	SAMPLE ID	1996 VRP	S28			S4A	
	DATE	Tier II	12/09/97	02/14/97	09/05/96	12/10/96	03/21/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 10	< 10	< 2	< 2	< 10
Benzene		98.6	< 5.0	< 5	< 5	< 5	< 5
Ethylbenzene		10220	< 5.0	< 5	< 5	< 5	< 5
Toluene		20440	< 5.0	< 5	< 5	< 5	< 5
Xylene (total)		204400	< 10	< 10	< 5	< 5	< 10
Naphthalene		4088	---	< 5	---	---	---
1,2,4-Trimethylbenzene		5.11E+3	---	< 1	---	---	---
1,1-Dichloroethane		10220	< 5.0	< 5	16	< 5	14
1,1-Dichloroethane		7	< 5.0	< 5	< 5	< 5	< 5
1,2-Dichloroethane		31.4	< 5.0	< 5	< 5	(270)	< 5
cis-1,2-Dichloroethane		1022	22	39	150	42	210
trans-1,2-Dichloroethane		2040	< 5.0	66	< 5	< 5	< 5
1,2-Dichloroethane (Total)			---	---	---	---	---
1,1,1-Trichloroethane		9198	< 5.0	< 5	< 5	< 5	< 5
Tetrachloroethane		56.1	< 5.0	< 5	< 5	< 5	< 5
Trichloroethane		260	65	85	< 5	< 5	6.6
Sum of Concentrations			87.00	190.00	166.00	315.10	230.60

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	S4A	S4A	S4A	S5	S6	
	SAMPLE ID	1996 VRP					
	DATE	Tier II	06/03/97	09/23/97	12/09/97	12/20/96	12/19/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		10	< 2	< 10	< 10	< 2	< 2
Benzene		98.6	< 5	< 5.0	< 5.0	< 5	< 5
Ethylbenzene		10220	< 5	< 5.0	< 5.0	< 5	< 5
Toluene		20440	< 5	< 5.0	< 5.0	< 5	< 5
Xylene (total)		204400	< 5	< 10	< 10	< 5	< 5
Naphthalene		4088	---	---	---	< 5	< 5
1,2,4-Trimethylbenzene		5.11E+3	---	---	---	< 400	< 400
1,1-Dichloroethane		10220	31	24	23	< 5	< 5
1,1-Dichloroethene		7	< 5	< 5.0	< 5.0	< 5	< 5
1,2-Dichloroethane		31.4	< 5	< 5.0	< 5.0	< 5	< 5
cis-1,2-Dichloroethene		1022	300	220	210	< 5	< 5
trans-1,2-Dichloroethene		2040	< 5	< 5.0	< 5.0	< 5	< 5
1,2-Dichloroethene (Total)			---	---	---	---	---
1,1,1-Trichloroethane		9198	< 5	< 5.0	< 5.0	< 5	< 5
Tetrachloroethene		56.1	< 5	< 5.0	< 5.0	< 5	< 5
Trichloroethene		260	< 5	< 5.0	< 5.0	< 5	< 5
Sum of Concentrations			331.00	244.00	233.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

The following modifier(s) exist: E, J, H, T

For PCL VOCs

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Total Phenols in Groundwater
 Area 1 - On-site Groundwater VOCs and Naptha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	1996 VRP	7-25	7D	7D	7D	7D
	SAMPLE ID						
	DATE	Tier II	09/25/97	03/21/97	03/21/97	09/24/97	09/24/97
	RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Primary	Duplicate 1
Total Phenols		12264	< 10	20	10	< 10	< 10
Sum of Concentrations:			0.00	20.00	10.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Total Phenols in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units: in ug/l)	SITE	8D	9-33	9-33	9-33	D7	
	SAMPLE ID	1996 VRP	9-33			D7	
	DATE	Tier II	09/24/97	03/19/97	09/26/97	09/26/97	03/22/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1	Primary
Total Phenols		12264	< 10	10	< 10	< 10	10
Sum of Concentrations			0.00	10.00	0.00	0.00	10.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Total Phenols in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE SAMPLE ID	1996 VRP	D7	MW-1 MW-1	MW-1	MW-2 MW-2	MW-2
	DATE	Tier II	09/24/97	03/18/97	09/26/97	03/18/97	09/26/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Total Phenols		12264	< 10	< 10	< 10	< 10	10
Sum of Concentrations			0.00	0.00	0.00	0.00	10.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Total Phenols in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	MW-3	MW-3	MW-3	MW-4	MW-4
	SAMPLE ID	1996 VRP	MW-3	MW-3	MW-4	MW-4
	DATE	Tier II	03/18/97	03/18/97	09/26/97	03/18/97
	RESULT TYPE	Non-Residential	Primary	Duplicate 1	Primary	Primary
Total Phenols		12264	< 10	< 10	< 10	< 10
Sum of Concentrations			0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Total Phenols in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units: in ug/l)	SITE	MW-9	MW-9	S1	S1	S14
		SAMPLE ID	MW-9		S1		S14
		DATE	03/18/97	09/25/97	03/19/97	09/23/97	03/19/97
		RESULT TYPE	Primary	Primary	Primary	Primary	Primary
Total Phenols		12264	80	20	< 10	< 10	< 10
Sum of Concentrations			80.00	20.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Total Phenols in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	S14	S15	S15	S15	S16
SAMPLE ID	1996 VRP	S14	S15	S15	MW-101	S16
DATE	Tier II	09/24/97	03/21/97	09/24/97	09/24/97	03/20/97
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1	Primary
Total Phenols	12264	< 10	< 10	< 10	< 10	< 10
Sum of Concentrations		0.00	0.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Total Phenols in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	1996 VRP	S16	S17	S26	S26	S4A
	SAMPLE ID			S17	S26	S26	S4A
	DATE	Tier II	09/24/97	03/20/97	03/20/97	09/23/97	03/21/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Total Phenols		12264	< 10	< 10	< 10	< 10	10
Sum of Concentrations			0.00	0.00	0.00	0.00	10.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	01CPT011	01CPT011	01CPT012	01CPT012	01CPT012	
	SAMPLE ID	1996 VRP	01CPW01137	01CPW01147	01CPW01230	01QD01230	01CPW01240
	DATE	Tier II	02/10/97	02/11/97	02/12/97	02/12/97	02/12/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Duplicate 1	Primary
Cyanide		2044	220	12	20	30	32
Arsenic, Dissolved (Filtered)		50	<1	4.4	<1	6.3	10
Barium, Dissolved (Filtered)		7154	74	56	51	74	81
Cadmium, Dissolved (Filtered)		51.1	<0.2	<0.2	<0.2	<0.2	<0.2
Copper, Dissolved (Filtered)		3800	<10	<10	<10	<10	<10
Chromium (T), Dissolved (Filtered)			<50	<50	<50	<50	<50
Lead, Dissolved (Filtered)		1.50E+1	<1	<1	<1	<1	<1
Mercury, Dissolved (Filtered)		6.1	<0.2	<0.2	<0.2	<0.2	<0.2
Nickel, Dissolved (Filtered)		2040	110	<10	220	<10	<10
Selenium, Dissolved (Filtered)		51.1	<2	<2	<2	<2	<2
Zinc, Dissolved (Filtered)		30660	70	44	95	62	<20
Chromium, Total			---	---	---	---	---
Lead, Total			---	---	---	---	---
Nickel, Total			---	---	---	---	---
Sum of Concentrations			474.00	116.40	386.00	172.30	123.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	01CPT012	01CPT013	01CPT013	01CPT013	01CPT016	
	SAMPLE ID	1996 VRP	01CPW01250	01CPW01322	01CPW01331	01CPW01655	
	DATE	Tier II	02/12/97	02/13/97	02/14/97	02/14/97	07/25/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Cyanide		2044	10	7	< 5	< 5	ND
Arsenic, Dissolved (Filtered)		50	2.2	1.2	1.7	3.3	1.8
Barium, Dissolved (Filtered)		7154	73	140	120	130	49
Cadmium, Dissolved (Filtered)		51.1	0.3	< 0.2	< 0.2	< 0.2	< 0.2
Copper, Dissolved (Filtered)		3800	13	< 10	< 10	< 10	10
Chromium (T), Dissolved (Filtered)			< 50	< 50	< 50	< 50	< 50
Lead, Dissolved (Filtered)		1.50E + 1	< 1	< 1	< 1	< 1	< 1
Mercury, Dissolved (Filtered)		6.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Nickel, Dissolved (Filtered)		2040	98	< 10	450	< 10	< 10
Selenium, Dissolved (Filtered)		51.1	< 2	< 2	< 2	< 2	3.2 J
Zinc, Dissolved (Filtered)		30660	82	26	38	< 20	< 20
Chromium, Total			---	---	---	---	---
Lead, Total			---	---	---	---	---
Nickel, Total			---	---	---	---	---
Sum of Concentrations			278.50	174.20	609.70	133.30	64.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	03GP005	03GP006	03GP011	03GP012	04GP001	
	SAMPLE ID	1996 VRP	03PW00521	03PW0620	03PW1125	03PW1223	04PW00120
	DATE	Tier II	10/25/96	10/01/96	10/02/96	10/02/96	10/22/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Cyanide	2044	---	---	---	---	---	
Arsenic, Dissolved (Filtered)	50	<1	<1	<1	<1	<1	
Barium, Dissolved (Filtered)	7154	28	63	100	89 B	110	
Cadmium, Dissolved (Filtered)	51.1	<0.2	<0.2	<0.2	<0.2	<0.2	
Copper, Dissolved (Filtered)	3800	12	<10	<10	<10	<10	
Chromium (T), Dissolved (Filtered)		<50	<50	<50	<50	<50	
Lead, Dissolved (Filtered)	1.50E+1	<1	<1	<1	<1	<1	
Mercury, Dissolved (Filtered)	6.1	<0.2	<0.2	<0.2	<0.2	<0.2	
Nickel, Dissolved (Filtered)	2040	<10	<10	<10	<10	<10	
Selenium, Dissolved (Filtered)	511	<2	<2	<2	<2	<2	
Zinc, Dissolved (Filtered)	30660	<20	<20	<20	<20	<20	
Chromium, Total		---	---	---	---	---	
Lead, Total		---	---	---	---	---	
Nickel, Total		---	---	---	---	---	
Sum of Concentrations		40.00	63.00	100.00	89.00	110.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	04GP004	09GP002	11GP001	11GP003	11GP006	
	SAMPLE ID	1996 VRP	04PS00421	11PW0115	11PW00316	11PW00617	
	DATE	Tier II	10/23/96	11/17/96	10/03/96	10/04/96	10/04/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Cyanide		2044	---	ND	---	---	---
Arsenic, Dissolved (Filtered)		50	<1	17	<1	<1	<1
Barium, Dissolved (Filtered)		7154	97	650	130	61	140
Cadmium, Dissolved (Filtered)		51.1	<0.2	<0.2	<0.2	<0.2	<0.2
Copper, Dissolved (Filtered)		3800	<10	<10	<10	<10	<10
Chromium (T), Dissolved (Filtered)			<50	<50	<50	<50	<50
Lead, Dissolved (Filtered)		1.50E+1	2.7	<1	<1	<1	<1
Mercury, Dissolved (Filtered)		6.1	<0.2	<0.2	<0.2	<0.2	<0.2
Nickel, Dissolved (Filtered)		2040	<10	15	<10	<10	<10
Selenium, Dissolved (Filtered)		511	<2	<2	<2	<2	<2
Zinc, Dissolved (Filtered)		30660	<20	<20	<20	<20	<20
Chromium, Total							
Lead, Total							
Nickel, Total							
Sum of Concentrations			99.70	682.00	130.00	61.00	140.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	12GP001	13GP001	13GP003	13GP004	13GP004	
	SAMPLE ID	1996 VRP	12PW00121	13PW00119	13PW00319	13PW00419	13QD00419
	DATE	Tier II	11/12/96	10/23/96	11/01/96	11/01/96	11/01/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Duplicate 1
Cyanide	2044	---	---	8	80	70	
Arsenic, Dissolved (Filtered)	50	1.4	<1	<1	27	27	
Barium, Dissolved (Filtered)	7154	99	56	79	160	170	
Cadmium, Dissolved (Filtered)	51.1	<0.2	<0.2	<0.2	<0.2	<0.2	
Copper, Dissolved (Filtered)	3800	<10	<10	<10	<10	<10	
Chromium (T), Dissolved (Filtered)		<50	<50	<50	<50	<50	
Lead, Dissolved (Filtered)	1.50E+1	<1	<1	<1	<1	<1	
Mercury, Dissolved (Filtered)	6.1	<0.2	<0.2	<0.2	<0.2 UJ	0.2	
Nickel, Dissolved (Filtered)	2040	<10	<10	<10	18	18	
Selenium, Dissolved (Filtered)	511	<2	<2	<2	<2	<2	
Zinc, Dissolved (Filtered)	30660	<20	<20	<20	<20	<20	
Chromium, Total		---	---	---	---	---	
Lead, Total		---	---	---	---	---	
Nickel, Total		---	---	---	---	---	
Sum of Concentrations		100.40	56.00	87.00	285.00	285.20	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	13GP005	13GP006	14GP003	14GP011	17GP001	
	SAMPLE ID	1996 VRP	13PW00520	13PW00620	14PW00322	14PW01120	17PW00120
	DATE	Tier II	11/03/96	11/15/96	10/25/96	10/31/96	11/12/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Cyanide		2044	< 5	[5200] PI	---	---	---
Arsenic, Dissolved (Filtered)		50	< 1	2.5	2	< 1	21
Barium, Dissolved (Filtered)		7154	98	32	44	153	430
Cadmium, Dissolved (Filtered)		51.1	6.8	< 0.2	< 0.2	< 0.2	< 0.2
Copper, Dissolved (Filtered)		3800	< 10	< 10	< 10	< 10	< 10
Chromium (T), Dissolved (Filtered)			< 50	< 50	< 50	< 50	< 50
Lead, Dissolved (Filtered)		1.50E + 1	< 1	< 1	< 1	< 1	4.1
Mercury, Dissolved (Filtered)		6.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Nickel, Dissolved (Filtered)		2040	< 10	570	< 10	< 10	< 10
Selenium, Dissolved (Filtered)		51.1	3.9	< 2	< 2	< 2	< 2
Zinc, Dissolved (Filtered)		30660	240	640	< 20	< 20	< 20
Chromium, Total			---	---	---	---	---
Lead, Total			---	---	---	---	---
Nickel, Total			---	---	---	---	---
Sum of Concentrations			348.70	6444.50	46.00	153.00	455.10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level The following qualifier(s) exist: J, B, U, P, I

Analytical Summary - Inorganics in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	1D	1D	1D	2D	2D	
	SAMPLE ID	1996 VRP	1D	1D	1D	2D	
	DATE	Tier II	09/04/96	03/21/97	09/25/97	09/05/96	03/22/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Cyanide	2044	ND	<5	<5	ND	<5	
Arsenic, Dissolved (Filtered)	50	---	---	---	---	---	
Barium, Dissolved (Filtered)	7154	---	---	---	---	---	
Cadmium, Dissolved (Filtered)	51.1	---	---	---	---	---	
Copper, Dissolved (Filtered)	3800	---	---	---	---	---	
Chromium (T), Dissolved (Filtered)		---	---	<5	---	---	
Lead, Dissolved (Filtered)	1.50E + 1	---	---	<2.0	---	---	
Mercury, Dissolved (Filtered)	6.1	---	---	---	---	---	
Nickel, Dissolved (Filtered)	2040	---	---	<20	---	---	
Selenium, Dissolved (Filtered)	511	---	---	---	---	---	
Zinc, Dissolved (Filtered)	30660	---	---	---	---	---	
Chromium, Total		ND	8	---	ND	9.4	
Lead, Total		0.8	<2	---	ND	<2	
Nickel, Total		ND	<20	---	ND	<20	
Sum of Concentrations		0.80	8.00	0.00	0.00	9.40	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Det

Analytical Summary - Inorganics in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE SAMPLE ID	2D 1996 VRP	7-25 7-25	7-25 7-25	7-25 7-25	7D 7D	
	DATE	Tier II	09/23/97	12/20/96	03/18/97	09/25/97	09/05/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Cyanide		2044	< 5	ND	< 5	< 5	ND
Arsenic, Dissolved (Filtered)		50	---	< 1	---	---	---
Barium, Dissolved (Filtered)		7154	---	55	---	---	---
Cadmium, Dissolved (Filtered)		51.1	---	0.7	---	---	---
Copper, Dissolved (Filtered)		3800	---	< 10	---	---	---
Chromium (T), Dissolved (Filtered)			< 5	< 50	---	< 5	---
Lead, Dissolved (Filtered)		1.50E+1	< 2.0	< 1	---	< 2.0	---
Mercury, Dissolved (Filtered)		6.1	---	< 0.2	---	---	---
Nickel, Dissolved (Filtered)		2040	< 20	< 10	---	< 20	---
Selenium, Dissolved (Filtered)		511	---	< 2	---	---	---
Zinc, Dissolved (Filtered)		30660	---	< 20	---	---	---
Chromium, Total			---	---	7	---	ND
Lead, Total			---	---	27	---	1.2
Nickel, Total			---	---	< 20	---	ND
Sum of Concentrations			0.00	55.70	34.00	0.00	1.20

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE SAMPLE ID	1996 VRP Tier II	7D 03/21/97 Primary	7D 03/21/97 Duplicate 1	7D 09/24/97 Primary	7D 09/24/97 Duplicate 1	88-10 09/04/96 Primary
Cyanide		2044	<5	<5	<5	<5	ND
Arsenic, Dissolved (Filtered)		50	---	---	---	---	---
Barium, Dissolved (Filtered)		7154	---	---	---	---	---
Cadmium, Dissolved (Filtered)		51.1	---	---	---	---	---
Copper, Dissolved (Filtered)		3800	---	---	---	---	---
Chromium (T), Dissolved (Filtered)			---	---	<5	<5	---
Lead, Dissolved (Filtered)		1.50E+1	---	---	<2.0	<2.0	---
Mercury, Dissolved (Filtered)		6.1	---	---	---	---	---
Nickel, Dissolved (Filtered)		2040	---	---	<20	<20	---
Selenium, Dissolved (Filtered)		511	---	---	---	---	---
Zinc, Dissolved (Filtered)		30660	---	---	---	---	---
Chromium, Total			21	21	---	---	13
Lead, Total			2.5	3.1	---	---	2.7
Nickel, Total			<20	<20	---	---	5.4
Sum of Concentrations			23.50	24.10	0.00	0.00	21.10

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

Analytical Summary - Inorganics in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	86-10	86-10	86-15	86-15	86-15	
	SAMPLE ID	1996 VRP	86-10		86-15		
	DATE	Tier II	03/18/97	09/25/97	09/04/96	03/18/97	09/25/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Cyanide		2044	< 5	6	ND	< 5	< 5
Arsenic, Dissolved (Filtered)		50	---	---	---	---	---
Barium, Dissolved (Filtered)		7154	---	---	---	---	---
Cadmium, Dissolved (Filtered)		51.1	---	---	---	---	---
Copper, Dissolved (Filtered)		3800	---	---	---	---	---
Chromium (T), Dissolved (Filtered)			---	< 5	---	---	< 5
Lead, Dissolved (Filtered)		1.50E + 1	---	< 2.0	---	---	< 2.0
Mercury, Dissolved (Filtered)		6.1	---	---	---	---	---
Nickel, Dissolved (Filtered)		2040	---	< 20	---	---	< 20
Selenium, Dissolved (Filtered)		51.1	---	---	---	---	---
Zinc, Dissolved (Filtered)		30660	---	---	---	---	---
Chromium, Total			< 5	---	4.8	< 5	---
Lead, Total			2.4	---	5.8	6.4	---
Nickel, Total			< 20	---	11	< 20	---
Sum of Concentrations			2.40	6.00	21.60	6.40	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	86-4	8D	8D	8D	8D	9-33
SAMPLE ID	1996 VRP						
DATE	Tier II	12/19/96	09/05/96	03/21/97	09/24/97	09/05/96	
RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary	
Cyanide	2044	ND	ND	161	90	ND	
Arsenic, Dissolved (Filtered)	50	1.1	---	---	---	---	
Barium, Dissolved (Filtered)	7154	36	---	---	---	---	
Cadmium, Dissolved (Filtered)	51.1	1.1	---	---	---	---	
Copper, Dissolved (Filtered)	3800	< 10	---	---	---	---	
Chromium (T), Dissolved (Filtered)		< 50	---	---	< 5	---	
Lead, Dissolved (Filtered)	1.50E + 1	< 1	---	---	< 2.0	---	
Mercury, Dissolved (Filtered)	6.1	< 0.2	---	---	---	---	
Nickel, Dissolved (Filtered)	2040	< 10	---	---	< 20	---	
Selenium, Dissolved (Filtered)	511	< 2	---	---	---	---	
Zinc, Dissolved (Filtered)	30660	< 20	---	---	---	---	
Chromium, Total		---	ND	11	---	ND	
Lead, Total		---	1.6	< 2	---	1.3	
Nickel, Total		---	5.8	< 20	---	ND	
Sum of Concentrations		38.20	7.40	172.00	90.00	1.30	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	1996 VRP	9-33	9-33	9-33	D7	D7
	SAMPLE ID		9-33				D7
	DATE	Tier II	03/19/97	09/26/97	09/26/97	09/04/96	03/22/97
	RESULT TYPE	Non-Residential	Primary	Primary	Duplicate 1	Primary	Primary
Cyanide		2044	< 5	< 5	< 5	ND	< 5
Arsenic, Dissolved (Filtered)		50	---	---	---	---	---
Barium, Dissolved (Filtered)		7154	---	---	---	---	---
Cadmium, Dissolved (Filtered)		51.1	---	---	---	---	---
Copper, Dissolved (Filtered)		3800	---	---	---	---	---
Chromium (T), Dissolved (Filtered)			---	< 5	< 5	---	---
Lead, Dissolved (Filtered)		1.50E + 1	---	< 2.0	< 2.0	---	---
Mercury, Dissolved (Filtered)		6.1	---	---	---	---	---
Nickel, Dissolved (Filtered)		2040	---	< 20	< 20	---	---
Selenium, Dissolved (Filtered)		511	---	---	---	---	---
Zinc, Dissolved (Filtered)		30660	---	---	---	---	---
Chromium, Total			< 5	---	---	ND	< 5
Lead, Total			< 2	---	---	0.6	< 2
Nickel, Total			< 20	---	---	ND	< 20
Sum of Concentrations			0.00	0.00	0.00	0.60	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE SAMPLE ID	1996 VRP	D7	MW-1	MW-1	MW-1	MW-2
	DATE	Tier II	09/24/97	12/20/96	03/18/97	09/26/97	12/20/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Cyanide		2044	< 5	ND	< 5	< 5	ND
Arsenic, Dissolved (Filtered)		50	---	< 1	---	---	< 1
Barium, Dissolved (Filtered)		7154	---	40	---	---	150
Cadmium, Dissolved (Filtered)		51.1	---	< 0.2	---	---	< 0.2
Copper, Dissolved (Filtered)		3800	---	< 10	---	---	< 10
Chromium (T), Dissolved (Filtered)			< 5	< 50	---	< 5	< 50
Lead, Dissolved (Filtered)		1.50E + 1	< 2.0	< 1 J	---	< 2.0	< 1
Mercury, Dissolved (Filtered)		6.1	---	< 0.2	---	---	< 0.2
Nickel, Dissolved (Filtered)		2040	< 20	< 10	---	< 20	< 10
Selenium, Dissolved (Filtered)		51.1	---	< 2	---	---	< 2
Zinc, Dissolved (Filtered)		30660	---	64	---	---	< 20
Chromium, Total			---	---	30 J	---	---
Lead, Total			---	---	19 J	---	---
Nickel, Total			---	---	140	---	---
Sum of Concentrations			0.00	104.00	189.00	0.00	150.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

Analytical Summary - Inorganics in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	MW-2	MW-2	MW-3	MW-3	MW-3
	SAMPLE ID	MW-2	MW-2	MW-3	MW-3	MW-3
	DATE	03/18/97	09/26/97	12/20/96	03/18/97	03/18/97
	RESULT TYPE	Primary	Primary	Primary	Primary	Duplicate 1
	1996 VRP					
	Tier II					
	Non-Residential					
Cyanide	2044	<5	<5	ND	<5	<5
Arsenic, Dissolved (Filtered)	50	---	---	<1	---	---
Barium, Dissolved (Filtered)	7154	---	---	100	---	---
Cadmium, Dissolved (Filtered)	51.1	---	---	<0.2	---	---
Copper, Dissolved (Filtered)	3800	---	---	<10	---	---
Chromium (T), Dissolved (Filtered)		---	<5	<50	---	---
Lead, Dissolved (Filtered)	1.50E+1	---	<2.0	<1	---	---
Mercury, Dissolved (Filtered)	6.1	---	---	<0.2	---	---
Nickel, Dissolved (Filtered)	2040	---	<20	<10	---	---
Selenium, Dissolved (Filtered)	511	---	---	<2	---	---
Zinc, Dissolved (Filtered)	30660	---	---	<20	---	---
Chromium, Total		<5	---	---	9.8	20
Lead, Total		12	---	---	3.6	19
Nickel, Total		<20	---	---	<20	<20
Sum of Concentrations		12.00	0.00	100.00	13.40	39.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Groundwater
Area 1 - On-site Groundwater VOCs and Naphtha Releases
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	MW-3	MW-4	MW-4	MW-4	MW-5	
	SAMPLE ID	1996 VRP					
	DATE	Tier II	09/26/97	12/19/96	03/18/97	09/26/97	12/20/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Cyanide	2044	< 5	6	< 5	< 5	9	
Arsenic, Dissolved (Filtered)	50	---	1.4	---	---	1.6	
Barium, Dissolved (Filtered)	7154	---	170	---	---	100	
Cadmium, Dissolved (Filtered)	51.1	---	< 0.2	---	---	< 0.2	
Copper, Dissolved (Filtered)	3800	---	< 10	---	---	< 10	
Chromium (T), Dissolved (Filtered)		< 5	< 50	---	< 5	< 50	
Lead, Dissolved (Filtered)	1.50E + 1	< 2.0	< 1	---	< 2.0	< 1	
Mercury, Dissolved (Filtered)	6.1	---	< 0.2	---	---	< 0.2	
Nickel, Dissolved (Filtered)	2040	< 20	< 10	---	< 20	< 10	
Selenium, Dissolved (Filtered)	511	---	< 2	---	---	< 2	
Zinc, Dissolved (Filtered)	30660	---	< 20	---	---	< 20	
Chromium, Total		---	---	2770	---	---	
Lead, Total		---	---	707	---	---	
Nickel, Total		---	---	620	---	---	
Sum of Concentrations		0.00	177.40	4097.00	0.00	110.60	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - Inorganics in Groundwater
Area 1 - On-site Groundwater VOCs and Naphtha Releases
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	MW-5	MW-5	MW-5	MW-6	MW-7	
	SAMPLE ID	1996 VRP	01QD0522	MW-5			
	DATE	Tier II	12/20/96	03/18/97	09/26/97	12/19/96	12/19/96
	RESULT TYPE	Non-Residential	Duplicate 1	Primary	Primary	Primary	Primary
Cyanide		2044	---	<5	<5	ND	ND
Arsenic, Dissolved (Filtered)		50	1.5	---	---	12	<1
Barium, Dissolved (Filtered)		7154	99	---	---	160	56
Cadmium, Dissolved (Filtered)		51.1	<0.2	---	---	<0.2	<0.2
Copper, Dissolved (Filtered)		3800	<10	---	---	<10	<10
Chromium (T), Dissolved (Filtered)			<50	---	<5	<50	<50
Lead, Dissolved (Filtered)		1.50E+1	<1	---	<2.0	12	<1
Mercury, Dissolved (Filtered)		6.1	<0.2	---	---	<0.2	<0.2
Nickel, Dissolved (Filtered)		2040	<10	---	<20	<10	<10
Selenium, Dissolved (Filtered)		51.1	<2	---	---	<2	<2
Zinc, Dissolved (Filtered)		30660	<20	---	---	<20	<20
Chromium, Total			---	290	---	---	---
Lead, Total			---	152	---	---	---
Nickel, Total			---	92	---	---	---
Sum of Concentrations			100.50	534.00	0.00	184.00	56.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	MW-7	MW-7	MW-8	MW-8	MW-9	
	SAMPLE ID	1996 VRP	MW-7		MW-8		
	DATE	Tier II	03/18/97	09/25/97	12/19/96	03/18/97	12/20/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Cyanide		2044	<5	<5	5	6	ND
Arsenic, Dissolved (Filtered)		50	---	---	20	---	<1
Barium, Dissolved (Filtered)		7154	---	---	150	---	120
Cadmium, Dissolved (Filtered)		51.1	---	---	<0.2	---	<0.2
Copper, Dissolved (Filtered)		3800	---	---	10	---	<10
Chromium (T), Dissolved (Filtered)			---	<5	<50	---	<50
Lead, Dissolved (Filtered)		1.50E+1	---	<2.0	1.1	---	<1
Mercury, Dissolved (Filtered)		6.1	---	---	<0.2	---	<0.2
Nickel, Dissolved (Filtered)		2040	---	<20	190	---	<10
Selenium, Dissolved (Filtered)		511	---	---	<2	---	<2
Zinc, Dissolved (Filtered)		30660	---	---	<20	---	<20
Chromium, Total			75	---	---	<5	---
Lead, Total			85	---	---	12	---
Nickel, Total			110	---	---	150	---
Sum of Concentrations			270.00	0.00	376.10	168.00	120.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE SAMPLE ID DATE RESULT TYPE	1996 VRP Tier II Non-Residential	MW-9 MW-9 03/18/97 Primary	MW-9 MW-9 09/25/97 Primary	S1 S1 09/05/96 Primary	S1 S1 03/19/97 Primary	S1 S1 09/23/97 Primary
Cyanide		2044	9	30	ND	< 5	< 5
Arsenic, Dissolved (Filtered)		50	---	---	---	---	---
Barium, Dissolved (Filtered)		7154	---	---	---	---	---
Cadmium, Dissolved (Filtered)		51.1	---	---	---	---	---
Copper, Dissolved (Filtered)		3800	---	---	---	---	---
Chromium (T), Dissolved (Filtered)				< 5	---	---	< 5
Lead, Dissolved (Filtered)		1.50E + 1	---	< 2.0	---	---	< 2.0
Mercury, Dissolved (Filtered)		6.1	---	---	---	---	---
Nickel, Dissolved (Filtered)		2040	---	< 20	---	---	< 20
Selenium, Dissolved (Filtered)		51.1	---	---	---	---	---
Zinc, Dissolved (Filtered)		30660	---	---	---	---	---
Chromium, Total			82	---	ND	6.7	---
Lead, Total			48	---	0.7	7.6	---
Nickel, Total			100	---	ND	< 20	---
Sum of Concentrations			239.00	30.00	0.70	14.30	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	S14	S14	S15	S15	S15	
	SAMPLE ID	1996 VRP	S14	S14	S15	S15	
	DATE	Tier II	03/19/97	09/24/97	09/04/96	03/21/97	09/24/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Cyanide	2044	< 5	< 5	ND	< 5	< 5	
Arsenic, Dissolved (Filtered)	50	---	---	---	---	---	
Barium, Dissolved (Filtered)	7154	---	---	---	---	---	
Cadmium, Dissolved (Filtered)	51.1	---	---	---	---	---	
Copper, Dissolved (Filtered)	3800	---	---	---	---	---	
Chromium (T), Dissolved (Filtered)		---	< 5	---	---	< 5	
Lead, Dissolved (Filtered)	1.50E + 1	---	< 2.0	---	---	< 2.0	
Mercury, Dissolved (Filtered)	6.1	---	---	---	---	---	
Nickel, Dissolved (Filtered)	2040	---	< 20	---	---	< 20	
Selenium, Dissolved (Filtered)	511	---	---	---	---	---	
Zinc, Dissolved (Filtered)	30660	---	---	---	---	---	
Chromium, Total		< 5	---	ND	44	---	
Lead, Total		< 2	---	ND	2.7	---	
Nickel, Total		< 20	---	ND	< 20	---	
Sum of Concentrations		0.00	0.00	0.00	46.70	0.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

Analytical Summary - Inorganics in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE SAMPLE ID	1996 VRP Tier II	S15 MW-101	S16 09/04/96	S16 03/20/97	S16 09/24/97	S17 09/04/96
	DATE	Non-Residential	Duplicate 1	Primary	Primary	Primary	Primary
	RESULT TYPE						
Cyanide		2044	< 5	ND	< 5	< 5	ND
Arsenic, Dissolved (Filtered)		50	---	---	---	---	---
Barium, Dissolved (Filtered)		7154	---	---	---	---	---
Cadmium, Dissolved (Filtered)		51.1	---	---	---	---	---
Copper, Dissolved (Filtered)		3800	---	---	---	---	---
Chromium (T), Dissolved (Filtered)			< 5	---	---	< 5	---
Lead, Dissolved (Filtered)		1.50E + 1	< 2.0	---	---	< 2.0	---
Mercury, Dissolved (Filtered)		6.1	---	---	---	---	---
Nickel, Dissolved (Filtered)		2040	< 20	---	---	< 20	---
Selenium, Dissolved (Filtered)		51.1	---	---	---	---	---
Zinc, Dissolved (Filtered)		30660	---	---	---	---	---
Chromium, Total			---	ND	< 5	---	4.1
Lead, Total			---	1.5	< 2	---	0.6
Nickel, Total			---	6.9	< 20	---	ND
Sum of Concentrations			0.00	8.40	0.00	0.00	4.70

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - Inorganics in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	S17	S26	S26	S26	S28	
	SAMPLE ID	1996 VRP	S17	S26	S26	S28	
	DATE	Tier II	03/20/97	09/05/96	03/20/97	09/23/97	02/14/97
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Cyanide		2044	<5	ND	<5	<5	<5
Arsenic, Dissolved (Filtered)		50	---	---	---	---	<1
Barium, Dissolved (Filtered)		7154	---	---	---	---	260
Cadmium, Dissolved (Filtered)		51.1	---	---	---	---	<0.2
Copper, Dissolved (Filtered)		3800	---	---	---	---	<10
Chromium (T), Dissolved (Filtered)			---	---	---	<5	<50
Lead, Dissolved (Filtered)		1.50E+1	---	---	---	<2.0	<1
Mercury, Dissolved (Filtered)		6.1	---	---	---	---	<0.2
Nickel, Dissolved (Filtered)		2040	---	---	---	<20	<10
Selenium, Dissolved (Filtered)		51.1	---	---	---	---	<2
Zinc, Dissolved (Filtered)		30660	---	---	---	---	<20
Chromium, Total			<5	4.5	<5	---	---
Lead, Total			<2	9.7	41	---	---
Nickel, Total			<20	8.1	<20	---	---
Sum of Concentrations			0.00	22.30	41.00	0.00	260.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

Analytical Summary - Inorganics in Groundwater
 Area 1 - On-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	S4A	S4A	S4A	S5	S6	
	SAMPLE ID	1996 VRP	S4A	S4A	S4A	S4A	
	DATE	Tier II	09/05/96	03/21/97	09/23/97	12/20/96	12/19/96
	RESULT TYPE	Non-Residential	Primary	Primary	Primary	Primary	Primary
Cyanide		2044	---	<5	<5	ND	ND
Arsenic, Dissolved (Filtered)		50	---	---	---	<1	<1
Barium, Dissolved (Filtered)		7154	---	---	---	120	33
Cadmium, Dissolved (Filtered)		51.1	---	---	---	<0.2	<0.2
Copper, Dissolved (Filtered)		3800	---	---	---	<10	<10
Chromium (T), Dissolved (Filtered)			---	---	<5	<50	<50
Lead, Dissolved (Filtered)		1.50E+1	---	---	<2.0	<1	<1
Mercury, Dissolved (Filtered)		6.1	---	---	---	<0.2	<0.2
Nickel, Dissolved (Filtered)		2040	---	---	<20	<10	<10
Selenium, Dissolved (Filtered)		5.1	---	---	---	<2	<2
Zinc, Dissolved (Filtered)		30660	---	---	---	<20	<20
Chromium, Total			43	16	---	---	---
Lead, Total			53	26	---	---	---
Nickel, Total			81	<20	---	---	---
Sum of Concentrations			177.00	42.00	0.00	120.00	33.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected The following qualifier(s) exist: J

For RCL INORG

Criteria Comparison 1996 VRP Tier II Non-Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - Off-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE SAMPLE ID	1996 VRP	5D	5D	5D	5D	5D
	DATE	Tier II	09/05/96	12/11/96	03/20/97	06/04/97	09/24/97
	RESULT TYPE	Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		2	< 2	< 2	< 10	< 2	< 10
1,1-Dichloroethane		640	< 5	< 5	< 5	< 5	< 5.0
1,2-Dichloroethane		5	< 5	< 5	< 5	< 5	< 5.0
cis-1,2-Dichloroethane		70	< 5	< 5	< 5	< 5	< 5.0
trans-1,2-Dichloroethane		608	< 5	< 5	< 5	< 5	< 5.0
Trichloroethene		5	< 5	< 5	< 5	< 5	< 5.0
Chloroethane		7.92E + 3	< 10	< 10	< 10	< 10	< 10
Sum of Concentrations			3.00	3.00	0.00	0.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Area 1 - Off-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE SAMPLE ID	1996 VRP	5D	D4	D4	D4	D4
	DATE	Tier II	12/10/97	09/04/96	12/10/96	03/21/97	03/21/97
	RESULT TYPE	Residential	Primary	Primary	Primary	Primary	Duplicate 1
Vinyl chloride	2	< 10	[17]	[11]	[18]	[16]	
1,1-Dichloroethane	640	< 5.0	< 5	< 5	< 5	< 5	
1,2-Dichloroethane	5	< 5.0	< 5	< 5	< 5	< 5	
cis-1,2-Dichloroethane	70	< 5.0	< 5	< 5	< 5	< 5	
trans-1,2-Dichloroethane	608	< 5.0	< 5	< 5	< 5	< 5	
Trichloroethene	5	< 5.0	< 5	< 5	< 5	< 5	
Chloroethane	7.92E + 3	< 10	< 10	< 10	< 10	< 10	
Sum of Concentrations		0.00	17.00	11.00	18.00	16.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - Off-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE SAMPLE ID	1996 VRP	D4	D4	D4	D4	S20
	DATE	Tier II	06/04/97	09/25/97	12/11/97	12/11/97	09/05/96
	RESULT TYPE	Residential	Primary	Primary	Primary	Duplicate 1	Primary
Vinyl chloride		2	< 2	[24] J	[28]	[29]	< 2
1,1-Dichloroethane		640	< 5	< 5.0 E	< 5.0	< 5.0	< 5
1,2-Dichloroethane		5	< 5	< 5.0 E	< 5.0	< 5.0	< 5
cis-1,2-Dichloroethene		70	< 5	< 5.0 E	< 5.0	< 5.0	< 5
trans-1,2-Dichloroethene		608	< 5	< 5.0 E	< 5.0	< 5.0	< 5
Trichloroethene		5	< 5	< 5.0 E	< 5.0	< 5.0	< 5
Chloroethane		7.92E + 3	25	< 10 E	< 10	< 10	< 10
Sum of Concentrations			25.00	24.00	28.00	29.00	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[J] = Greater than Action Level

Analytical Summary - VOCs in Groundwater
 Area 1 - Off-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	S20	S20	S20	S20	S21	
	SAMPLE ID	1996 VRP	S20	S20	S20	S20	
	DATE	Tier II	03/20/97	06/04/97	09/23/97	12/09/97	09/05/96
	RESULT TYPE	Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride	2	<10	<2	<10	<10	<2	
1,1-Dichloroethane	640	<5	<5	<5.0	<5.0	<5	
1,2-Dichloroethane	5	<5	<5	<5.0	<5.0	<5	
cis-1,2-Dichloroethane	70	<5	<5	<5.0	<5.0	17	
trans-1,2-Dichloroethane	608	<5	<5	<5.0	<5.0	25	
Trichloroethene	5	<5	<5	<5.0	<5.0	[21]	
Chloroethane	7.92E + 3	<10	<10	<10	<10	<10	
Sum of Concentrations		0.00	0.00	0.00	0.00	63.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
 [] = Greater than Action Level
 For RCL VOC1 Criteria Comparison 1996 VRP Tier II Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - Off-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	S21	S21	S21	S21	S21	
	SAMPLE ID	1996 VRP	S21	S21	S21	S21	
	DATE	Tier II	12/11/96	03/20/97	06/04/97	09/26/97	12/10/97
	RESULT TYPE	Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride	2	<2	<10	<2	<10	<10	
1,1-Dichloroethane	640	<5	<5	<5	<5.0	<5.0	
1,2-Dichloroethane	5	<5	<5	<5	<5.0	<5.0	
cis-1,2-Dichloroethene	70	15	22	36	25	23	
trans-1,2-Dichloroethene	608	9.3	16	29	20	18	
Trichloroethene	5	[19]	[28]	[31]	[42]	[46]	
Chloroethane	7.92E+3	<10	<10	<10	<10	<10	
Sum of Concentrations		43.30	66.00	96.00	87.00	87.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOCs

Criteria Comparison 1996 VRP Tier II Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - Off-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	S22	S22	S22	S22	S22	
	SAMPLE ID	1996 VRP	S22	S22	S22	S22	
	DATE	Tier II	09/04/96	12/11/96	03/22/97	06/04/97	09/23/97
	RESULT TYPE	Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride		2	<2	<2	<10	<2	<10
1,1-Dichloroethane		640	<5	<5	<5	<5	<5.0
1,2-Dichloroethane		5	<5	<5	<5	<5	<5.0
cis-1,2-Dichloroethene		70	57	55	46	66	64
trans-1,2-Dichloroethene		608	77	70	69	91	97
Trichloroethene		5	<5	<5	<5	<5	<5.0
Chloroethane		7.92E+3	<10	<10	<10	<10	<10
Sum of Concentrations			134.00	125.00	115.00	157.00	161.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Area 1 - Off-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	S22	S23	S23	S23	S23	
	SAMPLE ID	1996 VRP					
	DATE	Tier II	12/10/97	09/05/96	03/22/97	06/04/97	09/23/97
	RESULT TYPE	Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride	2	<10	<2	<10	<2	<10	
1,1-Dichloroethane	640	<5.0	<5	<5	<5	<5.0	
1,2-Dichloroethane	5	<5.0	<5	<5	<5	<5.0	
cis-1,2-Dichloroethene	70	63	<5	<5	<5	<5.0	
trans-1,2-Dichloroethene	608	92	<5	<5	<5	<5.0	
Trichloroethene	5	<5.0	<5	<5	<5	<5.0	
Chloroethane	7.92E+3	<10	<10	<10	<10	<10	
Sum of Concentrations		155.00	0.00	0.00	0.00	0.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Analytical Summary - VOCs in Groundwater
 Area 1 - Off-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	1996 VRP	S23	S24	S24	S24	S24
	SAMPLE ID	Tier II	12/10/97	09/04/96	12/11/96	03/21/97	06/05/97
	DATE	Residential	Primary	Primary	Primary	Primary	Primary
	RESULT TYPE						
Vinyl chloride		2	< 10	< 2	< 2	< 10	< 2
1,1-Dichloroethane		640	< 5.0	< 5	< 5	< 5	< 5
1,2-Dichloroethane		5	< 5.0	< 5	< 5	< 5	< 5
cis-1,2-Dichloroethene		70	< 5.0	52	52	44	[100]
trans-1,2-Dichloroethene		608	< 5.0	84	77	85	170
Trichloroethene		5	[5.1]	[8]	[7.3]	< 5	[9.0]
Chloroethane		7.92E + 3	< 10	< 10	< 10	< 10	< 10
Sum of Concentrations			5.10	144.00	136.30	129.00	279.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - Off-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	1996 VRP	S24	S24	S25	S25	S25
	SAMPLE ID	Tier II	09/23/97	12/09/97	09/05/96	12/11/96	03/20/97
	DATE	Residential	Primary	Primary	Primary	Primary	Primary
	RESULT TYPE						
Vinyl chloride		2	< 10	< 10	< 2	< 2	< 10
1,1-Dichloroethane		640	< 5.0	< 5.0	< 5	< 5	< 5
1,2-Dichloroethane		5	< 5.0	< 5.0	< 5	< 5	< 5
cis-1,2-Dichloroethane		70	[91]	[99]	< 5	< 5	< 5
trans-1,2-Dichloroethane		608	160	180	< 5	< 5	< 5
Trichloroethene		5	[9.1]	[9.3]	< 5	< 5	< 5
Chloroethane		7.92E+3	< 10	< 10	< 10	< 10	< 10
Sum of Concentrations			260.10	288.30	2.30	3.20	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOCs Criteria Comparison 1996 VRP Tier II Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - Off-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	S25	S25	S25	S27	S27	
	SAMPLE ID	1996 VRP					
	DATE	Tier II	06/04/97	09/23/97	12/10/97	09/05/96	12/11/96
	RESULT TYPE	Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride	2	<2	<10	<10	<2	<2	
1,1-Dichloroethane	640	<5	<5.0	<5.0	<5	<5	
1,2-Dichloroethane	5	<5	<5.0	<5.0	<5	<5	
cis-1,2-Dichloroethene	70	<5	<5.0	<5.0	21	25	
trans-1,2-Dichloroethene	608	<5	<5.0	<5.0	14	15	
Trichloroethene	5	<5	<5.0	<5.0	[27]	[27]	
Chloroethane	7.92E + 3	<10	<10	<10	<10	<10	
Sum of Concentrations		0.00	0.00	0.00	62.00	67.00	

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[] = Greater than Action Level

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Residential

Analytical Summary - VOCs in Groundwater
 Area 1 - Off-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT	(Units in ug/l)	SITE	S9	S9	S9	S9	S9	
		SAMPLE ID	1996 VRP	S9	S9	S9	S9	
		DATE	Tier II	12/11/96	03/19/97	06/04/97	09/25/97	12/11/97
		RESULT TYPE	Residential	Primary	Primary	Primary	Primary	Primary
Vinyl chloride			2	< 2	< 10	< 2	< 10	< 10
1,1-Dichloroethane			640	< 5	< 5	< 5	< 5.0	< 5.0
1,2-Dichloroethane			5	< 5	[220]	[250]	[190]	[240]
cis-1,2-Dichloroethane			70	15	45	54	54	62
trans-1,2-Dichloroethane			608	9.3	5.8	< 5	5.8	< 5.0
Trichloroethene			5	[19]	< 5	< 5	< 5.0	< 5.0
Chloroethane			7.92E + 3	< 10	< 10	< 10	< 10	< 10
Sum of Concentrations				43.30	270.80	304.00	249.80	302.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

[I] = Greater than Action Level The following qualifier(s) exist: J, E

For RCL VOC1

Criteria Comparison 1996 VRP Tier II Residential

Analytical Summary - Inorganics in Groundwater
Area 1 - Off-site Groundwater VOCs and Naphtha Releases
Voluntary Site Investigation
AlliedSignal Industrial Complex
South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	5D	5D	5D	D4	D4
	SAMPLE ID	1996 VRP	5D	5D	5D	D4
DATE	Tier II	09/05/96	03/20/97	09/24/97	09/04/96	03/21/97
RESULT TYPE	Residential	Primary	Primary	Primary	Primary	Primary
Cyanide	200	ND	< 5	< 5	ND	< 5
Arsenic, Dissolved (Filtered)	50	---	---	---	---	---
Barium, Dissolved (Filtered)	2000	---	---	---	---	---
Cadmium, Dissolved (Filtered)	5	---	---	---	---	---
Copper, Dissolved (Filtered)	1300	---	---	---	---	---
Chromium (T), Dissolved (Filtered)	---	---	< 5	---	---	---
Lead, Dissolved (Filtered)	1.5E + 1	---	< 2.0	---	---	---
Mercury, Dissolved (Filtered)	100	---	---	---	---	---
Nickel, Dissolved (Filtered)	100	---	< 20	---	---	---
Selenium, Dissolved (Filtered)	50	---	---	---	---	---
Zinc, Dissolved (Filtered)	9120	---	---	---	---	---
Chromium, Total	---	ND	< 5	---	ND	9.5
Lead, Total	---	0.8	< 2	---	ND	< 2
Nickel, Total	---	ND	< 20	---	ND	< 20
Sum of Concentrations	---	0.80	0.00	0.00	0.00	9.50

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

For RCL INORG

Indiana Commission 1996 VRP Tier II Residential

Analytical Summary - Inorganics in Groundwater
 Area 1 - Off-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	D4	D4	S20	S20	S20	
	SAMPLE ID	1996 VRP	D4	D4	S20	S20	
DATE	Tier II	03/21/97	09/25/97	09/05/96	03/20/97	09/23/97	
RESULT TYPE	Residential	Duplicate 1	Primary	Primary	Primary	Primary	
Cyanide		200	< 5	< 5	ND	< 5	< 5
Arsenic, Dissolved (Filtered)		50	---	---	---	---	---
Barium, Dissolved (Filtered)		2000	---	---	---	---	---
Cadmium, Dissolved (Filtered)		5	---	---	---	---	---
Copper, Dissolved (Filtered)		1300	---	---	---	---	---
Chromium (T), Dissolved (Filtered)			---	< 5	---	---	< 5
Lead, Dissolved (Filtered)		1.5E + 1	---	< 2.0	---	---	< 2.0
Mercury, Dissolved (Filtered)		100	---	---	---	---	---
Nickel, Dissolved (Filtered)		100	---	< 20	---	---	< 20
Selenium, Dissolved (Filtered)		50	---	---	---	---	---
Zinc, Dissolved (Filtered)		9120	---	---	---	---	---
Chromium, Total			9.3	---	ND	< 5	---
Lead, Total			< 2	---	ND	3.6	---
Nickel, Total			< 20	---	5.4	< 20	---
Sum of Concentrations			9.30	0.00	5.40	3.60	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

For RCL INORG

Criteria Comparison 1996 VRP Tier II Residential

Analytical Summary - Inorganics in Groundwater
 Area 1 - Off-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE SAMPLE ID DATE RESULT TYPE	1996 VRP Tier II Residential	S21 09/05/96 Primary	S21 S21 03/20/97 Primary	S21 09/26/97 Primary	S22 09/04/96 Primary	S22 S22 03/22/97 Primary
Cyanide		200	ND	< 5	< 5	ND	< 5
Arsenic, Dissolved (Filtered)		50	---	---	---	---	---
Barium, Dissolved (Filtered)		2000	---	---	---	---	---
Cadmium, Dissolved (Filtered)		5	---	---	---	---	---
Copper, Dissolved (Filtered)		1300	---	---	---	---	---
Chromium (T), Dissolved (Filtered)		---	---	---	< 5	---	---
Lead, Dissolved (Filtered)		1.5E + 1	---	---	< 2.0	---	---
Mercury, Dissolved (Filtered)		100	---	---	---	---	---
Nickel, Dissolved (Filtered)		100	---	---	< 20	---	---
Selenium, Dissolved (Filtered)		50	---	---	---	---	---
Zinc, Dissolved (Filtered)		9120	---	---	---	---	---
Chromium, Total			ND	5.6	---	ND	7.4
Lead, Total			ND	3	---	1.6	< 2
Nickel, Total			ND	< 20	---	ND	< 20
Sum of Concentrations			0.00	8.60	0.00	1.60	7.40

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

Analytical Summary - Inorganics in Groundwater
 Area 1 - Off-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	S22	S23	S23	S23	S24
	SAMPLE ID	1996 VRP	S23	S23	S23	S24
DATE	Tier II	09/23/97	09/05/96	03/22/97	09/23/97	09/04/96
RESULT TYPE	Residential	Primary	Primary	Primary	Primary	Primary
Cyanide	200	< 5	ND	< 5	< 5	ND
Arsenic, Dissolved (Filtered)	50	---	---	---	---	---
Barium, Dissolved (Filtered)	2000	---	---	---	---	---
Cadmium, Dissolved (Filtered)	5	---	---	---	---	---
Copper, Dissolved (Filtered)	1300	---	---	---	---	---
Chromium (T), Dissolved (Filtered)		< 5	---	---	< 5	---
Lead, Dissolved (Filtered)	1.5E + 1	< 2.0	---	---	< 2.0	---
Mercury, Dissolved (Filtered)	100	---	---	---	---	---
Nickel, Dissolved (Filtered)	100	< 20	---	---	< 20	---
Selenium, Dissolved (Filtered)	50	---	---	---	---	---
Zinc, Dissolved (Filtered)	9120	---	---	---	---	---
Chromium, Total		---	ND	< 5	---	ND
Lead, Total		---	ND	< 2	---	0.6
Nickel, Total		---	ND	< 20	---	5.4
Sum of Concentrations		0.00	0.00	0.00	0.00	6.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

For RCL INORG

Criteria Comparison 1996 VRP Tier II Residential

Analytical Summary - Inorganics in Groundwater
 Area 1 - Off-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	1996 VRP	S24	S24	S25	S25	S25
	SAMPLE ID	Tier II	S24	S24	S25	S25	S25
	DATE	Residential	03/21/97	09/23/97	09/05/96	03/20/97	09/23/97
	RESULT TYPE	Residential	Primary	Primary	Primary	Primary	Primary
Cyanide		200	< 5	< 5	ND	< 5	< 5
Arsenic, Dissolved (Filtered)		50	---	---	---	---	---
Barium, Dissolved (Filtered)		2000	---	---	---	---	---
Cadmium, Dissolved (Filtered)		5	---	---	---	---	---
Copper, Dissolved (Filtered)		1300	---	---	---	---	---
Chromium (T), Dissolved (Filtered)			---	< 5	---	---	< 5
Lead, Dissolved (Filtered)		1.6E + 1	---	< 2.0	---	---	< 2.0
Mercury, Dissolved (Filtered)		100	---	---	---	---	---
Nickel, Dissolved (Filtered)		100	---	< 20	---	---	< 20
Selenium, Dissolved (Filtered)		50	---	---	---	---	---
Zinc, Dissolved (Filtered)		9120	---	---	---	---	---
Chromium, Total			13	---	ND	7.3	---
Lead, Total			13	---	0.9	30	---
Nickel, Total			< 20	---	ND	< 20	---
Sum of Concentrations			26.00	0.00	0.90	37.30	0.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

Analytical Summary - Inorganics in Groundwater
 Area 1 - Off-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units: in ug/l)	SITE	S27	S27	S27	S9	S9	
	SAMPLE ID	1996 VRP	S27	S27	S27	S9	
	DATE	Tier II	09/05/96	03/20/97	09/23/97	09/04/96	03/19/97
	RESULT TYPE	Residential	Primary	Primary	Primary	Primary	Primary
Cyanide		200	ND	7	< 5	ND	9
Arsenic, Dissolved (Filtered)		50	---	---	---	---	---
Barium, Dissolved (Filtered)		2000	---	---	---	---	---
Cadmium, Dissolved (Filtered)		5	---	---	---	---	---
Copper, Dissolved (Filtered)		1300	---	---	---	---	---
Chromium (T), Dissolved (Filtered)			---	---	< 5	---	---
Lead, Dissolved (Filtered)		1.5E + 1	---	---	< 2.0	---	---
Mercury, Dissolved (Filtered)		100	---	---	---	---	---
Nickel, Dissolved (Filtered)		100	---	---	< 20	---	---
Selenium, Dissolved (Filtered)		50	---	---	---	---	---
Zinc, Dissolved (Filtered)		9120	---	---	---	---	---
Chromium, Total			ND	19	---	7.2	< 5
Lead, Total			5.4	52	---	ND	3
Nickel, Total			6.0	< 20	---	6.9	< 20
Sum of Concentrations			11.40	78.00	0.00	14.10	12.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

ND = Not Detected

For RCL INORG

Criteria Comparison 1996 VRP Tier II Residential

Analytical Summary - Inorganics in Groundwater
 Area 1 - Off-site Groundwater VOCs and Naphtha Releases
 Voluntary Site Investigation
 AlliedSignal Industrial Complex
 South Bend, Indiana

CONSTITUENT (Units in ug/l)	SITE	S9	
	SAMPLE ID	1996 VRP	
	DATE	Tier II	09/25/97
	RESULT TYPE	Residential	Primary
Cyanide		200	10
Arsenic, Dissolved (Filtered)		50	---
Barium, Dissolved (Filtered)		2000	---
Cadmium, Dissolved (Filtered)		5	---
Copper, Dissolved (Filtered)		1300	---
Chromium (T), Dissolved (Filtered)			< 5
Lead, Dissolved (Filtered)		1.5E + 1	< 2.0
Mercury, Dissolved (Filtered)		100	---
Nickel, Dissolved (Filtered)		100	< 20
Selenium, Dissolved (Filtered)		50	---
Zinc, Dissolved (Filtered)		9120	---
Chromium, Total			---
Lead, Total			---
Nickel, Total			---
Sum of Concentrations			10.00

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed