

PHASE II

ENVIRONMENTAL SITE ASSESSMENT

**IVY TOWER CORPORATION FACILITY
635 S. Lafayette Boulevard and 600 Prairie Avenue
South Bend, Indiana**

Project No. 2012-5001

March 23, 2012

Prepared For:

**CITY OF SOUTH BEND
Community and Economic Development
227 W. Jefferson Blvd.
South Bend, Indiana 46601**

Prepared By:

**WIGHTMAN PETRIE, INC.
412 S. Lafayette Blvd.
South Bend, Indiana 46601**



March 23, 2012

City of South Bend
Department of Community and Economic Development
227 W. Jefferson, Suite 1200
South Bend, Indiana 46601

Attention: Mr. Bill Schalliol

RE: REPORT OF LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT, IVY TOWER FACILITIES, 600 UNITED DRIVE AND 635 S. LAFAYETTE BLVD., SOUTH BEND, INDIANA

Wightman Petrie is pleased to provide the following Report of Limited Phase II Environmental Site Assessment as it relates to the Ivy Tower Facility/South Bend Warehousing and Distribution Facility located at 600 United Drive and 635 S. Lafayette Blvd., South Bend, Indiana. The following presents a brief summary of project information and the need for follow-up environmental services, the scope of services performed, a discussion of laboratory analysis and comparison to applicable Indiana Department of Environmental Management (IDEM) Risk Integrated System of Closure (RISC), Default Closure Criteria, and resultant Conclusions/Recommendations.

PROJECT INFORMATION

The Ivy Tower complex consists of three (3) land parcels, two of which have been developed with larger industrial facilities. The third parcel encompasses a thin tract of land located between the existing buildings and the adjacent Penn Central Railroad property (vacant and undeveloped). The facilities together operate as the South Bend Warehousing and Distribution Corporation, a provider of space for the storage of goods and materials for local businesses, as well as an area for vehicle storage during winter months. Excluding the more recent construction of a small office area at the westernmost extent of the property, all existing buildings (referred to as Buildings 84, 112 and 113) date to prior use as part of the former Studebaker Corporation, which ceased operations in 1963. Portions of Building 112 also serve as a base for manufacturing operations of WEDI, Inc., a manufacturer of "backer boards" for bathroom, spa and sauna installations, and McGowan Wire Specialties, Inc., a straightener and cutter of rolled wire to manufacturer specifications. Similarly, Therm-o-Lite Windows operates from the extreme eastern end of Building 113, along S. Lafayette Blvd., as a manufacturer of specialty window systems.

As part of a recently completed (February 2012) Phase I Environmental Site Assessment, Recognized Environmental Conditions were identified with respect to the historical manufacturing operations conducted at the subject site under Studebaker Wagon Works (prior to current building construction), and later as Studebaker Automotive (paint shop, blacksmith shop, machine shop, foundry, metal fabrication).



WIGHTMAN PETRIE

ARCHITECTURE GIS CIVIL ENGINEERING LANDSCAPE ARCHITECTURE
ENVIRONMENTAL PLANNING RENEWABLE ENERGY LAND SURVEYING

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Such concerns stem from the identified location of a former UST system along Building 113, the potential presence of additional undocumented UST systems, undocumented spills and/or releases, and the absence of any documentation regarding historical disposal practices. In addition we note that for other areas immediately adjacent to the subject site, abandoned features such as cisterns (32,000 gallons) and historically impacted soils, have been unearthed, and are therefore potentially present on the subject site.

We note that such historical uses (automotive manufacture) may have involved the use of underground storage tanks for purposes of fueling, storage of solvents (lacquer thinner), and/or storage of heating oils, etc. During the reconnaissance, signage along the south-central exterior wall of Building 113 was identified as reading "Safety First, Absolutely No Gas Pumped While Your Motor Is Running". In the immediate area of the signage, Wightman Petrie noted a grassy area among a series of small concrete drives that would be consistent with that of a former fueling area. There was no existing fuel fill ports or dispenser units that would indicate that the systems remained in the ground; however there was no documentation that the systems had been removed, the condition the system(s) were in at the time of removal, or if any environmental sampling had been performed as verification that the UST system(s) had not resulted in environmental impact. As such, the area of this presumed former UST system constitutes a Recognized Environmental Condition for which additional site investigation is warranted.

Although the incidental release of oils associated with the transfer of oils and lubricants as a part of ongoing manufacturing activities are regarded as an environmental concern for which preventive measures should be taken (i.e., secondary containment, application of oil-dri and use of catch basins); such incidental spills and/or releases of oils to the concrete flooring of the subject site buildings are unlikely to result in significant environmental impacts to the subject site as a whole, based on the methods of construction (i.e., 12"-16" thickness of the concrete floors, ceilings and brick curtain walls of 12" thickness, etc.), minimal presence of floor drains, and floor drains being connected to the municipal sewer system. Furthermore, materials that are currently being warehoused at the facility were not identified as having any "release condition". Wightman Petrie did not observe any outside storage or use of petroleum products or hazardous substances.

The presence of subsurface impacts to the subject site as a result of historical manufacturing operations in close proximity to the subject site have been documented by prior investigation of those specific sites (groundwater plume migration). In most instances, review of the data by the Indiana Brownfields Program identified the level of remedial action necessary to minimize potential exposure pathways and allow for property re-development and re-use. Such actions have typically involved the removal of up to 24" of cover soils that were deemed as having been directly impacted by prior manufacturing (i.e., hot spot excavations), and/or an attachment of an Environmental Restrictive Covenant to the property deed. Such Environmental Restrictive Covenant generally prohibits the use of groundwater, prohibits agricultural use of the land, and prevents development of the property for residential uses. However, the potential for on-site migration of contaminants from off-site sources are noted as a Recognized Environmental Condition.

Additional Recognized Environmental Conditions were identified with respect to the presence of PCB-laden di-electric fluids within larger industrial transformer units on the first level of Building 84 (transformers appropriately labeled), as well as the presence of asbestos-containing materials and lead-based and/or lead-containing paint. However, we note that the aforementioned PCB contaminated transformers, as well as the asbestos-containing materials and lead-based paint are to be addressed as part of any proposed re-development of the subject site, having been previously identified and quantified as additional services concurrent with the Phase I effort (submitted under separate cover).

SCOPE OF SERVICES PERFORMED

The following further describes the methods used during the implementation of the Phase II Environmental Site Assessment.

Ground Penetrating Radar Survey

Prior to the initiation of any Phase II Environmental Site Assessment activities, Wightman Petrie completed a Ground Penetrating Radar Survey (GPR) of the subject site for the purpose of identifying the potential presence of features such as previously abandoned and/or removed underground storage tank systems, cisterns and tunnels, as well as the presence of possible fill materials from prior demolition activities. Key areas of the GPR Survey were along the south side of Building 113 where a former UST is thought to have been located, as well as the cleared lot to the south of the entry drive from S. Lafayette Blvd., where the former Avanti Motors/Studebaker Wagon Works Foundry and Paint Shop were historically located.

Ground Penetrating Radar offers the means to detect buried objects that are not otherwise detectable. In addition to the ability to locate metal objects (i.e., underground storage tanks, drums), GPR is able to detect non-metallic objects. The system sends radar pulses into the surface, receives, and processes the reflected energy. Through advanced processing technology, the system calibrates the di-electric constant of the surrounding material. When the signal is reflected from the material having a different dielectric constant, the signal is displayed on the screen as an anomaly. Depth can also be determined by processing the sampling interval and determining the size and comparing relative data to other objects detected.

Characteristics of underlying soils effect the penetration of the radar through the ground. Sands and gravel offer the greatest depth penetration and clearest resolution. Whereas, dense saturated clays offer limited penetration of the radar signal. For purposes of this GPR Survey, the depth limitation for the GPR was approximately 8 feet below land surface.

Areas of the former UST were scanned in both an east/west and north/south direction, at approximately 3-ft intervals. While the GPR was able to detect some disturbances consistent with the apparent placement of backfill materials; it did not detect the presence of any subsurface anomalies consistent with the presence of buried USTs.

With respect to the vacant lot to the south of Building 113, our GPR scan was able to detect the presence of numerous foundations from historical industrial buildings that had been demolished; however, only one (1) of the former structures appeared to indicate the presence of significant debris within the confines of the foundation. Such results would tend to indicate that demolition of the historical structures occurred to the extent that aboveground features were removed, and the subsurface components were backfilled, leaving the foundations in place. For the former structure where the GPR detected significant debris, it should be assumed that such debris is most likely demolition debris that was not removed prior to the backfilling of sub-grade features. These findings would also indicate that some level of foundation excavation may be necessary depending on the proposed future use/construction plan for the area.

Soil Sampling via Geoprobe Methodology

Using Geoprobe methodologies (small track mounted hydraulically driven sampling probe) soil samples were collected from a total of seven (7) locations. Boring locations (refer to Appendix A – Figures) were determined based upon the results of historical document review and field data gathered from the completion of the Ground Penetrating Radar. Three (3) soil borings (GP-1, GP-2 and GP-4) were installed within the cleared area to the south of Building 113 as a location for which the potential migration of contaminants may occur. Wightman Petrie installed one (1) soil boring along the southern wall of Building 113, in the area of the historical UST system (GP-3); one (1) soil boring near the western extent of the Loft Building>Loading dock area (GP-5), and one (1) boring along the southern wall of Building 112, in the general area of the McGowan Wire operations (GP-6). The final soil boring (GP-7) was installed within the small grassy area to the west of Building 112, nearest United Drive and the former Industrial Fuels and Resources facility.

For each of the Geoprobe boring locations, discrete soil samples were collected at 5-foot intervals throughout the soil profile until saturated soil conditions were encountered (approximately 24-feet below land surface). Each soil sample interval was screened for the presence of volatile organics by placing a portion of the soil sample into a plastic bag, allowing time for equilibration, and insertion of a photoionization detector (PID) probe to observe a reading of "total VOCs" in parts per million (ppm). All data associated with the field screening of VOCs will be recorded for future reference (Appendix B - Soil Boring Logs). In general there were no PID readings observed at levels that would be considered above the typical range of background (less than 5 ppm for total VOCs).

In addition, a portion of each discrete sampling interval was collected for submittal to a laboratory. Wightman Petrie initially proposed to submit two (2) soil samples from each of the seven (7) boring locations based on the PID field screening results and/or other indications of the presence of potential contamination (visual or olfactory). However, given that there were no significant deflections of the PID consistent with the presence of elevated concentrations of VOCs, and visual/olfactory observations did not indicate specific zones of contamination; the soil sample collected from the upper two (2) feet within the boring, as well as the interval immediately above the soil/groundwater interface were submitted for laboratory analysis. Each of the soil samples selected for laboratory analysis were analyzed for the presence of Volatile Organic Compounds (VOCs) via EPA Method 8260, and carcinogenic Polynuclear Aromatic Hydrocarbons (cPAHs). Wightman Petrie utilized IDEM guidance Terra-Core Methods to collect soil samples from each discrete sampling interval for the analysis of VOC constituents. All soil samples were labeled with identifying nomenclature, packed on ice and forwarded to the laboratory under chain-of-custody procedures.

Temporary Geoprobe Well Installation for Groundwater Sampling

Wightman Petrie converted each of the seven (7) Geoprobe soil borings to temporary wells with insertion of a Geoprobe groundwater sampling device, which allowed for the extension of a stainless steel slotted screen for collection of a groundwater sample from the point at which the saturated or water-bearing zone was encountered. As previously indicated, Wightman Petrie encountered the water-bearing zone within 22- to 24-feet of land surface. Temporary wells were initially screened within the upper 4-feet, once encountering saturated conditions.

Once a groundwater sample was collected from the upper 4-feet of the saturated zone, for boring locations GP-1, GP-4, GP-6 and GP-7, the groundwater sampling device was pushed an additional ten (10) feet for the purpose of being able to collect a second groundwater sample, from an intermediate depth within the saturated zone. The basis of collecting this secondary groundwater sample at an intermediate depth is based on the documented presence of a chlorinated solvent plume along the common property boundary with the adjacent Department of Public Works garage, located immediately south of the subject site. We note that chlorinated solvents are generally heavier than water and would therefore tend to "sink" within the saturated zone. By sampling groundwater in the upper and intermediate depths of the saturated zone, both the presence of lighter and heavier (than water) solvents and petroleum products, can be detected.

Once installed, each temporary well or depth interval within the temporary well was purged until such time as the water discharge became relatively free of solids or until at least three (3) gallons of water had been removed. Groundwater from each of the temporary wells was analyzed for Volatile Organic Compounds via EPA Method 8260, and carcinogenic PAHs via EPA Method 8270 SIM. For those temporary wells at which a secondary groundwater sample was collected (total of four); Wightman Petrie requested analysis for the presence of VOCs only. Each groundwater sample was appropriately labeled, packed on ice, and forwarded to the laboratory (priority overnight delivery) under chain-of-custody procedures.

With the completion of groundwater sampling activity, the boreholes/wells were plugged with bentonite in order to prevent the potential for introduction of contamination via the boring annulus.

SUMMARY OF LABORATORY ANALYSIS

Soil Sampling via Geoprobe Methodology

As indicated by the Soil Boring Logs, the soils present at the subject site were classified as a brown sand with gravel and/or rock/brick fragments. This description would be consistent with the documented historical uses of the subject site and the demolition of historical structures, with the identification of poorly graded sands, brick and concrete fragments and wood chips. We also note the presence of clays in certain borings; although such clay appears to be more consistent with the nature of backfill material, as opposed to a naturally occurring clay lens characteristic of area geology. As indicated on the Soil Boring Logs, there were no deflections consistent with the presence of Volatile Organic Compounds identified during the field screening efforts with a photoionization detector.

Analytical results for soil samples submitted for laboratory analysis are presented in Table 1, respectively.

TABLE 1
SUMMARY OF ANALYTICAL DATA - SOILS
IVY TOWER - South Bend
Shallow Soil Samples

	GP-1 (0-5)	GP-2 (0-5)	GP-3 (0-5)	GP-4 (0-5)	GP-5 (0-5)	GP-6 (0-5)	GP-7 (0-5)	RISC RESIDENTIAL CLOSURE LEVEL	RISC INDUSTRIAL CLOSURE LEVEL
Volatile Organics									
Trichloroethylene	ND	0.057	0.35						
Tetrachloroethylene	ND	0.058	0.64						
Carcinogenic PAHs									
Benzo(a)anthracene	0.0116	0.355	0.0224	3.68	ND	ND	ND	5	15
Benzo(a)pyrene	0.0107	0.273	0.0218	3.32	ND	ND	ND	0.5	1.5
Benzo(b)fluoranthene	0.0079	0.201	0.0163	2.69	ND	ND	ND	5	15
Benzo(k)fluoranthene	0.009	0.224	0.0181	2.56	ND	ND	ND	50	150
Chrysene	0.0103	0.274	0.0192	3.05	ND	ND	ND	500	1500
Dibenzo(a,h)anthracene	ND	0.0657	0.006	0.959	ND	ND	ND	0.5	1.5
Indeno(1,2,3-cd)pyrene	0.0059	0.13	0.0118	1.85	ND	ND	ND	5	15
Naphthalene	ND	0.0344	ND	0.492	ND	ND	ND	0.7	170
Percent Moisture	5.1	9.4	10.1	23.6	7.1	7.6	8.4		

3.32 - Above RISC Industrial Default Closure Criteria
0.959 - Above RISC Residential Default Closure Crietria

For the soil samples collected from the upper 2-ft (identified as the Geoprobe sleeve from the 0'-5' interval), the only location for which any of the Contaminants of Concern were identified was location GP-4. For location GP-4, the concentration of Benzo(a)pyrene (3.32 mg/kg) was above both the RISC Residential criteria of 0.5 mg/kg, and the RISC Industrial criteria of 1.5 mg/kg. The only other Contaminant of Concern identified at location GP-4 that was above RISC Residential criteria was Dibenzo(a,h)anthracene at 0.959 mg/kg, which was above the RISC Residential level of 0.5 mg/kg. All other Contaminants of Concern (VOCs and Carcinogenic PAHs) were reported at concentrations that were either non-detect, or below the more conservative, compound-specific, RISC Residential criteria.

With respect to the subsurface soil samples collected from the 15'-20' soil depth interval, as presented in Table 2; none of the Contaminants of Concern (VOCs and carcinogenic PAHs) were detected above the RISC Residential Default Closure Criteria. Indeed, only the presence of Tetrachloroethylene was reported above the laboratory detection limits for any of the subsurface soil samples. Tetrachloroethylene

was reported at 0.0101 mg/kg for location GP-3, and at 0.0417 mg/kg for location GP-7. Both reported concentrations were below the RISC Residential Criteria of 0.058 mg/kg for Tetrachloroethylene.

TABLE 2
SUMMARY OF ANALYTICAL DATA - SOILS
IVY TOWER - South Bend
Subsurface Soil Samples

	GP-1 (15-20)	GP-2 (15-20)	GP-3 (15-20)	GP-4 (15-20)	GP-5 (15-20)	GP-6 (15-20)	GP-7 (15-20)	RISC RESIDENTIAL CLOSURE LEVEL	RISC INDUSTRIAL CLOSURE LEVEL
Volatile Organics									
Trichloroethylene	ND	0.057	0.35						
Tetrachloroethylene	ND	ND	0.0101	ND	ND	ND	0.0417	0.058	0.64
Carcinogenic PAHs									
Benzo(a)anthracene	ND	5	15						
Benzo(a)pyrene	ND	0.5	1.5						
Benzo(b)fluoranthene	ND	5	15						
Benzo(k)fluoranthene	ND	50	150						
Chrysene	ND	500	1500						
Dibeno(a,h)anthracene	ND	0.5	1.5						
Indeno(1,2,3-cd)pyrene	ND	5	15						
Naphthalene	ND	0.7	170						
Percent Moisture	3.7	3.6	3.1	3	4.2	3.7	3.7		

3.32	- Above RISC Industrial Default Closure Criteria
0.959	- Above RISC Residential Default Closure Crietria

The RISC Residential Default Closure Values are derived from the lowest of five factors that include: 1) concentration for soil saturation, 2) soil attenuation capacity, 3) calculations regarding risk-based construction worker scenario, 4) calculations regarding risk-based direct exposure, and 5) calculations regarding the potential exposure as a result of migration to groundwater. Default Closure Values are considered protective of human health. It should also be noted that IDEM uses the RISC Residential Default Closure Criteria as a basis for all closures. Use of the less restrictive Industrial Default Closure Values requires the attachment of an Environmental Restrictive Covenant to the existing property deed.

Groundwater Sampling via Geoprobe Methodology

Analytical results for groundwater samples submitted for laboratory analysis are presented in Table 3, respectively.

As indicated for the Shallow Depth Samples (i.e., upper 4-ft. of the saturated zone), the only Contaminant of Concern reported above the laboratory detection limit was the presence of Tetrachloroethylene at a concentration of 0.0371 mg/L. We note that the RISC Residential Criteria is 0.005 mg/L, with the RISC Industrial Criteria being 0.055 mg/L. As indicated in the prior section, location GP-7 was one of two locations where Tetrachloroethylene was detected in the 15'-20' depth interval of the soil profile. We note that GP-7 is located at the western extent of the subject site, with groundwater flow direction for the area being north/northeasterly, toward the St. Joseph River.

TABLE 3
SUMMARY OF ANALYTICAL DATA - GROUNDWATER
IVY TOWER SOUTH BEND - Shallow Depth Samples

	GP-1	GP-2	GP-3	GP-4	GP-5	GP-6	GP-7	RISC RESIDENTIAL CLOSURE LEVEL	RISC INDUSTRIAL CLOSURE LEVEL
Volatile Organics									
Trichloroethylene	ND	0.005	0.031						
Tetrachloroethylene	ND	ND	ND	ND	ND	ND	0.0371	0.005	0.055
Carcinogenic PAHs									
Benzo(a)anthracene	ND	0.0012	0.0039						
Benzo(a)pyrene	ND	0.0002	0.00039						
Benzo(b)fluoranthene	ND	0.0012	0.0039						
Benzo(k)fluoranthene	ND	0.012	0.39						
Chrysene	ND	0.12	0.39						
Dibenz(a,h)anthracene	ND	0.00012	0.00039						
Indeno(1,2,3-cd)pyrene	ND	0.0012	0.0039						
Naphthalene	ND	0.0083	2						

SUMMARY OF ANALYTICAL DATA - GROUNDWATER
Intermediate Depth Samples

	GP-1/2	GP-4/2	GP-6/2	GP-7/2	RISC RESIDENTIAL CLOSURE LEVEL	RISC INDUSTRIAL CLOSURE LEVEL
Volatile Organics						
Trichloroethylene	ND	ND	0.0062	0.0078	0.005	0.031
Tetrachloroethylene	ND	ND	ND	0.18	0.005	0.055
Carcinogenic PAHs	NA	NA	NA	NA		

3.32 - Above RISC Industrial Default Closure Criteria
0.959 - Above RISC Residential Default Closure Crietria

With respect to the groundwater samples collected from the deeper screened interval (34'-38' ft. below land surface), the analytical data indicated the presence of both Tetrachloroethylene (0.18 mg/L) and Trichloroethylene (0.0078 mg/L) at location GP-7. We note that the reported concentration of Tetrachloroethylene was above the RISC Industrial Default Closure Value of 0.055 mg/L, and that the reported Trichloroethylene concentration was above the RISC Residential Criteria of 0.005 mg/L. Also noted was the presence of Trichloroethylene in location GP-6 at a concentration of 0.0062 mg/L, above the RISC Residential Criteria of 0.005 mg/L. It should be noted that Trichloroethylene is a breakdown product of Tetrachloroethylene, likely explaining the presence of Trichloroethylene at levels just in excess of the RISC Residential Criteria for both locations GP-6 and GP-7.

CONCLUSIONS

On the basis of the results obtained from the current Phase II Environmental Site Assessment of the subject site, it would appear as though some level of hot spot contamination exists in the general proximity of location GP-4. We note that location GP-4 is an area where employees of the adjacent Public Works Garage often park their personal vehicles, and where the Department of Public Works trucks are sometimes left to idle, awaiting load-out with salt for roadway application, or clean-out of fall leaf residual. As such, Wightman Petrie believes that such hot spot is the direct result of incidental vehicular releases, as opposed to any specific spill event or historical industrial activity. As to the limited nature of the contamination, the soil sample collected from the 15'-20' depth interval at location GP-4 did not identify the presence of contaminants above the laboratory detection limit.

With respect to groundwater, it is likely that the presence of Tetrachloroethylene at location GP-7 would be attributed to an off-site source. Such determination is based on the location of GP-7 at the westernmost property boundary of the subject site, as well as the north/northeasterly groundwater flow direction in the area of the subject site. The presence of Trichloroethylene for locations GP-6 and GP-7 is likely associated with the biological breakdown of Tetrachloroethylene, with concentrations of Trichloroethylene being only slightly above the RISC Residential Criteria.

Information available for the immediate area indicates that there has been a chlorinated solvent plume detected as migrating throughout the greater downtown area of South Bend. The source of the plume remains unknown; however, thought to be associated with historically industrial manufacturing activity of the Studebaker Automotive operations, Oliver Plow manufacturing operation and/or countless other facilities historically located along former industrial corridors to the south/southwest of the subject site.

A review of property use in the area of the subject site indicates the historical presence of the Cintas Uniform facility and Oliver Plow facilities to the west/southwest, as well as the ongoing presence of the Model Uniform facility and the former Industrial Fuels & Resources facility to the immediate west of the subject site. These specific facilities would be located in a hydraulically upgradient location to that of the subject site, and could be the potential source of on-site migration of both the Tetrachloroethylene and Trichloroethylene contamination.

With respect to the presence of Tetrachloroethylene in groundwater, we note that the subject site is connected to municipal water and sanitary sewer systems of the City of South Bend. As such there exists no completed pathway for direct exposure, as there is no public use of groundwater at the subject site. There should be restrictions prohibiting the future use of groundwater at the subject site, even for limited purposes such as irrigation.

We also note that the projected use of the subject site does not include residential on the ground level floor. Indeed, only the 5th and 6th levels of the existing structure are being considered for potential future residential use. Similarly, there is no day care, or adult care facilities planned for the ground floor level, as the young and aged tend to be the more susceptible populations for exposure to contaminants.

CLOSURE

Wightman Petrie appreciates the opportunity to be of service on this project. Should you have any questions or require additional information, please contact me at (574) 232-4388.

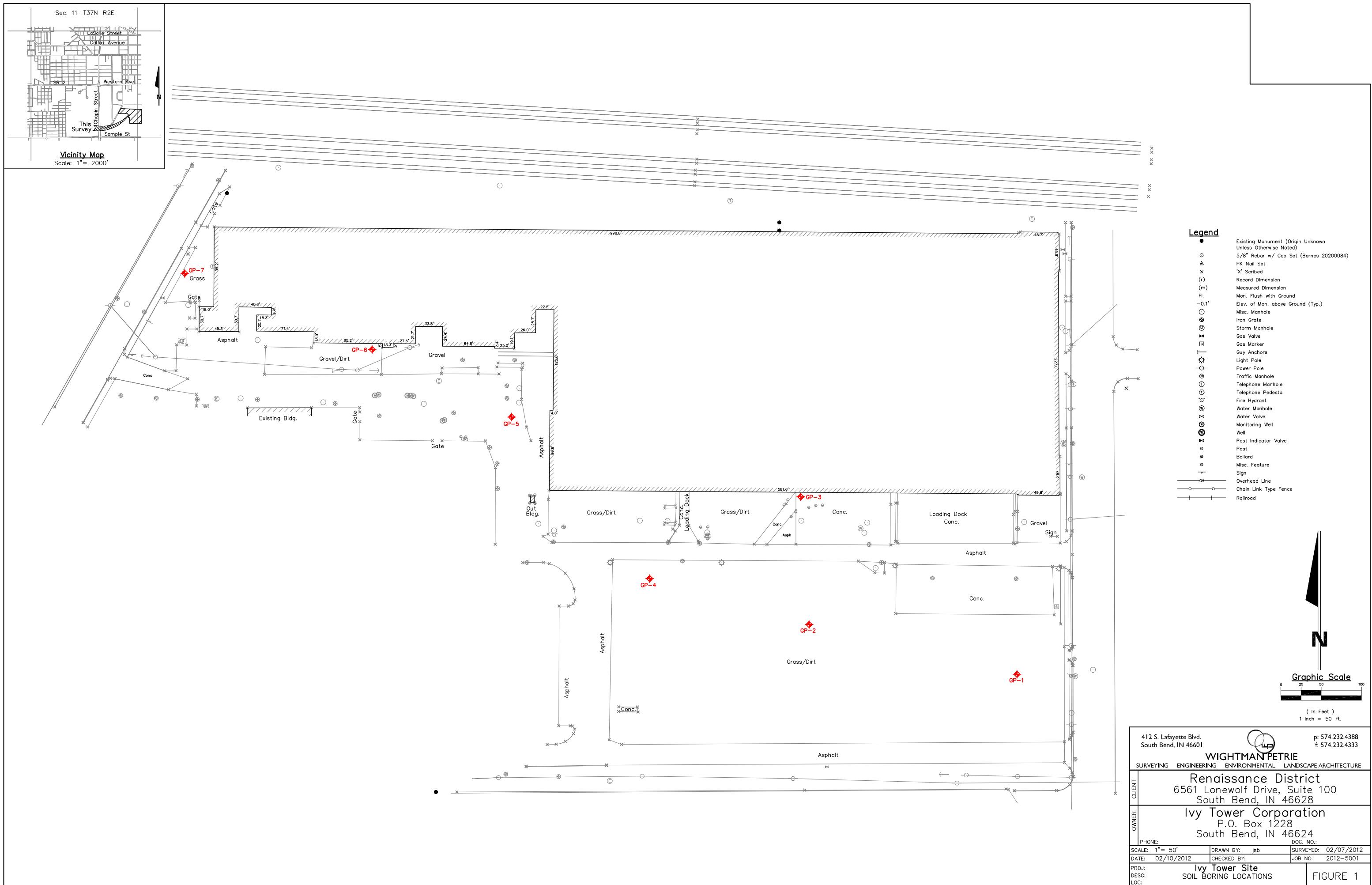
Sincerely,



Conley B. Phifer, CHMM
Environmental Department Manager

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Figures



Soil Boring Logs

PROJECT : Ivy Tower	BORING NUMBER : GP-1 SHEET 1 of 1
PROJECT NUMBER : 2012-5001	LOCATION : South Bend, IN
BORING METHOD : Geoprobe	GROUNDWATER DEPTH (ft bgs) : 24.5' bgs
CONTRACTOR : D&T Drilling	SAMPLER TYPE: Geoprobe Sampling Sleeve
START : 3/8/12	HAMMER WGT: n/a
FINISH : 3/9/12	DROP: n/a

DEPTH BELOW	SOIL DESCRIPTION	SYMBOL	P.I.D. DATA		COMMENTS
			SAMPLE (ft)	RESULT (ppm)	
	Black Sand & Gravel Fill				
2	Red Brick Fragments				
4	Brown Silty Sand w/ Trace Gravel & Rock Fragments				
6	Brown Sand w/ Trace Gravel & Rock Fragments				
8					
10					
12					
14					
16					
18					
20	Brown Sand				
22					
24					Well Screened - 24'-28' & 34'-38'

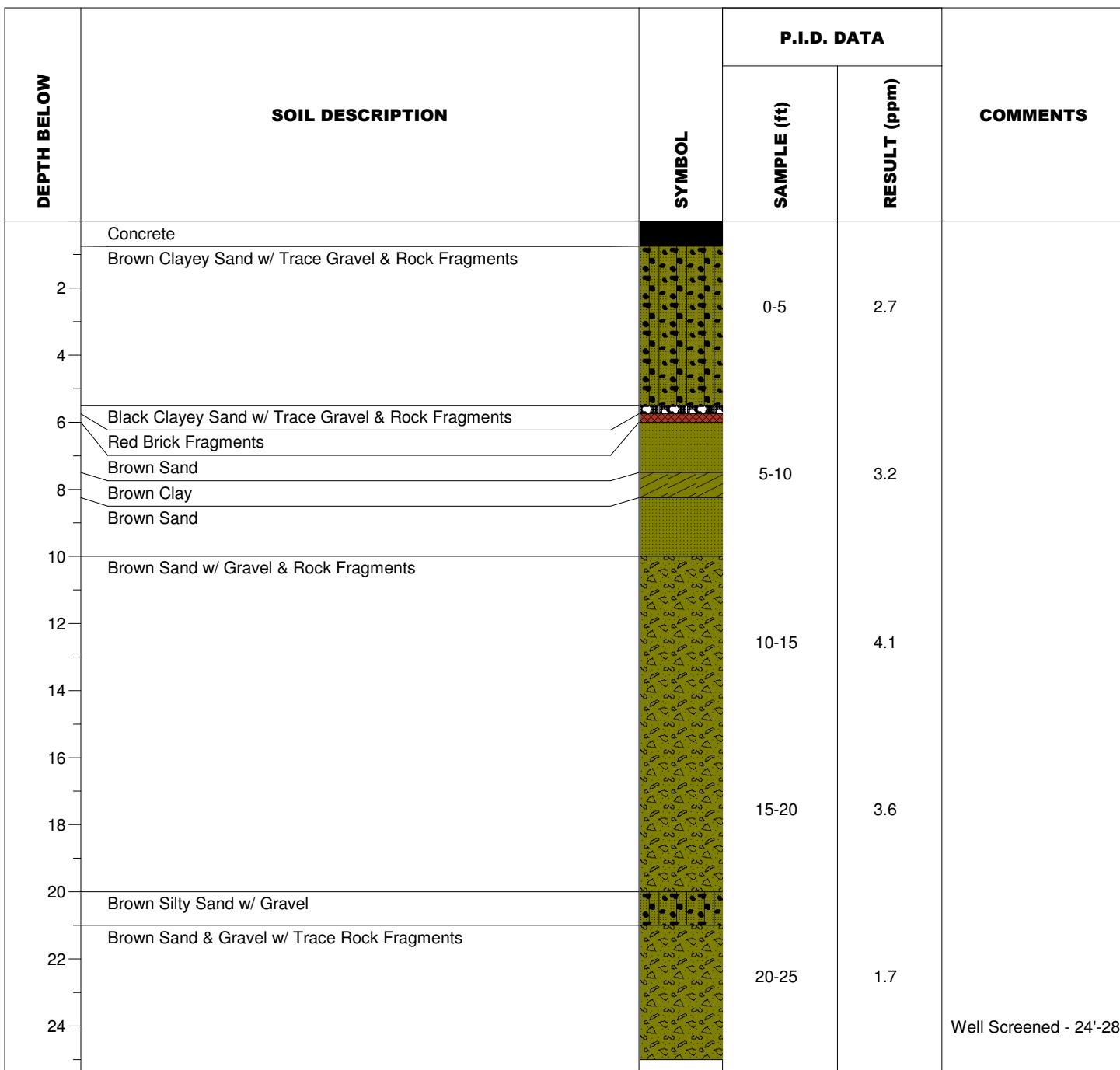


PROJECT : Ivy Tower	BORING NUMBER : GP-2 SHEET 1 of 1
PROJECT NUMBER : 2012-5001	LOCATION : South Bend, IN
BORING METHOD : Geoprobe	GROUNDWATER DEPTH (ft bgs) : 24.5' bgs
CONTRACTOR : D&T Drilling	SAMPLER TYPE: Geoprobe Sampling Sleeve
START : 3/8/12	HAMMER WGT: n/a
FINISH : 3/9/12	DROP: n/a

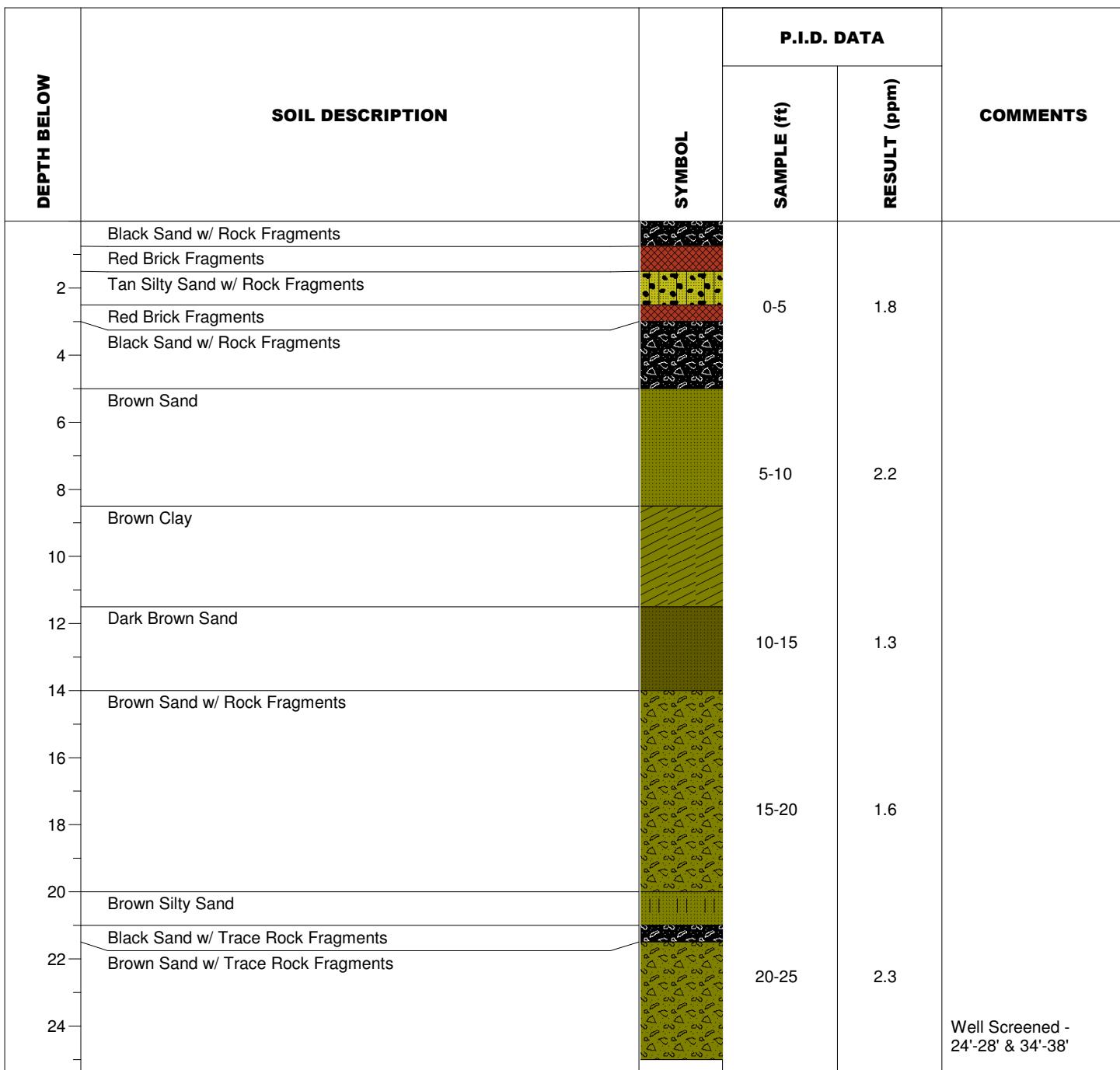
DEPTH BELOW	SOIL DESCRIPTION	SYMBOL	P.I.D. DATA		COMMENTS
			SAMPLE (ft)	RESULT (ppm)	
2	Black Silty Sandy Topsoil				
2	Dark Brown Silty Sand w/ Rock & Brick Fragments				
4					
6	Brown Sand w/ Trace Rock Fragments				
8	Brown Clay				
10	Brown Sand				
10	Brown Sand w/ Gravel & Rock Fragments				
12					
14					
16					
18					
20					
22					
24					Well Screened - 24'-28'



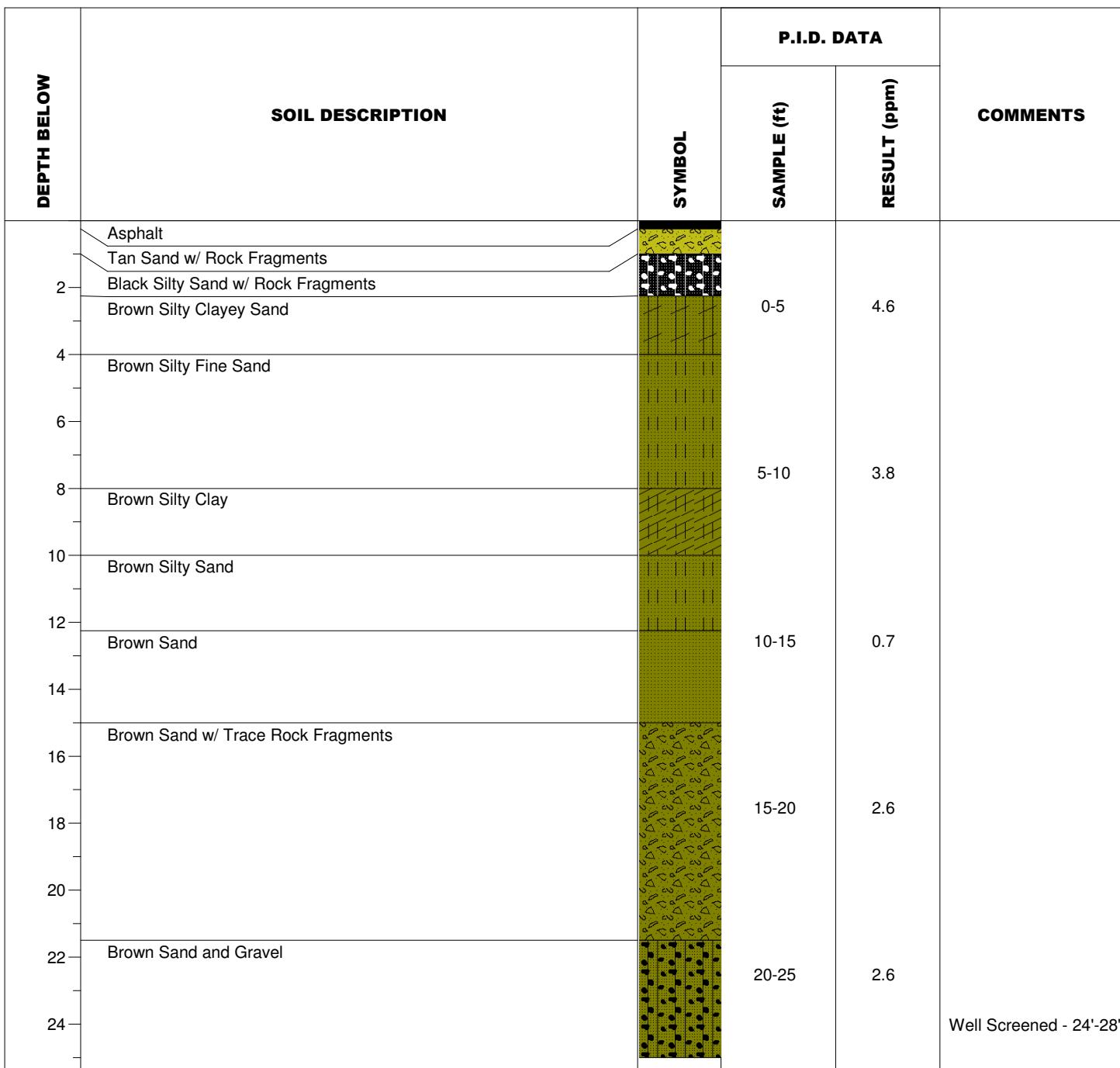
PROJECT : Ivy Tower	BORING NUMBER : GP-3 SHEET 1 of 1
PROJECT NUMBER : 2012-5001	LOCATION : South Bend, IN
BORING METHOD : Geoprobe	GROUNDWATER DEPTH (ft bgs) : 24.5' bgs
CONTRACTOR : D&T Drilling	SAMPLER TYPE: Geoprobe Sampling Sleeve
START : 3/8/12	HAMMER WGT: n/a
FINISH : 3/9/12	DROP: n/a



PROJECT : Ivy Tower	BORING NUMBER : GP-4 SHEET 1 of 1
PROJECT NUMBER : 2012-5001	LOCATION : South Bend, IN
BORING METHOD : Geoprobe	GROUNDWATER DEPTH (ft bgs) : 24' bgs
CONTRACTOR : D&T Drilling	SAMPLER TYPE: Geoprobe Sampling Sleeve
START : 3/8/12	HAMMER WGT: n/a
FINISH : 3/9/12	DROP: n/a



PROJECT : Ivy Tower	BORING NUMBER : GP-5 SHEET 1 of 1
PROJECT NUMBER : 2012-5001	LOCATION : South Bend, IN
BORING METHOD : Geoprobe	GROUNDWATER DEPTH (ft bgs) : 23' bgs
CONTRACTOR : D&T Drilling	SAMPLER TYPE: Geoprobe Sampling Sleeve
START : 3/8/12	HAMMER WGT: n/a
FINISH : 3/9/12	DROP: n/a

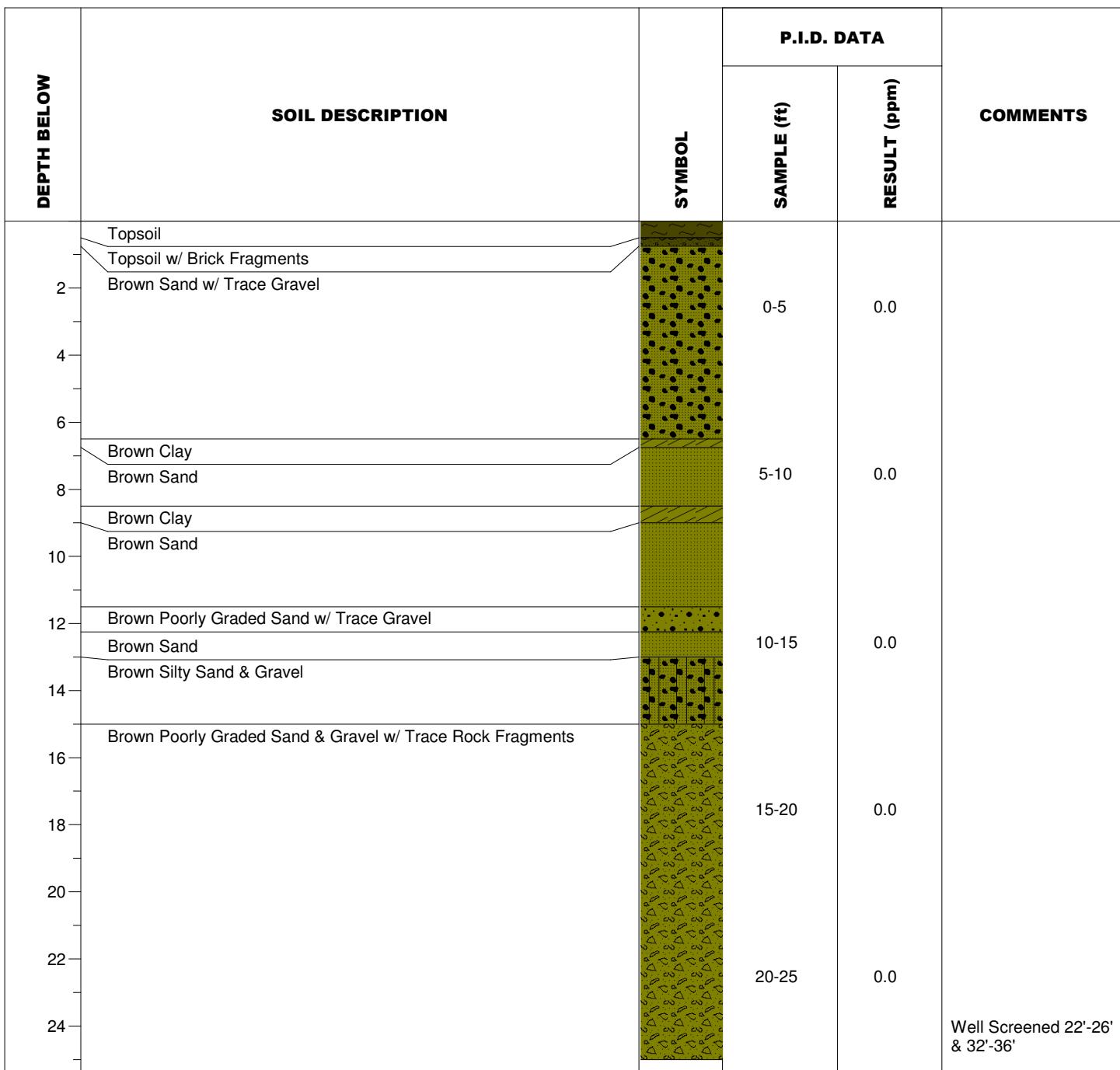


PROJECT : Ivy Tower	BORING NUMBER : GP-6 SHEET 1 of 1
PROJECT NUMBER : 2012-5001	LOCATION : South Bend, IN
BORING METHOD : Geoprobe	GROUNDWATER DEPTH (ft bgs) : 22' bgs
CONTRACTOR : D&T Drilling	SAMPLER TYPE: Geoprobe Sampling Sleeve
START : 3/8/12	HAMMER WGT: n/a
FINISH : 3/9/12	DROP: n/a

DEPTH BELOW	SOIL DESCRIPTION	SYMBOL	P.I.D. DATA		COMMENTS
			SAMPLE (ft)	RESULT (ppm)	
2	Topsoil Black Sandy Fill w/ Concrete Fragments Tan Sandy Fill w/ Concrete Fragments Black Sandy Fill w/ Concrete Fragments Red Brick Fragments Brown Sand w/ Trace Rock Fragments		0-5	0.0	
6	Brown Sand		5-10	0.0	
8	Brown Clay				
10	Brown Poorly Graded Sand		10-15	0.0	
14	Brown Poorly Graded Sand w/ Trace Rock Fragments		15-20	0.0	
24			20-25	0.0	Well Screened - 22'-26' & 32'-36'



PROJECT : Ivy Tower	BORING NUMBER : GP-7 SHEET 1 of 1
PROJECT NUMBER : 2012-5001	LOCATION : South Bend, IN
BORING METHOD : Geoprobe	GROUNDWATER DEPTH (ft bgs) : 23' bgs
CONTRACTOR : D&T Drilling	SAMPLER TYPE: Geoprobe Sampling Sleeve
START : 3/8/12	HAMMER WGT: n/a
FINISH : 3/9/12	DROP: n/a



Laboratory Results

March 15, 2012

Mr. Conley Phifer
Wightman Petrie Environmental
412 S. Lafayette
South Bend, IN 46601

RE: Project: Ivy Tower 2012-5001
Pace Project No.: 5059712

Dear Mr. Phifer:

Enclosed are the analytical results for sample(s) received by the laboratory on March 09, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Lyle Cable

lyle.cable@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Ivy Tower 2012-5001
Pace Project No.: 5059712

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 100418
Indiana Certification #: C-49-06
Kansas Certification #: E-10247

Kentucky Certification #: 0042
Louisiana/NELAC Certification #: 04076
Ohio VAP: CL0065
West Virginia Certification #: 330

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SAMPLE SUMMARY

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5059712001	GP-1 0-5 IVY	Solid	03/08/12 08:32	03/09/12 11:17
5059712002	GP-1 15-20 IVY	Solid	03/08/12 08:49	03/09/12 11:17
5059712003	GP-2 0-5 IVY	Solid	03/08/12 10:07	03/09/12 11:17
5059712004	GP-2 15-20 IVY	Solid	03/08/12 10:20	03/09/12 11:17
5059712005	GP-3 0-5 IVY	Solid	03/08/12 11:25	03/09/12 11:17
5059712006	GP-3 15-20 IVY	Solid	03/08/12 11:39	03/09/12 11:17
5059712007	GP-1 5-10 IVY	Solid	03/08/12 08:37	03/09/12 11:17
5059712008	GP-1 10-15 IVY	Solid	03/08/12 08:43	03/09/12 11:17
5059712009	GP-1 20-25 IVY	Solid	03/08/12 08:55	03/09/12 11:17
5059712010	GP-2 5-10 IVY	Solid	03/08/12 10:10	03/09/12 11:17
5059712011	GP-2 10-15 IVY	Solid	03/08/12 10:16	03/09/12 11:17
5059712012	GP-2 20-25 IVY	Solid	03/08/12 10:27	03/09/12 11:17
5059712013	GP-3 5-10 IVY	Solid	03/08/12 11:30	03/09/12 11:17
5059712014	GP-3 10-15 IVY	Solid	03/08/12 11:33	03/09/12 11:17
5059712015	GP-3 20-25 IVY	Solid	03/08/12 11:46	03/09/12 11:17

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SAMPLE ANALYTE COUNT

Project: Ivy Tower 2012-5001
 Pace Project No.: 5059712

Lab ID	Sample ID	Method	Analysts	Analytes Reported
5059712001	GP-1 0-5 IVY	EPA 8270 by SIM	RRB	10
		EPA 8260	ALA	73
		ASTM D2974-87	MLS	1
5059712002	GP-1 15-20 IVY	EPA 8270 by SIM	RRB	10
		EPA 8260	ALA	73
		ASTM D2974-87	MLS	1
5059712003	GP-2 0-5 IVY	EPA 8270 by SIM	RRB	10
		EPA 8260	ALA	73
		ASTM D2974-87	MLS	1
5059712004	GP-2 15-20 IVY	EPA 8270 by SIM	RRB	10
		EPA 8260	ALA	73
		ASTM D2974-87	MLS	1
5059712005	GP-3 0-5 IVY	EPA 8270 by SIM	RRB	10
		EPA 8260	GRM	73
		ASTM D2974-87	MLS	1
5059712006	GP-3 15-20 IVY	EPA 8270 by SIM	RRB	10
		EPA 8260	GRM	73

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ANALYTICAL RESULTS

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

Sample: GP-1 0-5 IVY Lab ID: 5059712001 Collected: 03/08/12 08:32 Received: 03/09/12 11:17 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Benzo(a)anthracene	11.6 ug/kg		5.3	1	03/14/12 12:15	03/14/12 17:09	56-55-3	
Benzo(a)pyrene	10.7 ug/kg		5.3	1	03/14/12 12:15	03/14/12 17:09	50-32-8	
Benzo(b)fluoranthene	7.9 ug/kg		5.3	1	03/14/12 12:15	03/14/12 17:09	205-99-2	
Benzo(k)fluoranthene	9.0 ug/kg		5.3	1	03/14/12 12:15	03/14/12 17:09	207-08-9	
Chrysene	10.3 ug/kg		5.3	1	03/14/12 12:15	03/14/12 17:09	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		5.3	1	03/14/12 12:15	03/14/12 17:09	53-70-3	
Indeno(1,2,3-cd)pyrene	5.9 ug/kg		5.3	1	03/14/12 12:15	03/14/12 17:09	193-39-5	
Naphthalene	ND ug/kg		5.3	1	03/14/12 12:15	03/14/12 17:09	91-20-3	
Surrogates								
2-Fluorobiphenyl (S)	63 %.		46-109	1	03/14/12 12:15	03/14/12 17:09	321-60-8	
p-Terphenyl-d14 (S)	72 %.		43-107	1	03/14/12 12:15	03/14/12 17:09	1718-51-0	
8260 MSV 5035A VOA Analytical Method: EPA 8260								
Acetone	ND ug/kg		90.0	1		03/12/12 21:24	67-64-1	
Acrolein	ND ug/kg		90.0	1		03/12/12 21:24	107-02-8	
Acrylonitrile	ND ug/kg		90.0	1		03/12/12 21:24	107-13-1	
Benzene	ND ug/kg		4.5	1		03/12/12 21:24	71-43-2	
Bromobenzene	ND ug/kg		4.5	1		03/12/12 21:24	108-86-1	
Bromoform	ND ug/kg		4.5	1		03/12/12 21:24	74-97-5	
Bromochloromethane	ND ug/kg		4.5	1		03/12/12 21:24	75-27-4	
Bromodichloromethane	ND ug/kg		4.5	1		03/12/12 21:24	75-25-2	
Bromoform	ND ug/kg		4.5	1		03/12/12 21:24	74-83-9	
2-Butanone (MEK)	ND ug/kg		22.5	1		03/12/12 21:24	78-93-3	
n-Butylbenzene	ND ug/kg		4.5	1		03/12/12 21:24	104-51-8	
sec-Butylbenzene	ND ug/kg		4.5	1		03/12/12 21:24	135-98-8	
tert-Butylbenzene	ND ug/kg		4.5	1		03/12/12 21:24	98-06-6	
Carbon disulfide	ND ug/kg		9.0	1		03/12/12 21:24	75-15-0	
Carbon tetrachloride	ND ug/kg		4.5	1		03/12/12 21:24	56-23-5	
Chlorobenzene	ND ug/kg		4.5	1		03/12/12 21:24	108-90-7	
Chloroethane	ND ug/kg		4.5	1		03/12/12 21:24	75-00-3	
Chloroform	ND ug/kg		4.5	1		03/12/12 21:24	67-66-3	
Chloromethane	ND ug/kg		4.5	1		03/12/12 21:24	74-87-3	
2-Chlorotoluene	ND ug/kg		4.5	1		03/12/12 21:24	95-49-8	
4-Chlorotoluene	ND ug/kg		4.5	1		03/12/12 21:24	106-43-4	
Dibromochloromethane	ND ug/kg		4.5	1		03/12/12 21:24	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		4.5	1		03/12/12 21:24	106-93-4	
Dibromomethane	ND ug/kg		4.5	1		03/12/12 21:24	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		4.5	1		03/12/12 21:24	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		4.5	1		03/12/12 21:24	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		4.5	1		03/12/12 21:24	106-46-7	
trans-1,4-Dichloro-2-butene	ND ug/kg		90.0	1		03/12/12 21:24	110-57-6	
Dichlorodifluoromethane	ND ug/kg		4.5	1		03/12/12 21:24	75-71-8	
1,1-Dichloroethane	ND ug/kg		4.5	1		03/12/12 21:24	75-34-3	
1,2-Dichloroethane	ND ug/kg		4.5	1		03/12/12 21:24	107-06-2	
1,1-Dichloroethene	ND ug/kg		4.5	1		03/12/12 21:24	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		4.5	1		03/12/12 21:24	156-59-2	

Date: 03/15/2012 04:51 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

Sample: GP-1 0-5 IVY Lab ID: 5059712001 Collected: 03/08/12 08:32 Received: 03/09/12 11:17 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
trans-1,2-Dichloroethene	ND ug/kg		4.5	1		03/12/12 21:24	156-60-5	
1,2-Dichloropropane	ND ug/kg		4.5	1		03/12/12 21:24	78-87-5	
1,3-Dichloropropane	ND ug/kg		4.5	1		03/12/12 21:24	142-28-9	
2,2-Dichloropropane	ND ug/kg		4.5	1		03/12/12 21:24	594-20-7	
1,1-Dichloropropene	ND ug/kg		4.5	1		03/12/12 21:24	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		4.5	1		03/12/12 21:24	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		4.5	1		03/12/12 21:24	10061-02-6	
Ethylbenzene	ND ug/kg		4.5	1		03/12/12 21:24	100-41-4	
Ethyl methacrylate	ND ug/kg		90.0	1		03/12/12 21:24	97-63-2	
Hexachloro-1,3-butadiene	ND ug/kg		4.5	1		03/12/12 21:24	87-68-3	
n-Hexane	ND ug/kg		4.5	1		03/12/12 21:24	110-54-3	
2-Hexanone	ND ug/kg		90.0	1		03/12/12 21:24	591-78-6	
Iodomethane	ND ug/kg		90.0	1		03/12/12 21:24	74-88-4	
Isopropylbenzene (Cumene)	ND ug/kg		4.5	1		03/12/12 21:24	98-82-8	
p-Isopropyltoluene	ND ug/kg		4.5	1		03/12/12 21:24	99-87-6	
Methylene Chloride	ND ug/kg		18.0	1		03/12/12 21:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		22.5	1		03/12/12 21:24	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		4.5	1		03/12/12 21:24	1634-04-4	
Naphthalene	ND ug/kg		4.5	1		03/12/12 21:24	91-20-3	
n-Propylbenzene	ND ug/kg		4.5	1		03/12/12 21:24	103-65-1	
Styrene	ND ug/kg		4.5	1		03/12/12 21:24	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		4.5	1		03/12/12 21:24	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		4.5	1		03/12/12 21:24	79-34-5	
Tetrachloroethene	ND ug/kg		4.5	1		03/12/12 21:24	127-18-4	
Toluene	ND ug/kg		4.5	1		03/12/12 21:24	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		4.5	1		03/12/12 21:24	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		4.5	1		03/12/12 21:24	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		4.5	1		03/12/12 21:24	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		4.5	1		03/12/12 21:24	79-00-5	
Trichloroethene	ND ug/kg		4.5	1		03/12/12 21:24	79-01-6	
Trichlorofluoromethane	ND ug/kg		4.5	1		03/12/12 21:24	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		4.5	1		03/12/12 21:24	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		4.5	1		03/12/12 21:24	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		4.5	1		03/12/12 21:24	108-67-8	
Vinyl acetate	ND ug/kg		90.0	1		03/12/12 21:24	108-05-4	
Vinyl chloride	ND ug/kg		4.5	1		03/12/12 21:24	75-01-4	
Xylene (Total)	ND ug/kg		9.0	1		03/12/12 21:24	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	100 %.		71-125	1		03/12/12 21:24	1868-53-7	
Toluene-d8 (S)	102 %.		76-124	1		03/12/12 21:24	2037-26-5	
4-Bromofluorobenzene (S)	97 %.		67-134	1		03/12/12 21:24	460-00-4	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	5.1 %		0.10	1		03/13/12 13:37		

Date: 03/15/2012 04:51 PM

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ANALYTICAL RESULTS

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

Sample: GP-1 15-20 IVY Lab ID: 5059712002 Collected: 03/08/12 08:49 Received: 03/09/12 11:17 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Benzo(a)anthracene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 17:27	56-55-3	
Benzo(a)pyrene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 17:27	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 17:27	205-99-2	
Benzo(k)fluoranthene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 17:27	207-08-9	
Chrysene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 17:27	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 17:27	53-70-3	
Indeno(1,2,3-cd)pyrene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 17:27	193-39-5	
Naphthalene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 17:27	91-20-3	
Surrogates								
2-Fluorobiphenyl (S)	71 %.		46-109	1	03/14/12 12:15	03/14/12 17:27	321-60-8	
p-Terphenyl-d14 (S)	88 %.		43-107	1	03/14/12 12:15	03/14/12 17:27	1718-51-0	
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
Acetone	ND ug/kg		90.6	1		03/12/12 22:02	67-64-1	
Acrolein	ND ug/kg		90.6	1		03/12/12 22:02	107-02-8	
Acrylonitrile	ND ug/kg		90.6	1		03/12/12 22:02	107-13-1	
Benzene	ND ug/kg		4.5	1		03/12/12 22:02	71-43-2	
Bromobenzene	ND ug/kg		4.5	1		03/12/12 22:02	108-86-1	
Bromoform	ND ug/kg		4.5	1		03/12/12 22:02	74-97-5	
Bromochloromethane	ND ug/kg		4.5	1		03/12/12 22:02	75-27-4	
Bromodichloromethane	ND ug/kg		4.5	1		03/12/12 22:02	75-25-2	
Bromoform	ND ug/kg		4.5	1		03/12/12 22:02	74-83-9	
2-Butanone (MEK)	ND ug/kg		22.7	1		03/12/12 22:02	78-93-3	
n-Butylbenzene	ND ug/kg		4.5	1		03/12/12 22:02	104-51-8	
sec-Butylbenzene	ND ug/kg		4.5	1		03/12/12 22:02	135-98-8	
tert-Butylbenzene	ND ug/kg		4.5	1		03/12/12 22:02	98-06-6	
Carbon disulfide	ND ug/kg		9.1	1		03/12/12 22:02	75-15-0	
Carbon tetrachloride	ND ug/kg		4.5	1		03/12/12 22:02	56-23-5	
Chlorobenzene	ND ug/kg		4.5	1		03/12/12 22:02	108-90-7	
Chloroethane	ND ug/kg		4.5	1		03/12/12 22:02	75-00-3	
Chloroform	ND ug/kg		4.5	1		03/12/12 22:02	67-66-3	
Chloromethane	ND ug/kg		4.5	1		03/12/12 22:02	74-87-3	
2-Chlorotoluene	ND ug/kg		4.5	1		03/12/12 22:02	95-49-8	
4-Chlorotoluene	ND ug/kg		4.5	1		03/12/12 22:02	106-43-4	
Dibromochloromethane	ND ug/kg		4.5	1		03/12/12 22:02	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		4.5	1		03/12/12 22:02	106-93-4	
Dibromomethane	ND ug/kg		4.5	1		03/12/12 22:02	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		4.5	1		03/12/12 22:02	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		4.5	1		03/12/12 22:02	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		4.5	1		03/12/12 22:02	106-46-7	
trans-1,4-Dichloro-2-butene	ND ug/kg		90.6	1		03/12/12 22:02	110-57-6	
Dichlorodifluoromethane	ND ug/kg		4.5	1		03/12/12 22:02	75-71-8	
1,1-Dichloroethane	ND ug/kg		4.5	1		03/12/12 22:02	75-34-3	
1,2-Dichloroethane	ND ug/kg		4.5	1		03/12/12 22:02	107-06-2	
1,1-Dichloroethene	ND ug/kg		4.5	1		03/12/12 22:02	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		4.5	1		03/12/12 22:02	156-59-2	

Date: 03/15/2012 04:51 PM

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ANALYTICAL RESULTS

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

Sample: GP-1 15-20 IVY Lab ID: 5059712002 Collected: 03/08/12 08:49 Received: 03/09/12 11:17 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
trans-1,2-Dichloroethene	ND ug/kg		4.5	1		03/12/12 22:02	156-60-5	
1,2-Dichloropropane	ND ug/kg		4.5	1		03/12/12 22:02	78-87-5	
1,3-Dichloropropane	ND ug/kg		4.5	1		03/12/12 22:02	142-28-9	
2,2-Dichloropropane	ND ug/kg		4.5	1		03/12/12 22:02	594-20-7	
1,1-Dichloropropene	ND ug/kg		4.5	1		03/12/12 22:02	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		4.5	1		03/12/12 22:02	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		4.5	1		03/12/12 22:02	10061-02-6	
Ethylbenzene	ND ug/kg		4.5	1		03/12/12 22:02	100-41-4	
Ethyl methacrylate	ND ug/kg		90.6	1		03/12/12 22:02	97-63-2	
Hexachloro-1,3-butadiene	ND ug/kg		4.5	1		03/12/12 22:02	87-68-3	
n-Hexane	ND ug/kg		4.5	1		03/12/12 22:02	110-54-3	
2-Hexanone	ND ug/kg		90.6	1		03/12/12 22:02	591-78-6	
Iodomethane	ND ug/kg		90.6	1		03/12/12 22:02	74-88-4	
Isopropylbenzene (Cumene)	ND ug/kg		4.5	1		03/12/12 22:02	98-82-8	
p-Isopropyltoluene	ND ug/kg		4.5	1		03/12/12 22:02	99-87-6	
Methylene Chloride	ND ug/kg		18.1	1		03/12/12 22:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		22.7	1		03/12/12 22:02	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		4.5	1		03/12/12 22:02	1634-04-4	
Naphthalene	ND ug/kg		4.5	1		03/12/12 22:02	91-20-3	
n-Propylbenzene	ND ug/kg		4.5	1		03/12/12 22:02	103-65-1	
Styrene	ND ug/kg		4.5	1		03/12/12 22:02	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		4.5	1		03/12/12 22:02	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		4.5	1		03/12/12 22:02	79-34-5	
Tetrachloroethene	ND ug/kg		4.5	1		03/12/12 22:02	127-18-4	
Toluene	ND ug/kg		4.5	1		03/12/12 22:02	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		4.5	1		03/12/12 22:02	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		4.5	1		03/12/12 22:02	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		4.5	1		03/12/12 22:02	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		4.5	1		03/12/12 22:02	79-00-5	
Trichloroethene	ND ug/kg		4.5	1		03/12/12 22:02	79-01-6	
Trichlorofluoromethane	ND ug/kg		4.5	1		03/12/12 22:02	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		4.5	1		03/12/12 22:02	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		4.5	1		03/12/12 22:02	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		4.5	1		03/12/12 22:02	108-67-8	
Vinyl acetate	ND ug/kg		90.6	1		03/12/12 22:02	108-05-4	
Vinyl chloride	ND ug/kg		4.5	1		03/12/12 22:02	75-01-4	
Xylene (Total)	ND ug/kg		9.1	1		03/12/12 22:02	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	98 %.		71-125	1		03/12/12 22:02	1868-53-7	
Toluene-d8 (S)	104 %.		76-124	1		03/12/12 22:02	2037-26-5	
4-Bromofluorobenzene (S)	97 %.		67-134	1		03/12/12 22:02	460-00-4	
Percent Moisture								
Analytical Method: ASTM D2974-87								
Percent Moisture	3.7 %		0.10	1		03/13/12 13:37		

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ANALYTICAL RESULTS

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

Sample: GP-2 0-5 IVY Lab ID: 5059712003 Collected: 03/08/12 10:07 Received: 03/09/12 11:17 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Benzo(a)anthracene	355 ug/kg		5.5	1	03/14/12 12:15	03/14/12 17:45	56-55-3	
Benzo(a)pyrene	273 ug/kg		5.5	1	03/14/12 12:15	03/14/12 17:45	50-32-8	
Benzo(b)fluoranthene	201 ug/kg		5.5	1	03/14/12 12:15	03/14/12 17:45	205-99-2	
Benzo(k)fluoranthene	224 ug/kg		5.5	1	03/14/12 12:15	03/14/12 17:45	207-08-9	
Chrysene	274 ug/kg		5.5	1	03/14/12 12:15	03/14/12 17:45	218-01-9	
Dibenz(a,h)anthracene	65.7 ug/kg		5.5	1	03/14/12 12:15	03/14/12 17:45	53-70-3	
Indeno(1,2,3-cd)pyrene	130 ug/kg		5.5	1	03/14/12 12:15	03/14/12 17:45	193-39-5	
Naphthalene	34.4 ug/kg		5.5	1	03/14/12 12:15	03/14/12 17:45	91-20-3	
Surrogates								
2-Fluorobiphenyl (S)	72 %.		46-109	1	03/14/12 12:15	03/14/12 17:45	321-60-8	
p-Terphenyl-d14 (S)	81 %.		43-107	1	03/14/12 12:15	03/14/12 17:45	1718-51-0	
8260 MSV 5035A VOA Analytical Method: EPA 8260								
Acetone	ND ug/kg		90.9	1		03/12/12 22:40	67-64-1	
Acrolein	ND ug/kg		90.9	1		03/12/12 22:40	107-02-8	
Acrylonitrile	ND ug/kg		90.9	1		03/12/12 22:40	107-13-1	
Benzene	ND ug/kg		4.5	1		03/12/12 22:40	71-43-2	
Bromobenzene	ND ug/kg		4.5	1		03/12/12 22:40	108-86-1	
Bromoform	ND ug/kg		4.5	1		03/12/12 22:40	74-97-5	
Bromochloromethane	ND ug/kg		4.5	1		03/12/12 22:40	75-27-4	
Bromodichloromethane	ND ug/kg		4.5	1		03/12/12 22:40	75-25-2	
Bromoform	ND ug/kg		4.5	1		03/12/12 22:40	74-83-9	
2-Butanone (MEK)	ND ug/kg		22.7	1		03/12/12 22:40	78-93-3	
n-Butylbenzene	ND ug/kg		4.5	1		03/12/12 22:40	104-51-8	
sec-Butylbenzene	ND ug/kg		4.5	1		03/12/12 22:40	135-98-8	
tert-Butylbenzene	ND ug/kg		4.5	1		03/12/12 22:40	98-06-6	
Carbon disulfide	ND ug/kg		9.1	1		03/12/12 22:40	75-15-0	
Carbon tetrachloride	ND ug/kg		4.5	1		03/12/12 22:40	56-23-5	
Chlorobenzene	ND ug/kg		4.5	1		03/12/12 22:40	108-90-7	
Chloroethane	ND ug/kg		4.5	1		03/12/12 22:40	75-00-3	
Chloroform	ND ug/kg		4.5	1		03/12/12 22:40	67-66-3	
Chloromethane	ND ug/kg		4.5	1		03/12/12 22:40	74-87-3	
2-Chlorotoluene	ND ug/kg		4.5	1		03/12/12 22:40	95-49-8	
4-Chlorotoluene	ND ug/kg		4.5	1		03/12/12 22:40	106-43-4	
Dibromochloromethane	ND ug/kg		4.5	1		03/12/12 22:40	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		4.5	1		03/12/12 22:40	106-93-4	
Dibromomethane	ND ug/kg		4.5	1		03/12/12 22:40	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		4.5	1		03/12/12 22:40	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		4.5	1		03/12/12 22:40	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		4.5	1		03/12/12 22:40	106-46-7	
trans-1,4-Dichloro-2-butene	ND ug/kg		90.9	1		03/12/12 22:40	110-57-6	
Dichlorodifluoromethane	ND ug/kg		4.5	1		03/12/12 22:40	75-71-8	
1,1-Dichloroethane	ND ug/kg		4.5	1		03/12/12 22:40	75-34-3	
1,2-Dichloroethane	ND ug/kg		4.5	1		03/12/12 22:40	107-06-2	
1,1-Dichloroethene	ND ug/kg		4.5	1		03/12/12 22:40	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		4.5	1		03/12/12 22:40	156-59-2	

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ANALYTICAL RESULTS

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

Sample: GP-2 0-5 IVY Lab ID: 5059712003 Collected: 03/08/12 10:07 Received: 03/09/12 11:17 Matrix: Solid
Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
trans-1,2-Dichloroethene	ND ug/kg		4.5	1		03/12/12 22:40	156-60-5	
1,2-Dichloropropane	ND ug/kg		4.5	1		03/12/12 22:40	78-87-5	
1,3-Dichloropropane	ND ug/kg		4.5	1		03/12/12 22:40	142-28-9	
2,2-Dichloropropane	ND ug/kg		4.5	1		03/12/12 22:40	594-20-7	
1,1-Dichloropropene	ND ug/kg		4.5	1		03/12/12 22:40	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		4.5	1		03/12/12 22:40	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		4.5	1		03/12/12 22:40	10061-02-6	
Ethylbenzene	ND ug/kg		4.5	1		03/12/12 22:40	100-41-4	
Ethyl methacrylate	ND ug/kg		90.9	1		03/12/12 22:40	97-63-2	
Hexachloro-1,3-butadiene	ND ug/kg		4.5	1		03/12/12 22:40	87-68-3	
n-Hexane	ND ug/kg		4.5	1		03/12/12 22:40	110-54-3	
2-Hexanone	ND ug/kg		90.9	1		03/12/12 22:40	591-78-6	
Iodomethane	ND ug/kg		90.9	1		03/12/12 22:40	74-88-4	
Isopropylbenzene (Cumene)	ND ug/kg		4.5	1		03/12/12 22:40	98-82-8	
p-Isopropyltoluene	ND ug/kg		4.5	1		03/12/12 22:40	99-87-6	
Methylene Chloride	ND ug/kg		18.2	1		03/12/12 22:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		22.7	1		03/12/12 22:40	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		4.5	1		03/12/12 22:40	1634-04-4	
Naphthalene	ND ug/kg		4.5	1		03/12/12 22:40	91-20-3	
n-Propylbenzene	ND ug/kg		4.5	1		03/12/12 22:40	103-65-1	
Styrene	ND ug/kg		4.5	1		03/12/12 22:40	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		4.5	1		03/12/12 22:40	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		4.5	1		03/12/12 22:40	79-34-5	
Tetrachloroethene	ND ug/kg		4.5	1		03/12/12 22:40	127-18-4	
Toluene	ND ug/kg		4.5	1		03/12/12 22:40	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		4.5	1		03/12/12 22:40	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		4.5	1		03/12/12 22:40	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		4.5	1		03/12/12 22:40	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		4.5	1		03/12/12 22:40	79-00-5	
Trichloroethene	ND ug/kg		4.5	1		03/12/12 22:40	79-01-6	
Trichlorofluoromethane	ND ug/kg		4.5	1		03/12/12 22:40	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		4.5	1		03/12/12 22:40	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		4.5	1		03/12/12 22:40	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		4.5	1		03/12/12 22:40	108-67-8	
Vinyl acetate	ND ug/kg		90.9	1		03/12/12 22:40	108-05-4	
Vinyl chloride	ND ug/kg		4.5	1		03/12/12 22:40	75-01-4	
Xylene (Total)	ND ug/kg		9.1	1		03/12/12 22:40	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	101 %.		71-125	1		03/12/12 22:40	1868-53-7	
Toluene-d8 (S)	104 %.		76-124	1		03/12/12 22:40	2037-26-5	
4-Bromofluorobenzene (S)	96 %.		67-134	1		03/12/12 22:40	460-00-4	
Percent Moisture								
Analytical Method: ASTM D2974-87								
Percent Moisture	9.4 %		0.10	1		03/13/12 13:37		

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ANALYTICAL RESULTS

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

Sample: GP-2 15-20 IVY Lab ID: 5059712004 Collected: 03/08/12 10:20 Received: 03/09/12 11:17 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Benzo(a)anthracene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 18:03	56-55-3	
Benzo(a)pyrene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 18:03	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 18:03	205-99-2	
Benzo(k)fluoranthene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 18:03	207-08-9	
Chrysene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 18:03	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 18:03	53-70-3	
Indeno(1,2,3-cd)pyrene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 18:03	193-39-5	
Naphthalene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 18:03	91-20-3	
Surrogates								
2-Fluorobiphenyl (S)	67 %.		46-109	1	03/14/12 12:15	03/14/12 18:03	321-60-8	
p-Terphenyl-d14 (S)	77 %.		43-107	1	03/14/12 12:15	03/14/12 18:03	1718-51-0	
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
Acetone	ND ug/kg		96.8	1		03/12/12 23:18	67-64-1	
Acrolein	ND ug/kg		96.8	1		03/12/12 23:18	107-02-8	
Acrylonitrile	ND ug/kg		96.8	1		03/12/12 23:18	107-13-1	
Benzene	ND ug/kg		4.8	1		03/12/12 23:18	71-43-2	
Bromobenzene	ND ug/kg		4.8	1		03/12/12 23:18	108-86-1	
Bromoform	ND ug/kg		4.8	1		03/12/12 23:18	74-97-5	
Bromochloromethane	ND ug/kg		4.8	1		03/12/12 23:18	75-27-4	
Bromodichloromethane	ND ug/kg		4.8	1		03/12/12 23:18	75-25-2	
Bromoform	ND ug/kg		4.8	1		03/12/12 23:18	74-83-9	
2-Butanone (MEK)	ND ug/kg		24.2	1		03/12/12 23:18	78-93-3	
n-Butylbenzene	ND ug/kg		4.8	1		03/12/12 23:18	104-51-8	
sec-Butylbenzene	ND ug/kg		4.8	1		03/12/12 23:18	135-98-8	
tert-Butylbenzene	ND ug/kg		4.8	1		03/12/12 23:18	98-06-6	
Carbon disulfide	ND ug/kg		9.7	1		03/12/12 23:18	75-15-0	
Carbon tetrachloride	ND ug/kg		4.8	1		03/12/12 23:18	56-23-5	
Chlorobenzene	ND ug/kg		4.8	1		03/12/12 23:18	108-90-7	
Chloroethane	ND ug/kg		4.8	1		03/12/12 23:18	75-00-3	
Chloroform	ND ug/kg		4.8	1		03/12/12 23:18	67-66-3	
Chloromethane	ND ug/kg		4.8	1		03/12/12 23:18	74-87-3	
2-Chlorotoluene	ND ug/kg		4.8	1		03/12/12 23:18	95-49-8	
4-Chlorotoluene	ND ug/kg		4.8	1		03/12/12 23:18	106-43-4	
Dibromochloromethane	ND ug/kg		4.8	1		03/12/12 23:18	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		4.8	1		03/12/12 23:18	106-93-4	
Dibromomethane	ND ug/kg		4.8	1		03/12/12 23:18	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		4.8	1		03/12/12 23:18	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		4.8	1		03/12/12 23:18	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		4.8	1		03/12/12 23:18	106-46-7	
trans-1,4-Dichloro-2-butene	ND ug/kg		96.8	1		03/12/12 23:18	110-57-6	
Dichlorodifluoromethane	ND ug/kg		4.8	1		03/12/12 23:18	75-71-8	
1,1-Dichloroethane	ND ug/kg		4.8	1		03/12/12 23:18	75-34-3	
1,2-Dichloroethane	ND ug/kg		4.8	1		03/12/12 23:18	107-06-2	
1,1-Dichloroethene	ND ug/kg		4.8	1		03/12/12 23:18	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		4.8	1		03/12/12 23:18	156-59-2	

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ANALYTICAL RESULTS

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

Sample: GP-2 15-20 IVY Lab ID: 5059712004 Collected: 03/08/12 10:20 Received: 03/09/12 11:17 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
trans-1,2-Dichloroethene	ND ug/kg		4.8	1		03/12/12 23:18	156-60-5	
1,2-Dichloropropane	ND ug/kg		4.8	1		03/12/12 23:18	78-87-5	
1,3-Dichloropropane	ND ug/kg		4.8	1		03/12/12 23:18	142-28-9	
2,2-Dichloropropane	ND ug/kg		4.8	1		03/12/12 23:18	594-20-7	
1,1-Dichloropropene	ND ug/kg		4.8	1		03/12/12 23:18	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		4.8	1		03/12/12 23:18	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		4.8	1		03/12/12 23:18	10061-02-6	
Ethylbenzene	ND ug/kg		4.8	1		03/12/12 23:18	100-41-4	
Ethyl methacrylate	ND ug/kg		96.8	1		03/12/12 23:18	97-63-2	
Hexachloro-1,3-butadiene	ND ug/kg		4.8	1		03/12/12 23:18	87-68-3	
n-Hexane	ND ug/kg		4.8	1		03/12/12 23:18	110-54-3	
2-Hexanone	ND ug/kg		96.8	1		03/12/12 23:18	591-78-6	
Iodomethane	ND ug/kg		96.8	1		03/12/12 23:18	74-88-4	
Isopropylbenzene (Cumene)	ND ug/kg		4.8	1		03/12/12 23:18	98-82-8	
p-Isopropyltoluene	ND ug/kg		4.8	1		03/12/12 23:18	99-87-6	
Methylene Chloride	ND ug/kg		19.4	1		03/12/12 23:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		24.2	1		03/12/12 23:18	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		4.8	1		03/12/12 23:18	1634-04-4	
Naphthalene	ND ug/kg		4.8	1		03/12/12 23:18	91-20-3	
n-Propylbenzene	ND ug/kg		4.8	1		03/12/12 23:18	103-65-1	
Styrene	ND ug/kg		4.8	1		03/12/12 23:18	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		4.8	1		03/12/12 23:18	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		4.8	1		03/12/12 23:18	79-34-5	
Tetrachloroethene	ND ug/kg		4.8	1		03/12/12 23:18	127-18-4	
Toluene	ND ug/kg		4.8	1		03/12/12 23:18	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		4.8	1		03/12/12 23:18	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		4.8	1		03/12/12 23:18	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		4.8	1		03/12/12 23:18	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		4.8	1		03/12/12 23:18	79-00-5	
Trichloroethene	ND ug/kg		4.8	1		03/12/12 23:18	79-01-6	
Trichlorofluoromethane	ND ug/kg		4.8	1		03/12/12 23:18	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		4.8	1		03/12/12 23:18	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		4.8	1		03/12/12 23:18	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		4.8	1		03/12/12 23:18	108-67-8	
Vinyl acetate	ND ug/kg		96.8	1		03/12/12 23:18	108-05-4	
Vinyl chloride	ND ug/kg		4.8	1		03/12/12 23:18	75-01-4	
Xylene (Total)	ND ug/kg		9.7	1		03/12/12 23:18	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	98 %.		71-125	1		03/12/12 23:18	1868-53-7	
Toluene-d8 (S)	104 %.		76-124	1		03/12/12 23:18	2037-26-5	
4-Bromofluorobenzene (S)	96 %.		67-134	1		03/12/12 23:18	460-00-4	
Percent Moisture								
Analytical Method: ASTM D2974-87								
Percent Moisture	3.6 %		0.10	1		03/13/12 13:37		

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ANALYTICAL RESULTS

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

Sample: GP-3 0-5 IVY Lab ID: 5059712005 Collected: 03/08/12 11:25 Received: 03/09/12 11:17 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Benzo(a)anthracene	22.4 ug/kg		5.6	1	03/14/12 12:15	03/14/12 18:21	56-55-3	
Benzo(a)pyrene	21.8 ug/kg		5.6	1	03/14/12 12:15	03/14/12 18:21	50-32-8	
Benzo(b)fluoranthene	16.3 ug/kg		5.6	1	03/14/12 12:15	03/14/12 18:21	205-99-2	
Benzo(k)fluoranthene	18.1 ug/kg		5.6	1	03/14/12 12:15	03/14/12 18:21	207-08-9	
Chrysene	19.2 ug/kg		5.6	1	03/14/12 12:15	03/14/12 18:21	218-01-9	
Dibenz(a,h)anthracene	6.0 ug/kg		5.6	1	03/14/12 12:15	03/14/12 18:21	53-70-3	
Indeno(1,2,3-cd)pyrene	11.8 ug/kg		5.6	1	03/14/12 12:15	03/14/12 18:21	193-39-5	
Naphthalene	ND ug/kg		5.6	1	03/14/12 12:15	03/14/12 18:21	91-20-3	
Surrogates								
2-Fluorobiphenyl (S)	72 %.		46-109	1	03/14/12 12:15	03/14/12 18:21	321-60-8	
p-Terphenyl-d14 (S)	82 %.		43-107	1	03/14/12 12:15	03/14/12 18:21	1718-51-0	
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
Acetone	ND ug/kg		85.8	1		03/14/12 20:23	67-64-1	
Acrolein	ND ug/kg		85.8	1		03/14/12 20:23	107-02-8	
Acrylonitrile	ND ug/kg		85.8	1		03/14/12 20:23	107-13-1	
Benzene	ND ug/kg		4.3	1		03/14/12 20:23	71-43-2	
Bromobenzene	ND ug/kg		4.3	1		03/14/12 20:23	108-86-1	
Bromoform	ND ug/kg		4.3	1		03/14/12 20:23	74-97-5	
Bromochloromethane	ND ug/kg		4.3	1		03/14/12 20:23	75-27-4	
Bromodichloromethane	ND ug/kg		4.3	1		03/14/12 20:23	75-25-2	
Bromoform	ND ug/kg		4.3	1		03/14/12 20:23	74-83-9	
2-Butanone (MEK)	ND ug/kg		21.5	1		03/14/12 20:23	78-93-3	
n-Butylbenzene	ND ug/kg		4.3	1		03/14/12 20:23	104-51-8	
sec-Butylbenzene	ND ug/kg		4.3	1		03/14/12 20:23	135-98-8	
tert-Butylbenzene	ND ug/kg		4.3	1		03/14/12 20:23	98-06-6	
Carbon disulfide	ND ug/kg		8.6	1		03/14/12 20:23	75-15-0	
Carbon tetrachloride	ND ug/kg		4.3	1		03/14/12 20:23	56-23-5	
Chlorobenzene	ND ug/kg		4.3	1		03/14/12 20:23	108-90-7	
Chloroethane	ND ug/kg		4.3	1		03/14/12 20:23	75-00-3	
Chloroform	ND ug/kg		4.3	1		03/14/12 20:23	67-66-3	
Chloromethane	ND ug/kg		4.3	1		03/14/12 20:23	74-87-3	
2-Chlorotoluene	ND ug/kg		4.3	1		03/14/12 20:23	95-49-8	
4-Chlorotoluene	ND ug/kg		4.3	1		03/14/12 20:23	106-43-4	
Dibromochloromethane	ND ug/kg		4.3	1		03/14/12 20:23	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		4.3	1		03/14/12 20:23	106-93-4	
Dibromomethane	ND ug/kg		4.3	1		03/14/12 20:23	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		4.3	1		03/14/12 20:23	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		4.3	1		03/14/12 20:23	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		4.3	1		03/14/12 20:23	106-46-7	
trans-1,4-Dichloro-2-butene	ND ug/kg		85.8	1		03/14/12 20:23	110-57-6	
Dichlorodifluoromethane	ND ug/kg		4.3	1		03/14/12 20:23	75-71-8	
1,1-Dichloroethane	ND ug/kg		4.3	1		03/14/12 20:23	75-34-3	
1,2-Dichloroethane	ND ug/kg		4.3	1		03/14/12 20:23	107-06-2	
1,1-Dichloroethene	ND ug/kg		4.3	1		03/14/12 20:23	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		4.3	1		03/14/12 20:23	156-59-2	

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ANALYTICAL RESULTS

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

Sample: GP-3 0-5 IVY Lab ID: 5059712005 Collected: 03/08/12 11:25 Received: 03/09/12 11:17 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
trans-1,2-Dichloroethene	ND ug/kg		4.3	1		03/14/12 20:23	156-60-5	
1,2-Dichloropropane	ND ug/kg		4.3	1		03/14/12 20:23	78-87-5	
1,3-Dichloropropane	ND ug/kg		4.3	1		03/14/12 20:23	142-28-9	
2,2-Dichloropropane	ND ug/kg		4.3	1		03/14/12 20:23	594-20-7	
1,1-Dichloropropene	ND ug/kg		4.3	1		03/14/12 20:23	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		4.3	1		03/14/12 20:23	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		4.3	1		03/14/12 20:23	10061-02-6	
Ethylbenzene	ND ug/kg		4.3	1		03/14/12 20:23	100-41-4	
Ethyl methacrylate	ND ug/kg		85.8	1		03/14/12 20:23	97-63-2	
Hexachloro-1,3-butadiene	ND ug/kg		4.3	1		03/14/12 20:23	87-68-3	
n-Hexane	ND ug/kg		4.3	1		03/14/12 20:23	110-54-3	
2-Hexanone	ND ug/kg		85.8	1		03/14/12 20:23	591-78-6	
Iodomethane	ND ug/kg		85.8	1		03/14/12 20:23	74-88-4	
Isopropylbenzene (Cumene)	ND ug/kg		4.3	1		03/14/12 20:23	98-82-8	
p-Isopropyltoluene	ND ug/kg		4.3	1		03/14/12 20:23	99-87-6	
Methylene Chloride	ND ug/kg		17.2	1		03/14/12 20:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		21.5	1		03/14/12 20:23	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		4.3	1		03/14/12 20:23	1634-04-4	
Naphthalene	ND ug/kg		4.3	1		03/14/12 20:23	91-20-3	
n-Propylbenzene	ND ug/kg		4.3	1		03/14/12 20:23	103-65-1	
Styrene	ND ug/kg		4.3	1		03/14/12 20:23	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		4.3	1		03/14/12 20:23	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		4.3	1		03/14/12 20:23	79-34-5	
Tetrachloroethene	ND ug/kg		4.3	1		03/14/12 20:23	127-18-4	
Toluene	ND ug/kg		4.3	1		03/14/12 20:23	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		4.3	1		03/14/12 20:23	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		4.3	1		03/14/12 20:23	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		4.3	1		03/14/12 20:23	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		4.3	1		03/14/12 20:23	79-00-5	
Trichloroethene	ND ug/kg		4.3	1		03/14/12 20:23	79-01-6	
Trichlorofluoromethane	ND ug/kg		4.3	1		03/14/12 20:23	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		4.3	1		03/14/12 20:23	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		4.3	1		03/14/12 20:23	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		4.3	1		03/14/12 20:23	108-67-8	
Vinyl acetate	ND ug/kg		85.8	1		03/14/12 20:23	108-05-4	
Vinyl chloride	ND ug/kg		4.3	1		03/14/12 20:23	75-01-4	
Xylene (Total)	ND ug/kg		8.6	1		03/14/12 20:23	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	96 %.		71-125	1		03/14/12 20:23	1868-53-7	
Toluene-d8 (S)	94 %.		76-124	1		03/14/12 20:23	2037-26-5	
4-Bromofluorobenzene (S)	94 %.		67-134	1		03/14/12 20:23	460-00-4	
Percent Moisture								
Analytical Method: ASTM D2974-87								
Percent Moisture	10.1 %		0.10	1		03/13/12 13:37		

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ANALYTICAL RESULTS

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

Sample: GP-3 15-20 IVY Lab ID: 5059712006 Collected: 03/08/12 11:39 Received: 03/09/12 11:17 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Benzo(a)anthracene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 18:38	56-55-3	
Benzo(a)pyrene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 18:38	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 18:38	205-99-2	
Benzo(k)fluoranthene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 18:38	207-08-9	
Chrysene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 18:38	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 18:38	53-70-3	
Indeno(1,2,3-cd)pyrene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 18:38	193-39-5	
Naphthalene	ND ug/kg		5.2	1	03/14/12 12:15	03/14/12 18:38	91-20-3	
Surrogates								
2-Fluorobiphenyl (S)	74 %.		46-109	1	03/14/12 12:15	03/14/12 18:38	321-60-8	
p-Terphenyl-d14 (S)	87 %.		43-107	1	03/14/12 12:15	03/14/12 18:38	1718-51-0	
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
Acetone	ND ug/kg		116	1		03/14/12 20:55	67-64-1	
Acrolein	ND ug/kg		116	1		03/14/12 20:55	107-02-8	
Acrylonitrile	ND ug/kg		116	1		03/14/12 20:55	107-13-1	
Benzene	ND ug/kg		5.8	1		03/14/12 20:55	71-43-2	
Bromobenzene	ND ug/kg		5.8	1		03/14/12 20:55	108-86-1	
Bromoform	ND ug/kg		5.8	1		03/14/12 20:55	74-97-5	
Bromochloromethane	ND ug/kg		5.8	1		03/14/12 20:55	75-27-4	
Bromodichloromethane	ND ug/kg		5.8	1		03/14/12 20:55	75-25-2	
Bromoform	ND ug/kg		5.8	1		03/14/12 20:55	74-83-9	
2-Butanone (MEK)	ND ug/kg		29.1	1		03/14/12 20:55	78-93-3	
n-Butylbenzene	ND ug/kg		5.8	1		03/14/12 20:55	104-51-8	
sec-Butylbenzene	ND ug/kg		5.8	1		03/14/12 20:55	135-98-8	
tert-Butylbenzene	ND ug/kg		5.8	1		03/14/12 20:55	98-06-6	
Carbon disulfide	ND ug/kg		11.6	1		03/14/12 20:55	75-15-0	
Carbon tetrachloride	ND ug/kg		5.8	1		03/14/12 20:55	56-23-5	
Chlorobenzene	ND ug/kg		5.8	1		03/14/12 20:55	108-90-7	
Chloroethane	ND ug/kg		5.8	1		03/14/12 20:55	75-00-3	
Chloroform	ND ug/kg		5.8	1		03/14/12 20:55	67-66-3	
Chloromethane	ND ug/kg		5.8	1		03/14/12 20:55	74-87-3	
2-Chlorotoluene	ND ug/kg		5.8	1		03/14/12 20:55	95-49-8	
4-Chlorotoluene	ND ug/kg		5.8	1		03/14/12 20:55	106-43-4	
Dibromochloromethane	ND ug/kg		5.8	1		03/14/12 20:55	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		5.8	1		03/14/12 20:55	106-93-4	
Dibromomethane	ND ug/kg		5.8	1		03/14/12 20:55	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		5.8	1		03/14/12 20:55	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		5.8	1		03/14/12 20:55	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		5.8	1		03/14/12 20:55	106-46-7	
trans-1,4-Dichloro-2-butene	ND ug/kg		116	1		03/14/12 20:55	110-57-6	
Dichlorodifluoromethane	ND ug/kg		5.8	1		03/14/12 20:55	75-71-8	
1,1-Dichloroethane	ND ug/kg		5.8	1		03/14/12 20:55	75-34-3	
1,2-Dichloroethane	ND ug/kg		5.8	1		03/14/12 20:55	107-06-2	
1,1-Dichloroethene	ND ug/kg		5.8	1		03/14/12 20:55	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		5.8	1		03/14/12 20:55	156-59-2	

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ANALYTICAL RESULTS

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

Sample: GP-3 15-20 IVY Lab ID: 5059712006 Collected: 03/08/12 11:39 Received: 03/09/12 11:17 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
trans-1,2-Dichloroethene	ND ug/kg		5.8	1		03/14/12 20:55	156-60-5	
1,2-Dichloropropane	ND ug/kg		5.8	1		03/14/12 20:55	78-87-5	
1,3-Dichloropropane	ND ug/kg		5.8	1		03/14/12 20:55	142-28-9	
2,2-Dichloropropane	ND ug/kg		5.8	1		03/14/12 20:55	594-20-7	
1,1-Dichloropropene	ND ug/kg		5.8	1		03/14/12 20:55	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		5.8	1		03/14/12 20:55	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		5.8	1		03/14/12 20:55	10061-02-6	
Ethylbenzene	ND ug/kg		5.8	1		03/14/12 20:55	100-41-4	
Ethyl methacrylate	ND ug/kg		116	1		03/14/12 20:55	97-63-2	
Hexachloro-1,3-butadiene	ND ug/kg		5.8	1		03/14/12 20:55	87-68-3	
n-Hexane	ND ug/kg		5.8	1		03/14/12 20:55	110-54-3	
2-Hexanone	ND ug/kg		116	1		03/14/12 20:55	591-78-6	
Iodomethane	ND ug/kg		116	1		03/14/12 20:55	74-88-4	
Isopropylbenzene (Cumene)	ND ug/kg		5.8	1		03/14/12 20:55	98-82-8	
p-Isopropyltoluene	ND ug/kg		5.8	1		03/14/12 20:55	99-87-6	
Methylene Chloride	ND ug/kg		23.2	1		03/14/12 20:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		29.1	1		03/14/12 20:55	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		5.8	1		03/14/12 20:55	1634-04-4	
Naphthalene	ND ug/kg		5.8	1		03/14/12 20:55	91-20-3	
n-Propylbenzene	ND ug/kg		5.8	1		03/14/12 20:55	103-65-1	
Styrene	ND ug/kg		5.8	1		03/14/12 20:55	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		5.8	1		03/14/12 20:55	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		5.8	1		03/14/12 20:55	79-34-5	
Tetrachloroethene	10.1 ug/kg		5.8	1		03/14/12 20:55	127-18-4	
Toluene	ND ug/kg		5.8	1		03/14/12 20:55	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		5.8	1		03/14/12 20:55	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		5.8	1		03/14/12 20:55	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		5.8	1		03/14/12 20:55	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		5.8	1		03/14/12 20:55	79-00-5	
Trichloroethene	ND ug/kg		5.8	1		03/14/12 20:55	79-01-6	
Trichlorofluoromethane	ND ug/kg		5.8	1		03/14/12 20:55	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		5.8	1		03/14/12 20:55	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		5.8	1		03/14/12 20:55	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		5.8	1		03/14/12 20:55	108-67-8	
Vinyl acetate	ND ug/kg		116	1		03/14/12 20:55	108-05-4	
Vinyl chloride	ND ug/kg		5.8	1		03/14/12 20:55	75-01-4	
Xylene (Total)	ND ug/kg		11.6	1		03/14/12 20:55	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	97 %.		71-125	1		03/14/12 20:55	1868-53-7	
Toluene-d8 (S)	93 %.		76-124	1		03/14/12 20:55	2037-26-5	
4-Bromofluorobenzene (S)	97 %.		67-134	1		03/14/12 20:55	460-00-4	
Analytical Method: ASTM D2974-87								
Percent Moisture	3.1 %		0.10	1		03/13/12 13:38		

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QUALITY CONTROL DATA

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

QC Batch:	MSV/40358	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV 5035A Volatile Organics
Associated Lab Samples:	5059712001, 5059712002, 5059712003, 5059712004		

METHOD BLANK: 702082	Matrix: Solid
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Associated Lab Samples: 5059712001, 5059712002, 5059712003, 5059712004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.0	03/12/12 14:02	
1,1,1-Trichloroethane	ug/kg	ND	5.0	03/12/12 14:02	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	03/12/12 14:02	
1,1,2-Trichloroethane	ug/kg	ND	5.0	03/12/12 14:02	
1,1-Dichloroethane	ug/kg	ND	5.0	03/12/12 14:02	
1,1-Dichloroethene	ug/kg	ND	5.0	03/12/12 14:02	
1,1-Dichloropropene	ug/kg	ND	5.0	03/12/12 14:02	
1,2,3-Trichlorobenzene	ug/kg	ND	5.0	03/12/12 14:02	
1,2,3-Trichloropropane	ug/kg	ND	5.0	03/12/12 14:02	
1,2,4-Trichlorobenzene	ug/kg	ND	5.0	03/12/12 14:02	
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	03/12/12 14:02	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.0	03/12/12 14:02	
1,2-Dichlorobenzene	ug/kg	ND	5.0	03/12/12 14:02	
1,2-Dichloroethane	ug/kg	ND	5.0	03/12/12 14:02	
1,2-Dichloropropane	ug/kg	ND	5.0	03/12/12 14:02	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	03/12/12 14:02	
1,3-Dichlorobenzene	ug/kg	ND	5.0	03/12/12 14:02	
1,3-Dichloropropane	ug/kg	ND	5.0	03/12/12 14:02	
1,4-Dichlorobenzene	ug/kg	ND	5.0	03/12/12 14:02	
2,2-Dichloropropane	ug/kg	ND	5.0	03/12/12 14:02	
2-Butanone (MEK)	ug/kg	ND	25.0	03/12/12 14:02	
2-Chlorotoluene	ug/kg	ND	5.0	03/12/12 14:02	
2-Hexanone	ug/kg	ND	100	03/12/12 14:02	
4-Chlorotoluene	ug/kg	ND	5.0	03/12/12 14:02	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	25.0	03/12/12 14:02	
Acetone	ug/kg	ND	100	03/12/12 14:02	
Acrolein	ug/kg	ND	100	03/12/12 14:02	
Acrylonitrile	ug/kg	ND	100	03/12/12 14:02	
Benzene	ug/kg	ND	5.0	03/12/12 14:02	
Bromobenzene	ug/kg	ND	5.0	03/12/12 14:02	
Bromochloromethane	ug/kg	ND	5.0	03/12/12 14:02	
Bromodichloromethane	ug/kg	ND	5.0	03/12/12 14:02	
Bromoform	ug/kg	ND	5.0	03/12/12 14:02	
Bromomethane	ug/kg	ND	5.0	03/12/12 14:02	
Carbon disulfide	ug/kg	ND	10.0	03/12/12 14:02	
Carbon tetrachloride	ug/kg	ND	5.0	03/12/12 14:02	
Chlorobenzene	ug/kg	ND	5.0	03/12/12 14:02	
Chloroethane	ug/kg	ND	5.0	03/12/12 14:02	
Chloroform	ug/kg	ND	5.0	03/12/12 14:02	
Chloromethane	ug/kg	ND	5.0	03/12/12 14:02	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	03/12/12 14:02	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	03/12/12 14:02	
Dibromochloromethane	ug/kg	ND	5.0	03/12/12 14:02	

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QUALITY CONTROL DATA

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

METHOD BLANK: 702082**Matrix:** Solid

Associated Lab Samples: 5059712001, 5059712002, 5059712003, 5059712004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/kg	ND	5.0	03/12/12 14:02	
Dichlorodifluoromethane	ug/kg	ND	5.0	03/12/12 14:02	
Ethyl methacrylate	ug/kg	ND	100	03/12/12 14:02	
Ethylbenzene	ug/kg	ND	5.0	03/12/12 14:02	
Hexachloro-1,3-butadiene	ug/kg	ND	5.0	03/12/12 14:02	
Iodomethane	ug/kg	ND	100	03/12/12 14:02	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	03/12/12 14:02	
Methyl-tert-butyl ether	ug/kg	ND	5.0	03/12/12 14:02	
Methylene Chloride	ug/kg	ND	20.0	03/12/12 14:02	
n-Butylbenzene	ug/kg	ND	5.0	03/12/12 14:02	
n-Hexane	ug/kg	ND	5.0	03/12/12 14:02	
n-Propylbenzene	ug/kg	ND	5.0	03/12/12 14:02	
Naphthalene	ug/kg	ND	5.0	03/12/12 14:02	
p-Isopropyltoluene	ug/kg	ND	5.0	03/12/12 14:02	
sec-Butylbenzene	ug/kg	ND	5.0	03/12/12 14:02	
Styrene	ug/kg	ND	5.0	03/12/12 14:02	
tert-Butylbenzene	ug/kg	ND	5.0	03/12/12 14:02	
Tetrachloroethene	ug/kg	ND	5.0	03/12/12 14:02	
Toluene	ug/kg	ND	5.0	03/12/12 14:02	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	03/12/12 14:02	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	03/12/12 14:02	
trans-1,4-Dichloro-2-butene	ug/kg	ND	100	03/12/12 14:02	
Trichloroethene	ug/kg	ND	5.0	03/12/12 14:02	
Trichlorofluoromethane	ug/kg	ND	5.0	03/12/12 14:02	
Vinyl acetate	ug/kg	ND	100	03/12/12 14:02	
Vinyl chloride	ug/kg	ND	5.0	03/12/12 14:02	
Xylene (Total)	ug/kg	ND	10.0	03/12/12 14:02	
4-Bromofluorobenzene (S)	%.	99	67-134	03/12/12 14:02	
Dibromofluoromethane (S)	%.	99	71-125	03/12/12 14:02	
Toluene-d8 (S)	%.	107	76-124	03/12/12 14:02	

LABORATORY CONTROL SAMPLE: 702083

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	50	40.9	82	68-125	
1,1,1-Trichloroethane	ug/kg	50	43.5	87	63-124	
1,1,2,2-Tetrachloroethane	ug/kg	50	51.3	103	73-123	
1,1,2-Trichloroethane	ug/kg	50	48.4	97	70-124	
1,1-Dichloroethane	ug/kg	50	45.8	92	63-122	
1,1-Dichloroethene	ug/kg	50	42.0	84	71-129	
1,1-Dichloropropene	ug/kg	50	44.8	90	71-122	
1,2,3-Trichlorobenzene	ug/kg	50	48.3	97	68-123	
1,2,3-Trichloropropane	ug/kg	50	78.3	157	47-117 L3	
1,2,4-Trichlorobenzene	ug/kg	50	44.0	88	68-125	
1,2,4-Trimethylbenzene	ug/kg	50	55.3	111	69-120	

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QUALITY CONTROL DATA

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

LABORATORY CONTROL SAMPLE: 702083

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/kg	50	50.2	100	67-121	
1,2-Dichlorobenzene	ug/kg	50	52.3	105	71-121	
1,2-Dichloroethane	ug/kg	50	47.3	95	74-120	
1,2-Dichloropropane	ug/kg	50	49.8	100	71-117	
1,3,5-Trimethylbenzene	ug/kg	50	45.9	92	64-119	
1,3-Dichlorobenzene	ug/kg	50	50.7	101	70-122	
1,3-Dichloropropane	ug/kg	50	46.4	93	68-118	
1,4-Dichlorobenzene	ug/kg	50	45.3	91	71-118	
2,2-Dichloropropane	ug/kg	50	38.5	77	62-119	
2-Butanone (MEK)	ug/kg	250	265	106	38-154	
2-Chlorotoluene	ug/kg	50	52.7	105	71-120	
2-Hexanone	ug/kg	250	278	111	50-134	
4-Chlorotoluene	ug/kg	50	45.2	90	72-123	
4-Methyl-2-pentanone (MIBK)	ug/kg	250	267	107	66-122	
Acetone	ug/kg	250	345	138	10-200	
Acrolein	ug/kg	1000	1450	145	11-200	
Acrylonitrile	ug/kg	1000	888	89	66-120	
Benzene	ug/kg	50	45.9	92	73-115	
Bromobenzene	ug/kg	50	50.2	100	64-130	
Bromochloromethane	ug/kg	50	45.5	91	71-127	
Bromodichloromethane	ug/kg	50	42.8	86	60-121	
Bromoform	ug/kg	50	36.0	72	44-130	
Bromomethane	ug/kg	50	76.8	154	48-175	
Carbon disulfide	ug/kg	100	74.6	75	71-126	
Carbon tetrachloride	ug/kg	50	34.5	69	57-127	
Chlorobenzene	ug/kg	50	46.5	93	72-121	
Chloroethane	ug/kg	50	57.5	115	72-141	
Chloroform	ug/kg	50	44.2	88	74-114	
Chloromethane	ug/kg	50	50.3	101	51-126	
cis-1,2-Dichloroethene	ug/kg	50	48.5	97	72-115	
cis-1,3-Dichloropropene	ug/kg	50	43.5	87	64-115	
Dibromochloromethane	ug/kg	50	37.5	75	58-114	
Dibromomethane	ug/kg	50	52.4	105	73-120	
Dichlorodifluoromethane	ug/kg	50	56.7	113	32-167	
Ethyl methacrylate	ug/kg	200	200	100	65-117	
Ethylbenzene	ug/kg	50	49.1	98	73-120	
Hexachloro-1,3-butadiene	ug/kg	50	41.1	82	65-121	
Iodomethane	ug/kg	100	99J	99	45-156	
Isopropylbenzene (Cumene)	ug/kg	50	43.6	87	74-123	
Methyl-tert-butyl ether	ug/kg	100	93.2	93	69-123	
Methylene Chloride	ug/kg	50	43.9	88	58-124	
n-Butylbenzene	ug/kg	50	45.9	92	71-118	
n-Hexane	ug/kg	50	35.8	72	50-106	
n-Propylbenzene	ug/kg	50	43.0	86	70-120	
Naphthalene	ug/kg	50	48.9	98	67-124	
p-Isopropyltoluene	ug/kg	50	44.4	89	71-123	
sec-Butylbenzene	ug/kg	50	45.1	90	66-122	
Styrene	ug/kg	50	51.9	104	75-118	

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QUALITY CONTROL DATA

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

LABORATORY CONTROL SAMPLE: 702083

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
tert-Butylbenzene	ug/kg	50	37.5	75	54-124	
Tetrachloroethene	ug/kg	50	42.9	86	66-126	
Toluene	ug/kg	50	45.9	92	69-115	
trans-1,2-Dichloroethene	ug/kg	50	38.1	76	69-120	
trans-1,3-Dichloropropene	ug/kg	50	39.7	79	61-116	
trans-1,4-Dichloro-2-butene	ug/kg	200	180	90	59-130	
Trichloroethene	ug/kg	50	49.6	99	71-117	
Trichlorofluoromethane	ug/kg	50	50.7	101	67-138	
Vinyl acetate	ug/kg	200	199	100	35-134	
Vinyl chloride	ug/kg	50	51.8	104	64-127	
Xylene (Total)	ug/kg	150	146	98	69-117	
4-Bromofluorobenzene (S)	%.			97	65-117	
Dibromofluoromethane (S)	%.			102	82-130	
Toluene-d8 (S)	%.			98	81-120	

QUALITY CONTROL DATA

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

QC Batch:	MSV/40433	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV 5035A Volatile Organics
Associated Lab Samples:	5059712005, 5059712006		

METHOD BLANK: 703852	Matrix: Solid
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Associated Lab Samples: 5059712005, 5059712006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.0	03/14/12 19:50	
1,1,1-Trichloroethane	ug/kg	ND	5.0	03/14/12 19:50	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	03/14/12 19:50	
1,1,2-Trichloroethane	ug/kg	ND	5.0	03/14/12 19:50	
1,1-Dichloroethane	ug/kg	ND	5.0	03/14/12 19:50	
1,1-Dichloroethene	ug/kg	ND	5.0	03/14/12 19:50	
1,1-Dichloropropene	ug/kg	ND	5.0	03/14/12 19:50	
1,2,3-Trichlorobenzene	ug/kg	ND	5.0	03/14/12 19:50	
1,2,3-Trichloropropane	ug/kg	ND	5.0	03/14/12 19:50	
1,2,4-Trichlorobenzene	ug/kg	ND	5.0	03/14/12 19:50	
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	03/14/12 19:50	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.0	03/14/12 19:50	
1,2-Dichlorobenzene	ug/kg	ND	5.0	03/14/12 19:50	
1,2-Dichloroethane	ug/kg	ND	5.0	03/14/12 19:50	
1,2-Dichloropropane	ug/kg	ND	5.0	03/14/12 19:50	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	03/14/12 19:50	
1,3-Dichlorobenzene	ug/kg	ND	5.0	03/14/12 19:50	
1,3-Dichloropropane	ug/kg	ND	5.0	03/14/12 19:50	
1,4-Dichlorobenzene	ug/kg	ND	5.0	03/14/12 19:50	
2,2-Dichloropropane	ug/kg	ND	5.0	03/14/12 19:50	
2-Butanone (MEK)	ug/kg	ND	25.0	03/14/12 19:50	
2-Chlorotoluene	ug/kg	ND	5.0	03/14/12 19:50	
2-Hexanone	ug/kg	ND	100	03/14/12 19:50	
4-Chlorotoluene	ug/kg	ND	5.0	03/14/12 19:50	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	25.0	03/14/12 19:50	
Acetone	ug/kg	ND	100	03/14/12 19:50	
Acrolein	ug/kg	ND	100	03/14/12 19:50	
Acrylonitrile	ug/kg	ND	100	03/14/12 19:50	
Benzene	ug/kg	ND	5.0	03/14/12 19:50	
Bromobenzene	ug/kg	ND	5.0	03/14/12 19:50	
Bromochloromethane	ug/kg	ND	5.0	03/14/12 19:50	
Bromodichloromethane	ug/kg	ND	5.0	03/14/12 19:50	
Bromoform	ug/kg	ND	5.0	03/14/12 19:50	
Bromomethane	ug/kg	ND	5.0	03/14/12 19:50	
Carbon disulfide	ug/kg	ND	10.0	03/14/12 19:50	
Carbon tetrachloride	ug/kg	ND	5.0	03/14/12 19:50	
Chlorobenzene	ug/kg	ND	5.0	03/14/12 19:50	
Chloroethane	ug/kg	ND	5.0	03/14/12 19:50	
Chloroform	ug/kg	ND	5.0	03/14/12 19:50	
Chloromethane	ug/kg	ND	5.0	03/14/12 19:50	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	03/14/12 19:50	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	03/14/12 19:50	
Dibromochloromethane	ug/kg	ND	5.0	03/14/12 19:50	

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QUALITY CONTROL DATA

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

METHOD BLANK: 703852

Matrix: Solid

Associated Lab Samples: 5059712005, 5059712006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/kg	ND	5.0	03/14/12 19:50	
Dichlorodifluoromethane	ug/kg	ND	5.0	03/14/12 19:50	
Ethyl methacrylate	ug/kg	ND	100	03/14/12 19:50	
Ethylbenzene	ug/kg	ND	5.0	03/14/12 19:50	
Hexachloro-1,3-butadiene	ug/kg	ND	5.0	03/14/12 19:50	
Iodomethane	ug/kg	ND	100	03/14/12 19:50	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	03/14/12 19:50	
Methyl-tert-butyl ether	ug/kg	ND	5.0	03/14/12 19:50	
Methylene Chloride	ug/kg	ND	20.0	03/14/12 19:50	
n-Butylbenzene	ug/kg	ND	5.0	03/14/12 19:50	
n-Hexane	ug/kg	ND	5.0	03/14/12 19:50	
n-Propylbenzene	ug/kg	ND	5.0	03/14/12 19:50	
Naphthalene	ug/kg	ND	5.0	03/14/12 19:50	
p-Isopropyltoluene	ug/kg	ND	5.0	03/14/12 19:50	
sec-Butylbenzene	ug/kg	ND	5.0	03/14/12 19:50	
Styrene	ug/kg	ND	5.0	03/14/12 19:50	
tert-Butylbenzene	ug/kg	ND	5.0	03/14/12 19:50	
Tetrachloroethene	ug/kg	ND	5.0	03/14/12 19:50	
Toluene	ug/kg	ND	5.0	03/14/12 19:50	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	03/14/12 19:50	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	03/14/12 19:50	
trans-1,4-Dichloro-2-butene	ug/kg	ND	100	03/14/12 19:50	
Trichloroethene	ug/kg	ND	5.0	03/14/12 19:50	
Trichlorofluoromethane	ug/kg	ND	5.0	03/14/12 19:50	
Vinyl acetate	ug/kg	ND	100	03/14/12 19:50	
Vinyl chloride	ug/kg	ND	5.0	03/14/12 19:50	
Xylene (Total)	ug/kg	ND	10.0	03/14/12 19:50	
4-Bromofluorobenzene (S)	%.	98	67-134	03/14/12 19:50	
Dibromofluoromethane (S)	%.	99	71-125	03/14/12 19:50	
Toluene-d8 (S)	%.	93	76-124	03/14/12 19:50	

LABORATORY CONTROL SAMPLE: 703853

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	50	50.2	100	68-125	
1,1,1-Trichloroethane	ug/kg	50	54.7	109	63-124	
1,1,2,2-Tetrachloroethane	ug/kg	50	56.1	112	73-123	
1,1,2-Trichloroethane	ug/kg	50	52.4	105	70-124	
1,1-Dichloroethane	ug/kg	50	53.0	106	63-122	
1,1-Dichloroethene	ug/kg	50	46.9	94	71-129	
1,1-Dichloropropene	ug/kg	50	54.9	110	71-122	
1,2,3-Trichlorobenzene	ug/kg	50	59.0	118	68-123	
1,2,3-Trichloropropane	ug/kg	50	91.7	183	47-117 L3	
1,2,4-Trichlorobenzene	ug/kg	50	58.0	116	68-125	
1,2,4-Trimethylbenzene	ug/kg	50	54.0	108	69-120	

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QUALITY CONTROL DATA

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

LABORATORY CONTROL SAMPLE: 703853

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/kg	50	52.2	104	67-121	
1,2-Dichlorobenzene	ug/kg	50	53.5	107	71-121	
1,2-Dichloroethane	ug/kg	50	59.2	118	74-120	
1,2-Dichloropropane	ug/kg	50	54.0	108	71-117	
1,3,5-Trimethylbenzene	ug/kg	50	53.4	107	64-119	
1,3-Dichlorobenzene	ug/kg	50	53.1	106	70-122	
1,3-Dichloropropane	ug/kg	50	51.6	103	68-118	
1,4-Dichlorobenzene	ug/kg	50	52.7	105	71-118	
2,2-Dichloropropane	ug/kg	50	53.4	107	62-119	
2-Butanone (MEK)	ug/kg	250	179	72	38-154	
2-Chlorotoluene	ug/kg	50	50.8	102	71-120	
2-Hexanone	ug/kg	250	162	65	50-134	
4-Chlorotoluene	ug/kg	50	54.2	108	72-123	
4-Methyl-2-pentanone (MIBK)	ug/kg	250	226	90	66-122	
Acetone	ug/kg	250	147	59	10-200	
Acrolein	ug/kg	1000	2360	236	11-200 L3	
Acrylonitrile	ug/kg	1000	980	98	66-120	
Benzene	ug/kg	50	51.2	102	73-115	
Bromobenzene	ug/kg	50	52.6	105	64-130	
Bromochloromethane	ug/kg	50	51.2	102	71-127	
Bromodichloromethane	ug/kg	50	49.2	98	60-121	
Bromoform	ug/kg	50	42.9	86	44-130	
Bromomethane	ug/kg	50	68.6	137	48-175	
Carbon disulfide	ug/kg	100	91.3	91	71-126	
Carbon tetrachloride	ug/kg	50	50.4	101	57-127	
Chlorobenzene	ug/kg	50	51.8	104	72-121	
Chloroethane	ug/kg	50	53.6	107	72-141	
Chloroform	ug/kg	50	55.9	112	74-114	
Chloromethane	ug/kg	50	43.8	88	51-126	
cis-1,2-Dichloroethene	ug/kg	50	53.8	108	72-115	
cis-1,3-Dichloropropene	ug/kg	50	45.2	90	64-115	
Dibromochloromethane	ug/kg	50	44.0	88	58-114	
Dibromomethane	ug/kg	50	58.7	117	73-120	
Dichlorodifluoromethane	ug/kg	50	58.4	117	32-167	
Ethyl methacrylate	ug/kg	200	202	101	65-117	
Ethylbenzene	ug/kg	50	53.8	108	73-120	
Hexachloro-1,3-butadiene	ug/kg	50	58.3	117	65-121	
Iodomethane	ug/kg	100	107	107	45-156	
Isopropylbenzene (Cumene)	ug/kg	50	55.9	112	74-123	
Methyl-tert-butyl ether	ug/kg	100	107	107	69-123	
Methylene Chloride	ug/kg	50	48.7	97	58-124	
n-Butylbenzene	ug/kg	50	54.5	109	71-118	
n-Hexane	ug/kg	50	39.0	78	50-106	
n-Propylbenzene	ug/kg	50	52.5	105	70-120	
Naphthalene	ug/kg	50	53.7	107	67-124	
p-Isopropyltoluene	ug/kg	50	55.6	111	71-123	
sec-Butylbenzene	ug/kg	50	54.6	109	66-122	
Styrene	ug/kg	50	56.0	112	75-118	

Date: 03/15/2012 04:51 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

LABORATORY CONTROL SAMPLE: 703853

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
tert-Butylbenzene	ug/kg	50	50.8	102	54-124	
Tetrachloroethene	ug/kg	50	51.8	104	66-126	
Toluene	ug/kg	50	46.8	94	69-115	
trans-1,2-Dichloroethene	ug/kg	50	51.5	103	69-120	
trans-1,3-Dichloropropene	ug/kg	50	45.3	91	61-116	
trans-1,4-Dichloro-2-butene	ug/kg	200	180	90	59-130	
Trichloroethene	ug/kg	50	57.3	115	71-117	
Trichlorofluoromethane	ug/kg	50	58.7	117	67-138	
Vinyl acetate	ug/kg	200	202	101	35-134	
Vinyl chloride	ug/kg	50	53.7	107	64-127	
Xylene (Total)	ug/kg	150	160	107	69-117	
4-Bromofluorobenzene (S)	%.			99	65-117	
Dibromofluoromethane (S)	%.			104	82-130	
Toluene-d8 (S)	%.			94	81-120	

QUALITY CONTROL DATA

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

QC Batch:	OEXT/29038	Analysis Method:	EPA 8270 by SIM
QC Batch Method:	EPA 3546	Analysis Description:	8270 MSSV PAH by SIM
Associated Lab Samples:	5059712001, 5059712002, 5059712003, 5059712004, 5059712005, 5059712006		

METHOD BLANK:	703303	Matrix:	Solid
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Associated Lab Samples:	5059712001, 5059712002, 5059712003, 5059712004, 5059712005, 5059712006		
-------------------------	--	--	--

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzo(a)anthracene	ug/kg	ND	5.0	03/14/12 15:23	
Benzo(a)pyrene	ug/kg	ND	5.0	03/14/12 15:23	
Benzo(b)fluoranthene	ug/kg	ND	5.0	03/14/12 15:23	
Benzo(k)fluoranthene	ug/kg	ND	5.0	03/14/12 15:23	
Chrysene	ug/kg	ND	5.0	03/14/12 15:23	
Dibenz(a,h)anthracene	ug/kg	ND	5.0	03/14/12 15:23	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	5.0	03/14/12 15:23	
Naphthalene	ug/kg	ND	5.0	03/14/12 15:23	
2-Fluorobiphenyl (S)	%.	73	46-109	03/14/12 15:23	
p-Terphenyl-d14 (S)	%.	95	43-107	03/14/12 15:23	

LABORATORY CONTROL SAMPLE:	703304
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Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzo(a)anthracene	ug/kg	333	308	92	52-122	
Benzo(a)pyrene	ug/kg	333	295	88	56-131	
Benzo(b)fluoranthene	ug/kg	333	275	83	54-125	
Benzo(k)fluoranthene	ug/kg	333	268	80	55-128	
Chrysene	ug/kg	333	246	74	56-118	
Dibenz(a,h)anthracene	ug/kg	333	274	82	56-125	
Indeno(1,2,3-cd)pyrene	ug/kg	333	270	81	56-124	
Naphthalene	ug/kg	333	221	66	52-112	
2-Fluorobiphenyl (S)	%.			68	46-109	
p-Terphenyl-d14 (S)	%.			80	43-107	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:	703305	703306
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Parameter	Units	5059850001		MSD		MSD		MSD		% Rec Limits	RPD	RPD	Max Qual
		Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec	MSD % Rec	% Rec				
Benzo(a)anthracene	ug/kg	26.1	418	418	333	368	73	82	36-105	10	20		
Benzo(a)pyrene	ug/kg	29.2	418	418	318	345	69	76	34-113	8	20		
Benzo(b)fluoranthene	ug/kg	27.6	418	418	309	333	67	73	33-111	7	20		
Benzo(k)fluoranthene	ug/kg	25.1	418	418	282	313	61	69	31-116	11	20		
Chrysene	ug/kg	29.4	418	418	285	302	61	65	34-109	6	20		
Dibenz(a,h)anthracene	ug/kg	8.6	418	418	254	303	59	70	32-111	17	20		
Indeno(1,2,3-cd)pyrene	ug/kg	19.0	418	418	268	304	59	68	27-113	13	20		
Naphthalene	ug/kg	46.7	418	418	299	301	60	61	45-106	.8	20		
2-Fluorobiphenyl (S)	%.						53	67	46-109		20 R1		
p-Terphenyl-d14 (S)	%.						57	73	43-107		20 R1		

Date: 03/15/2012 04:51 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Ivy Tower 2012-5001

Pace Project No.: 5059712

QC Batch:	PMST/6811	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples: 5059712001, 5059712002, 5059712003, 5059712004, 5059712005, 5059712006			

SAMPLE DUPLICATE: 702844

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	25.6	27.1	6	5	R2

SAMPLE DUPLICATE: 702845

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%		23.3			R2

QUALIFIERS

Project: Ivy Tower 2012-5001
Pace Project No.: 5059712

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

- L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
R1 RPD value was outside control limits.
R2 RPD value was outside control limits due to matrix interference

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ivy Tower 2012-5001
Pace Project No.: 5059712

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5059712001	GP-1 0-5 IVY	EPA 3546	OEXT/29038	EPA 8270 by SIM	MSSV/9758
5059712002	GP-1 15-20 IVY	EPA 3546	OEXT/29038	EPA 8270 by SIM	MSSV/9758
5059712003	GP-2 0-5 IVY	EPA 3546	OEXT/29038	EPA 8270 by SIM	MSSV/9758
5059712004	GP-2 15-20 IVY	EPA 3546	OEXT/29038	EPA 8270 by SIM	MSSV/9758
5059712005	GP-3 0-5 IVY	EPA 3546	OEXT/29038	EPA 8270 by SIM	MSSV/9758
5059712006	GP-3 15-20 IVY	EPA 3546	OEXT/29038	EPA 8270 by SIM	MSSV/9758
5059712001	GP-1 0-5 IVY	EPA 8260	MSV/40358		
5059712002	GP-1 15-20 IVY	EPA 8260	MSV/40358		
5059712003	GP-2 0-5 IVY	EPA 8260	MSV/40358		
5059712004	GP-2 15-20 IVY	EPA 8260	MSV/40358		
5059712005	GP-3 0-5 IVY	EPA 8260	MSV/40433		
5059712006	GP-3 15-20 IVY	EPA 8260	MSV/40433		
5059712001	GP-1 0-5 IVY	ASTM D2974-87	PMST/6811		
5059712002	GP-1 15-20 IVY	ASTM D2974-87	PMST/6811		
5059712003	GP-2 0-5 IVY	ASTM D2974-87	PMST/6811		
5059712004	GP-2 15-20 IVY	ASTM D2974-87	PMST/6811		
5059712005	GP-3 0-5 IVY	ASTM D2974-87	PMST/6811		

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: Nightman Petrie Address: 412 S. LAFAYETTE South Bend, IN 46601 Email To: C.D.Petrie@whitmanpetrie.com Phone: 574-232-4388 Requested Due Date/TAT: 1 WEEK		Report To: SAME Copy To: SAME Purchase Order No.: C137 Project Name: ENV OWNER Project Number: 2012-5001		Attention: Kim Bowman Company Name: SAME Address: Pace Quote Reference: Pace Project Manager: Pace Profile #: 	
				<input type="checkbox"/> NPDES <input type="checkbox"/> GROUNDWATER <input checked="" type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER R13C Site Location: IN State: IN	
				Residual Chlorine (Y/N) SOSS 712 Pace Project No./Lab ID. -001	
				Requested Analysis Filtered (Y/N) CDAs VOCs PCPs ANALYSIS TEST 1 Preservatives # OF CONTAINERS SAMPLE TEMP AT COLLECTION UNPRESERVED NaOH HCl HNO3 H2SO4 Na2S2O3 Methanol Other DI WATER	
SAMPLE ID <small>(A-Z, 0-9 / -)</small> Sample IDs MUST BE UNIQUE		Matrix Codes <small>MATRIX / CODE</small> Drinking Water DW Waste Water WW Product P Soil/Solid SL Oil OL Wipe WP Air AR Tissue TS Other OT		COLLECTED <small>MATRIX CODE (see valid codes to left)</small> COMPOSITE START COMPOSITE END/GRAB DATE TIME DATE TIME SAMPLE TYPE (G=GRAB C=COMB)	
Item # <small>ITEM #</small>					
1 GP-1 0-5 1VV 2 GP-1 5-10 1VV 3 GP-1 10-15 1VV 4 GP-1 15-20 1VV 5 GP-1 20-25 1VV 6 GP-2 0-5 1VV 7 GP-2 5-10 1VV 8 GP-2 10-15 1VV 9 GP-2 15-20 1VV 10 GP-2 20-25 1VV 11 GP-3 0-5 1VV 12 GP-3 5-10 1VV		DATE TIME DATE TIME SL G 3/8 8:32 5 2 SL G 3/8 8:37 5 2 SL G 3/8 8:43 5 2 SL G 3/8 8:49 5 2 SL G 3/8 8:55 5 2 SL G 3/8 10:07 5 2 SL G 3/8 10:10 5 2 SL G 3/8 10:16 5 2 SL G 3/8 10:20 5 2 SL G 3/8 10:27 5 2 SL G 3/8 11:25 5 2 SL G 3/8 11:30 5 2			
ADDITIONAL COMMENTS <small>REINQUISITION BY AFFILIATION</small>				DATE TIME ACCEPTED BY AFFILIATION Andy Seens-WPI 3/8/12 4:05 p.m. Pace 3/8/12	
				DATE TIME SAMPLE CONDITIONS 3/8/12 4:05 p.m. Pace 3/8/12	
				PRINT NAME of SAMPLER: Andy Seens SIGNATURE of SAMPLER: Andy Seens	
				PRINT NAME AND SIGNATURE: Jeff Fedek SIGNATURE: Jeff Fedek	
				Temp in °C: 2 Received on Date (Y/N): 3/8/12 Samples intact (Y/N): Y Custody Transfer (Y/N): Y Sealed Container (Y/N): Y	
				*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of +25% per month for any invoices not paid within 30 days. F-ALL-Q-020rev.07, 15-May-2007	



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: WIGHTMAN PRIVATE	Report To: Corley Phifer	Address: 412 S. LAFAYETTE	Copy To: SAME	Attention: Kim Bowman	Company Name: SAMS
Address: South Bend, IN 46601	Purchase Order No.: CBP	Address: SAMS	Pace Quote Reference: Pace Project Manager:	NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> OTHER	DRINKING WATER <input type="checkbox"/> RCRA <input type="checkbox"/> UST
Email To: Corley Phifer@wightmanprivate.com	Project Name: TUV Tower	Pace Profile #: 2012-5001	Pace Due Date/TAT: 1/14/2018	Site Location STATE: IN	Residual Chlorine (Y/N) N
Section D Required Client Information					
SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE					
ITEM #	Matrix Codes MATRIX / CODE	COLLECTED COMPOSITE START	COMPOSITE END/GRAB	SAMPLE TEMP AT COLLECTION	PACE PROJECT NO./LAB ID.
1	DW WT WW P SL OL WP AR TS OT Oil Air Tissue Other	MATRIX CODE (see valid codes to left)	G=GRAB C=COMP	Unpreserved NaOH HClO HNO ₃ H ₂ SO ₄ # OF CONTAINERS	HOLD 04-06-18
2	GP-3 10-15	IVY	SG 3/8	11:33	52
2	GP-3 15-20	IVY	SG 3/8	11:39	52
3	GP-3 20-25	IVY	SG 3/8	11:46	52
4					
5					
6					
7					
8					
9					
10					
11					
12					
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		ACCEPTED BY / AFFILIATION	SAMPLE CONDITIONS
				DATE 3/8/18 4:05	TIME 3/8/18 11:31
				DATE 3/8/18 4:05	TIME 3/8/18 11:31
SAMPLER NAME AND SIGNATURE					
PRINT NAME OF SAMPLER: Andy Soens					
SIGNATURE OF SAMPLER: Andrew Soens					
Temp in °C Received on 3/8/18					
Custody Control (Y/N) Sealed Container (Y/N) Samples intact (Y/N)					
F-ALL-Q-002 rev 07 15-May-2007					

Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: <u>Wrightman Retrie</u> Address: <u>112 S. Buffalo</u> S. Bend, IN <u>46601</u> Email To: <u>lchaffr@wrightmanretrie.com</u> Phone: <u>574-232-4392</u> Fax: Requested Due Date/TAT:		Report To: <u>A. Soens</u> Copy To: <u>A. Soens</u> Purchase Order No.: <u>14 Towers</u> Project Name: Project Number:		Attention: <u>K. n. Bowman</u> Company Name: <u>-</u> Address: <u>-</u> Pace Quote Reference: Pace Project Manager: Pace Profile #: <u>-</u>	
				REGULATORY AGENCY	
				<input type="checkbox"/> NPDES	<input type="checkbox"/> GROUND WATER
				<input type="checkbox"/> USF	<input type="checkbox"/> RCRA
				<input type="checkbox"/> OTHER	<input type="checkbox"/> DRINKING WATER
				Site Location STATE	
				<u>WV</u>	
				Residual Chlorine (Y/N)	
				<u>Y</u>	
Section D Required Client Information:					
SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE					
# ITEM					
Matrix Codes MATRIX / CODE					
Drinking Water DW WT WW P Waste Water SL Product Oil WP Soil/Solid AIR TS Oil Air Tissue Wipe Tissue Other OT					
SAMPLE TYPE (G=GRAB C=COMP) Matrix Code (see valid codes to left)					
SAMPLE TEMP AT COLLECTION					
TIME DATE TIME DATE TIME					
# OF CONTAINERS					
Preservatives					
NaOH HCl H ₂ SO ₄ Na ₂ S ₂ O ₃ Methanol Other					
ANALYSIS TEST					
CPA/Hg					
SOS 7712 Pace Project No./Lab I.D. <u>-001</u>					
<u>Hold -007</u>					
<u>Hold -008</u>					
<u>Hold -009</u>					
<u>Hold -010</u>					
<u>Hold -011</u>					
<u>Hold -012</u>					
<u>Hold -013</u>					
REINQUISITION BY / AFFILIATION					
DATE TIME ACCEPTED BY / AFFILIATION DATE TIME SAMPLE CONDITIONS					
<u>Andrew Soens</u> <u>3/3/12 4:15 see kg.</u>					
<u>2</u>					
ADDITIONAL COMMENTS					
PRINT Name of SAMPLER: <u>Andrew Soens</u>					
SIGNATURE of SAMPLER: <u>Andrew Soens</u>					
Temp in °C Received on _____ Site ID (Y/N) Custody Control (Y/N) Samples intact (Y/N)					
Date (MM/DD/YY): <u>3/1/12</u> Date Signed (MM/DD/YY): <u>3/1/12</u>					
Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month or any invoices not paid within 30 days.					



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Sample Condition Upon Receipt

Pace Analytical Client Name: Wightman Petrie Project # SOS9712

Courier: FedEx UPS USPS Client Commercial Pace Other _____

Tracking #: 8996 6661 2556

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Date/Time 5035A kits placed in freezer
3/9/12 11:20

Thermometer Used: 1 2 3 4 6 A B C D E

Type of Ice: Wet Blue None

Samples on ice, cooling process has begun

Cooler Temperature: 3.1°C

Ice Visible in Sample Containers:

yes no

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: KC 3/9/12

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5. <u>TC's</u>
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	9. (Circle) HNO3 H2SO4 NaOH HCl
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	10.
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Project Manager Review:		
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: C. Project

Date/Time: _____

Comments/ Resolution: _____

Seal SARS FOR CPNA WERE NOT SENT. WILL ARRIVE ON THURSDAY (SHIPPED MONDAY).

CPNA SARS ARRIVED TUESDAY, MARCH 13th COC #'S 1549065/9066 (PARTIAL)

Project Manager Review:

Date: 3-9-12

CLIENT: Wrightman Petrie

COC PAGE 1 of 2
COC ID#

Sample Container Count

Project # SOS9712

Sample Line

Item	DG9H	AG1U	WGFU	R 4/6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	Comments
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													

4/3/11

Container Codes

DG9H	40ml HCl amber vial	AF	Air Filter	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved amber vial
BP2N	500mL HNO3 plastic	AG2N	500ml HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	-	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500ml H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500ml unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250ml HNO3 plastic	AG3U	250ml unpreserved amber gla	BP3A	250mL NaOH, Asc Acid plastic	VG9H	40mL HCL clear vial
BP3U	250ml unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio, clear vial
BP3S	250ml H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40ml unpreserved clear vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

CLIENT: Nightman Petric

Sample Container Count

COC PAGE 2 of 2

JL

SOS9712

Project #

Sample Line

Sample Line	Item	DG9H	AG1U	WGFU	R 4 / 6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	Comments
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														

Container Codes

DG9H	40mL HCL amber voa vial	AF	Air Filter	BP1N	1 liter HNO3 plastic	BP1S	1 liter H2SO4 plastic	BP2A	500mL NaOH, Asc Acid plastic	BP2B	500mL NaOH, Asc Acid plastic	BP2C	500mL NaOH plastic	BP2D	500mL NaOH, Zn Ac	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	BP1U	1 liter unpreserved plastic	BP1Z	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	BP1Z	1 liter Na Thio amber vial	BP1Z	1 liter unpreserved amber vial	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	BP1U	1 liter unpreserved plastic	BP1Z	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	BP1Z	1 liter Na Thio amber vial	BP1Z	1 liter unpreserved amber vial	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	BP1Z	1 liter NaOH, Zn, Ac	BP1Z	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	BP1Z	1 liter NaOH, Zn, Ac	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved amber vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	BP2A	500mL NaOH, Asc Acid plastic	BP2A	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	BP2A	500mL NaOH, Asc Acid plastic	BP2A	500mL NaOH, Asc Acid plastic	VG9H	40mL HCL clear vial
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	BP2O	500mL NaOH plastic	BP2O	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	BP2O	500mL NaOH plastic	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	BP2Z	500mL NaOH, Zn Ac	BP2Z	500mL unpreserved amber amber gla	BP2Z	500mL NaOH, Zn Ac	BP2Z	500mL NaOH, Zn Ac	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	BP3A	250mL NaOH, Asc Acid plastic	BP3A	250mL NaOH, Asc Acid plastic	BP3A	250mL HNO3 plastic	BP3A	250mL NaOH, Asc Acid plastic	BP3A	250mL NaOH, Asc Acid plastic	BP3A	250mL NaOH, Asc Acid plastic	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	BP3C	250mL NaOH plastic	BP3C	1 liter H2SO4 clear glass	BP3C	250mL NaOH plastic	BP3C	250mL NaOH plastic	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	BP3Z	250mL NaOH, Zn Ac plastic	BP3Z	1 liter Na Thiosulfate clear gla	BP3Z	250mL NaOH, Zn Ac plastic	BP3Z	250mL NaOH, Zn Ac plastic	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved clear vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	C	Air Cassettes	C	1 liter Na Thiosulfate clear gla	C	Air Cassettes	C	Air Cassettes	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	DG9B	40mL Na Bisulfate amber vial	DG9B	1 liter Na Thiosulfate clear gla	DG9B	40mL Na Bisulfate amber vial	DG9B	40mL Na Bisulfate amber vial	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/ hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag	ZPLC	1 liter NaOH, Asc Acid plastic	ZPLC	40mL MeOH clear vial	ZPLC	40mL MeOH clear vial	ZPLC	40mL MeOH clear vial	ZPLC	Ziploc Bag

CLIENT: Wachtmeier Rothne

COC PAGE 2 of 4
COC ID# 1549065

Sample Container Count

Project # 50597m

Container Codes

DG9H	40mL HCl amber vial	AF	Air Filter	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1 liter unpreserved amber glass	AG1H	1 liter HCl amber glass	BP1S	1 liter H ₂ SO ₄ plastic	DG9S	40mL H ₂ SO ₄ amber vial
WGfU	4oz clear soil jar	AG1S	1 liter H ₂ SO ₄ amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved amber vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	Wipe/Swab	
BP2U	500mL unpreserved plastic	AG2S	500mL H ₂ SO ₄ amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H ₂ SO ₄ plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U Summa Can	
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	BP3A	250mL NaOH, Asc Acid plastic	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCl clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H ₂ SO ₄ plastic	BG1S	1 liter H ₂ SO ₄ clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved clear vial
AG3S	250mL H ₂ SO ₄ glass amber	BG1T	1 liter Na Thiosulfate clear gla	C Air Cassettes		VSG	Headspace septa vial & HCL
AG1S	1 liter H ₂ SO ₄ amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziologic Baq

CLIENT: Wrightman Petrie

COC PAGE 3 of 4
COC ID# 154906

Sample Container Count

Project # SOS9712

Sample Line Item	DG9H	AG1U	WGFU	R 4 / 6	BP2N	BP2U	BP3N	BP3U	BP3S	AG3S	AG1H	Comments
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

Container Codes

DG9H	40mL HCl amber vial	AF	Air Filter	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCl amber glass	BP1S	1 liter H ₂ SO ₄ plastic	DG9S	40mL H ₂ SO ₄ amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H ₂ SO ₄ amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved amber vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H ₂ SO ₄ amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H ₂ SO ₄ plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	BP3A	250mL NaOH, Asc Acid plastic	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BP1H	1 liter HCl clear glass	BP3C	250mL NaOH plastic	VGGT	40mL Na Thio. clear vial
BP3S	250mL H ₂ SO ₄ plastic	BG1S	1 liter H ₂ SO ₄ clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VGGU	40mL unpreserved clear vial
AG3S	250mL H ₂ SO ₄ glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H ₂ SO ₄ amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

March 15, 2012

Mr. Conley Phifer
Wightman Petrie Environmental
412 S. Lafayette
South Bend, IN 46601

RE: Project: Ivy Tower
Pace Project No.: 5059789

Dear Mr. Phifer:

Enclosed are the analytical results for sample(s) received by the laboratory on March 10, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Lyle Cable

lyle.cable@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Ivy Tower
Pace Project No.: 5059789

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 100418
Indiana Certification #: C-49-06
Kansas Certification #: E-10247

Kentucky Certification #: 0042
Louisiana/NELAC Certification #: 04076
Ohio VAP: CL0065
West Virginia Certification #: 330

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Ivy Tower
Pace Project No.: 5059789

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5059789001	GP-4 0-5	Solid	03/08/12 12:38	03/10/12 10:00
5059789002	GP-4 15-20	Solid	03/08/12 12:52	03/10/12 10:00
5059789003	GP-5 0-5	Solid	03/08/12 14:12	03/10/12 10:00
5059789004	GP-5 15-20	Solid	03/08/12 14:29	03/10/12 10:00
5059789005	GP-6 0-5	Solid	03/09/12 08:38	03/10/12 10:00
5059789006	GP-6 15-20	Solid	03/09/12 09:28	03/10/12 10:00
5059789007	GP-7 0-5	Solid	03/09/12 11:09	03/10/12 10:00
5059789008	GP-7 15-20	Solid	03/09/12 11:28	03/10/12 10:00
5059789009	GP-4 5-10	Solid	03/08/12 12:42	03/10/12 10:00
5059789010	GP-4 10-15	Solid	03/08/12 12:47	03/10/12 10:00
5059789011	GP-4 20-25	Solid	03/08/12 12:58	03/10/12 10:00
5059789012	GP-5 5-10	Solid	03/08/12 14:19	03/10/12 10:00
5059789013	GP-5 10-15	Solid	03/08/12 14:24	03/10/12 10:00
5059789014	GP-5 20-25	Solid	03/08/12 14:35	03/10/12 10:00
5059789015	GP-6 5-10	Solid	03/09/12 08:42	03/10/12 10:00
5059789016	GP-6 10-15	Solid	03/09/12 09:22	03/10/12 10:00
5059789017	GP-7 5-10	Solid	03/09/12 11:15	03/10/12 10:00
5059789018	GP-7 10-15	Solid	03/09/12 11:22	03/10/12 10:00
5059789019	GP-7 20-25	Solid	03/09/12 11:35	03/10/12 10:00
5059789020	GP-6 20-25	Solid	03/09/12 09:37	03/10/12 10:00

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Ivy Tower
Pace Project No.: 5059789

Lab ID	Sample ID	Method	Analysts	Analytes Reported
5059789001	GP-4 0-5	EPA 8270 by SIM	RRB	10
		EPA 8260	SLB	73
		ASTM D2974-87	MLS	1
5059789002	GP-4 15-20	EPA 8270 by SIM	RRB	10
		EPA 8260	SLB	73
		ASTM D2974-87	MLS	1
5059789003	GP-5 0-5	EPA 8270 by SIM	RRB	10
		EPA 8260	SLB	73
		ASTM D2974-87	MLS	1
5059789004	GP-5 15-20	EPA 8270 by SIM	RRB	10
		EPA 8260	SLB	73
		ASTM D2974-87	MLS	1
5059789005	GP-6 0-5	EPA 8270 by SIM	RRB	10
		EPA 8260	SLB	73
		ASTM D2974-87	MLS	1
5059789006	GP-6 15-20	EPA 8270 by SIM	RRB	10
		EPA 8260	SLB	73
		ASTM D2974-87	MLS	1
5059789007	GP-7 0-5	EPA 8270 by SIM	RRB	10
		EPA 8260	SLB	73
		ASTM D2974-87	MLS	1
5059789008	GP-7 15-20	EPA 8270 by SIM	RRB	10
		EPA 8260	SLB	73
		ASTM D2974-87	MLS	1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059789

Sample: GP-4 0-5 Lab ID: 5059789001 Collected: 03/08/12 12:38 Received: 03/10/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Benzo(a)anthracene	3680 ug/kg		32.7	5	03/14/12 12:15	03/15/12 07:06	56-55-3	
Benzo(a)pyrene	3320 ug/kg		32.7	5	03/14/12 12:15	03/15/12 07:06	50-32-8	
Benzo(b)fluoranthene	2690 ug/kg		32.7	5	03/14/12 12:15	03/15/12 07:06	205-99-2	
Benzo(k)fluoranthene	2560 ug/kg		32.7	5	03/14/12 12:15	03/15/12 07:06	207-08-9	
Chrysene	3050 ug/kg		32.7	5	03/14/12 12:15	03/15/12 07:06	218-01-9	
Dibenz(a,h)anthracene	959 ug/kg		32.7	5	03/14/12 12:15	03/15/12 07:06	53-70-3	
Indeno(1,2,3-cd)pyrene	1850 ug/kg		32.7	5	03/14/12 12:15	03/15/12 07:06	193-39-5	
Naphthalene	492 ug/kg		32.7	5	03/14/12 12:15	03/15/12 07:06	91-20-3	
Surrogates								
2-Fluorobiphenyl (S)	73 %.		46-109	5	03/14/12 12:15	03/15/12 07:06	321-60-8	
p-Terphenyl-d14 (S)	80 %.		43-107	5	03/14/12 12:15	03/15/12 07:06	1718-51-0	
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
Acetone	ND ug/kg		194	1		03/12/12 12:04	67-64-1	
Acrolein	ND ug/kg		194	1		03/12/12 12:04	107-02-8	
Acrylonitrile	ND ug/kg		194	1		03/12/12 12:04	107-13-1	
Benzene	ND ug/kg		9.7	1		03/12/12 12:04	71-43-2	
Bromobenzene	ND ug/kg		9.7	1		03/12/12 12:04	108-86-1	
Bromoform	ND ug/kg		9.7	1		03/12/12 12:04	74-97-5	
Bromochloromethane	ND ug/kg		9.7	1		03/12/12 12:04	75-27-4	
Bromodichloromethane	ND ug/kg		9.7	1		03/12/12 12:04	75-25-2	
Bromoform	ND ug/kg		9.7	1		03/12/12 12:04	74-83-9	
2-Butanone (MEK)	ND ug/kg		48.4	1		03/12/12 12:04	78-93-3	
n-Butylbenzene	ND ug/kg		9.7	1		03/12/12 12:04	104-51-8	
sec-Butylbenzene	ND ug/kg		9.7	1		03/12/12 12:04	135-98-8	
tert-Butylbenzene	ND ug/kg		9.7	1		03/12/12 12:04	98-06-6	
Carbon disulfide	ND ug/kg		19.4	1		03/12/12 12:04	75-15-0	
Carbon tetrachloride	ND ug/kg		9.7	1		03/12/12 12:04	56-23-5	
Chlorobenzene	ND ug/kg		9.7	1		03/12/12 12:04	108-90-7	
Chloroethane	ND ug/kg		9.7	1		03/12/12 12:04	75-00-3	
Chloroform	ND ug/kg		9.7	1		03/12/12 12:04	67-66-3	
Chloromethane	ND ug/kg		9.7	1		03/12/12 12:04	74-87-3	
2-Chlorotoluene	ND ug/kg		9.7	1		03/12/12 12:04	95-49-8	
4-Chlorotoluene	ND ug/kg		9.7	1		03/12/12 12:04	106-43-4	
Dibromochloromethane	ND ug/kg		9.7	1		03/12/12 12:04	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		9.7	1		03/12/12 12:04	106-93-4	
Dibromomethane	ND ug/kg		9.7	1		03/12/12 12:04	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		9.7	1		03/12/12 12:04	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		9.7	1		03/12/12 12:04	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		9.7	1		03/12/12 12:04	106-46-7	
trans-1,4-Dichloro-2-butene	ND ug/kg		194	1		03/12/12 12:04	110-57-6	
Dichlorodifluoromethane	ND ug/kg		9.7	1		03/12/12 12:04	75-71-8	
1,1-Dichloroethane	ND ug/kg		9.7	1		03/12/12 12:04	75-34-3	
1,2-Dichloroethane	ND ug/kg		9.7	1		03/12/12 12:04	107-06-2	
1,1-Dichloroethene	ND ug/kg		9.7	1		03/12/12 12:04	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		9.7	1		03/12/12 12:04	156-59-2	

Date: 03/15/2012 04:14 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059789

Sample: GP-4 0-5 Lab ID: 5059789001 Collected: 03/08/12 12:38 Received: 03/10/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
trans-1,2-Dichloroethene	ND ug/kg		9.7	1		03/12/12 12:04	156-60-5	
1,2-Dichloropropane	ND ug/kg		9.7	1		03/12/12 12:04	78-87-5	
1,3-Dichloropropane	ND ug/kg		9.7	1		03/12/12 12:04	142-28-9	
2,2-Dichloropropane	ND ug/kg		9.7	1		03/12/12 12:04	594-20-7	
1,1-Dichloropropene	ND ug/kg		9.7	1		03/12/12 12:04	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		9.7	1		03/12/12 12:04	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		9.7	1		03/12/12 12:04	10061-02-6	
Ethylbenzene	ND ug/kg		9.7	1		03/12/12 12:04	100-41-4	
Ethyl methacrylate	ND ug/kg		194	1		03/12/12 12:04	97-63-2	
Hexachloro-1,3-butadiene	ND ug/kg		9.7	1		03/12/12 12:04	87-68-3	
n-Hexane	ND ug/kg		9.7	1		03/12/12 12:04	110-54-3	
2-Hexanone	ND ug/kg		194	1		03/12/12 12:04	591-78-6	
Iodomethane	ND ug/kg		194	1		03/12/12 12:04	74-88-4	
Isopropylbenzene (Cumene)	ND ug/kg		9.7	1		03/12/12 12:04	98-82-8	
p-Isopropyltoluene	ND ug/kg		9.7	1		03/12/12 12:04	99-87-6	
Methylene Chloride	ND ug/kg		38.7	1		03/12/12 12:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		48.4	1		03/12/12 12:04	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		9.7	1		03/12/12 12:04	1634-04-4	
Naphthalene	ND ug/kg		9.7	1		03/12/12 12:04	91-20-3	
n-Propylbenzene	ND ug/kg		9.7	1		03/12/12 12:04	103-65-1	
Styrene	ND ug/kg		9.7	1		03/12/12 12:04	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		9.7	1		03/12/12 12:04	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		9.7	1		03/12/12 12:04	79-34-5	
Tetrachloroethene	ND ug/kg		9.7	1		03/12/12 12:04	127-18-4	
Toluene	ND ug/kg		9.7	1		03/12/12 12:04	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		9.7	1		03/12/12 12:04	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		9.7	1		03/12/12 12:04	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		9.7	1		03/12/12 12:04	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		9.7	1		03/12/12 12:04	79-00-5	
Trichloroethene	ND ug/kg		9.7	1		03/12/12 12:04	79-01-6	
Trichlorofluoromethane	ND ug/kg		9.7	1		03/12/12 12:04	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		9.7	1		03/12/12 12:04	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		9.7	1		03/12/12 12:04	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		9.7	1		03/12/12 12:04	108-67-8	
Vinyl acetate	ND ug/kg		194	1		03/12/12 12:04	108-05-4	
Vinyl chloride	ND ug/kg		9.7	1		03/12/12 12:04	75-01-4	
Xylene (Total)	ND ug/kg		19.4	1		03/12/12 12:04	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	107 %.		71-125	1		03/12/12 12:04	1868-53-7	
Toluene-d8 (S)	100 %.		76-124	1		03/12/12 12:04	2037-26-5	
4-Bromofluorobenzene (S)	100 %.		67-134	1		03/12/12 12:04	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	23.6 %		0.10	1		03/14/12 15:14		

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059789

Sample: GP-4 15-20 Lab ID: 5059789002 Collected: 03/08/12 12:52 Received: 03/10/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Benzo(a)anthracene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 03:50	56-55-3	
Benzo(a)pyrene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 03:50	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 03:50	205-99-2	
Benzo(k)fluoranthene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 03:50	207-08-9	
Chrysene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 03:50	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 03:50	53-70-3	
Indeno(1,2,3-cd)pyrene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 03:50	193-39-5	
Naphthalene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 03:50	91-20-3	
Surrogates								
2-Fluorobiphenyl (S)	72 %.		46-109	1	03/14/12 12:15	03/15/12 03:50	321-60-8	
p-Terphenyl-d14 (S)	90 %.		43-107	1	03/14/12 12:15	03/15/12 03:50	1718-51-0	
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
Acetone	ND ug/kg		94.1	1		03/12/12 12:42	67-64-1	
Acrolein	ND ug/kg		94.1	1		03/12/12 12:42	107-02-8	
Acrylonitrile	ND ug/kg		94.1	1		03/12/12 12:42	107-13-1	
Benzene	ND ug/kg		4.7	1		03/12/12 12:42	71-43-2	
Bromobenzene	ND ug/kg		4.7	1		03/12/12 12:42	108-86-1	
Bromoform	ND ug/kg		4.7	1		03/12/12 12:42	74-97-5	
Bromochloromethane	ND ug/kg		4.7	1		03/12/12 12:42	75-27-4	
Bromodichloromethane	ND ug/kg		4.7	1		03/12/12 12:42	75-25-2	
Bromoform	ND ug/kg		4.7	1		03/12/12 12:42	74-83-9	
2-Butanone (MEK)	ND ug/kg		23.5	1		03/12/12 12:42	78-93-3	
n-Butylbenzene	ND ug/kg		4.7	1		03/12/12 12:42	104-51-8	
sec-Butylbenzene	ND ug/kg		4.7	1		03/12/12 12:42	135-98-8	
tert-Butylbenzene	ND ug/kg		4.7	1		03/12/12 12:42	98-06-6	
Carbon disulfide	ND ug/kg		9.4	1		03/12/12 12:42	75-15-0	
Carbon tetrachloride	ND ug/kg		4.7	1		03/12/12 12:42	56-23-5	
Chlorobenzene	ND ug/kg		4.7	1		03/12/12 12:42	108-90-7	
Chloroethane	ND ug/kg		4.7	1		03/12/12 12:42	75-00-3	
Chloroform	ND ug/kg		4.7	1		03/12/12 12:42	67-66-3	
Chloromethane	ND ug/kg		4.7	1		03/12/12 12:42	74-87-3	
2-Chlorotoluene	ND ug/kg		4.7	1		03/12/12 12:42	95-49-8	
4-Chlorotoluene	ND ug/kg		4.7	1		03/12/12 12:42	106-43-4	
Dibromochloromethane	ND ug/kg		4.7	1		03/12/12 12:42	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		4.7	1		03/12/12 12:42	106-93-4	
Dibromomethane	ND ug/kg		4.7	1		03/12/12 12:42	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		4.7	1		03/12/12 12:42	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		4.7	1		03/12/12 12:42	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		4.7	1		03/12/12 12:42	106-46-7	
trans-1,4-Dichloro-2-butene	ND ug/kg		94.1	1		03/12/12 12:42	110-57-6	
Dichlorodifluoromethane	ND ug/kg		4.7	1		03/12/12 12:42	75-71-8	
1,1-Dichloroethane	ND ug/kg		4.7	1		03/12/12 12:42	75-34-3	
1,2-Dichloroethane	ND ug/kg		4.7	1		03/12/12 12:42	107-06-2	
1,1-Dichloroethene	ND ug/kg		4.7	1		03/12/12 12:42	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		4.7	1		03/12/12 12:42	156-59-2	

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059789

Sample: GP-4 15-20 Lab ID: 5059789002 Collected: 03/08/12 12:52 Received: 03/10/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
trans-1,2-Dichloroethene	ND ug/kg		4.7	1		03/12/12 12:42	156-60-5	
1,2-Dichloropropane	ND ug/kg		4.7	1		03/12/12 12:42	78-87-5	
1,3-Dichloropropane	ND ug/kg		4.7	1		03/12/12 12:42	142-28-9	
2,2-Dichloropropane	ND ug/kg		4.7	1		03/12/12 12:42	594-20-7	
1,1-Dichloropropene	ND ug/kg		4.7	1		03/12/12 12:42	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		4.7	1		03/12/12 12:42	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		4.7	1		03/12/12 12:42	10061-02-6	
Ethylbenzene	ND ug/kg		4.7	1		03/12/12 12:42	100-41-4	
Ethyl methacrylate	ND ug/kg		94.1	1		03/12/12 12:42	97-63-2	
Hexachloro-1,3-butadiene	ND ug/kg		4.7	1		03/12/12 12:42	87-68-3	
n-Hexane	ND ug/kg		4.7	1		03/12/12 12:42	110-54-3	
2-Hexanone	ND ug/kg		94.1	1		03/12/12 12:42	591-78-6	
Iodomethane	ND ug/kg		94.1	1		03/12/12 12:42	74-88-4	
Isopropylbenzene (Cumene)	ND ug/kg		4.7	1		03/12/12 12:42	98-82-8	
p-Isopropyltoluene	ND ug/kg		4.7	1		03/12/12 12:42	99-87-6	
Methylene Chloride	ND ug/kg		18.8	1		03/12/12 12:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		23.5	1		03/12/12 12:42	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		4.7	1		03/12/12 12:42	1634-04-4	
Naphthalene	ND ug/kg		4.7	1		03/12/12 12:42	91-20-3	
n-Propylbenzene	ND ug/kg		4.7	1		03/12/12 12:42	103-65-1	
Styrene	ND ug/kg		4.7	1		03/12/12 12:42	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		4.7	1		03/12/12 12:42	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		4.7	1		03/12/12 12:42	79-34-5	
Tetrachloroethene	ND ug/kg		4.7	1		03/12/12 12:42	127-18-4	
Toluene	ND ug/kg		4.7	1		03/12/12 12:42	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		4.7	1		03/12/12 12:42	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		4.7	1		03/12/12 12:42	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		4.7	1		03/12/12 12:42	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		4.7	1		03/12/12 12:42	79-00-5	
Trichloroethene	ND ug/kg		4.7	1		03/12/12 12:42	79-01-6	
Trichlorofluoromethane	ND ug/kg		4.7	1		03/12/12 12:42	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		4.7	1		03/12/12 12:42	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		4.7	1		03/12/12 12:42	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		4.7	1		03/12/12 12:42	108-67-8	
Vinyl acetate	ND ug/kg		94.1	1		03/12/12 12:42	108-05-4	
Vinyl chloride	ND ug/kg		4.7	1		03/12/12 12:42	75-01-4	
Xylene (Total)	ND ug/kg		9.4	1		03/12/12 12:42	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	105 %.		71-125	1		03/12/12 12:42	1868-53-7	
Toluene-d8 (S)	93 %.		76-124	1		03/12/12 12:42	2037-26-5	
4-Bromofluorobenzene (S)	99 %.		67-134	1		03/12/12 12:42	460-00-4	
Percent Moisture								
Analytical Method: ASTM D2974-87								
Percent Moisture	3.0 %		0.10	1		03/14/12 15:14		

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059789

Sample: GP-5 0-5 Lab ID: 5059789003 Collected: 03/08/12 14:12 Received: 03/10/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Benzo(a)anthracene	ND ug/kg		5.4	1	03/14/12 12:15	03/15/12 04:08	56-55-3	
Benzo(a)pyrene	ND ug/kg		5.4	1	03/14/12 12:15	03/15/12 04:08	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		5.4	1	03/14/12 12:15	03/15/12 04:08	205-99-2	
Benzo(k)fluoranthene	ND ug/kg		5.4	1	03/14/12 12:15	03/15/12 04:08	207-08-9	
Chrysene	ND ug/kg		5.4	1	03/14/12 12:15	03/15/12 04:08	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		5.4	1	03/14/12 12:15	03/15/12 04:08	53-70-3	
Indeno(1,2,3-cd)pyrene	ND ug/kg		5.4	1	03/14/12 12:15	03/15/12 04:08	193-39-5	
Naphthalene	ND ug/kg		5.4	1	03/14/12 12:15	03/15/12 04:08	91-20-3	
Surrogates								
2-Fluorobiphenyl (S)	63 %.		46-109	1	03/14/12 12:15	03/15/12 04:08	321-60-8	
p-Terphenyl-d14 (S)	75 %.		43-107	1	03/14/12 12:15	03/15/12 04:08	1718-51-0	
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
Acetone	ND ug/kg		99.3	1		03/12/12 13:20	67-64-1	
Acrolein	ND ug/kg		99.3	1		03/12/12 13:20	107-02-8	
Acrylonitrile	ND ug/kg		99.3	1		03/12/12 13:20	107-13-1	
Benzene	ND ug/kg		5.0	1		03/12/12 13:20	71-43-2	
Bromobenzene	ND ug/kg		5.0	1		03/12/12 13:20	108-86-1	
Bromoform	ND ug/kg		5.0	1		03/12/12 13:20	74-97-5	
Bromochloromethane	ND ug/kg		5.0	1		03/12/12 13:20	75-27-4	
Bromodichloromethane	ND ug/kg		5.0	1		03/12/12 13:20	75-25-2	
Bromoform	ND ug/kg		5.0	1		03/12/12 13:20	74-83-9	
2-Butanone (MEK)	ND ug/kg		24.8	1		03/12/12 13:20	78-93-3	
n-Butylbenzene	ND ug/kg		5.0	1		03/12/12 13:20	104-51-8	
sec-Butylbenzene	ND ug/kg		5.0	1		03/12/12 13:20	135-98-8	
tert-Butylbenzene	ND ug/kg		5.0	1		03/12/12 13:20	98-06-6	
Carbon disulfide	ND ug/kg		9.9	1		03/12/12 13:20	75-15-0	
Carbon tetrachloride	ND ug/kg		5.0	1		03/12/12 13:20	56-23-5	
Chlorobenzene	ND ug/kg		5.0	1		03/12/12 13:20	108-90-7	
Chloroethane	ND ug/kg		5.0	1		03/12/12 13:20	75-00-3	
Chloroform	ND ug/kg		5.0	1		03/12/12 13:20	67-66-3	
Chloromethane	ND ug/kg		5.0	1		03/12/12 13:20	74-87-3	
2-Chlorotoluene	ND ug/kg		5.0	1		03/12/12 13:20	95-49-8	
4-Chlorotoluene	ND ug/kg		5.0	1		03/12/12 13:20	106-43-4	
Dibromochloromethane	ND ug/kg		5.0	1		03/12/12 13:20	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		5.0	1		03/12/12 13:20	106-93-4	
Dibromomethane	ND ug/kg		5.0	1		03/12/12 13:20	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		5.0	1		03/12/12 13:20	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		5.0	1		03/12/12 13:20	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		5.0	1		03/12/12 13:20	106-46-7	
trans-1,4-Dichloro-2-butene	ND ug/kg		99.3	1		03/12/12 13:20	110-57-6	
Dichlorodifluoromethane	ND ug/kg		5.0	1		03/12/12 13:20	75-71-8	
1,1-Dichloroethane	ND ug/kg		5.0	1		03/12/12 13:20	75-34-3	
1,2-Dichloroethane	ND ug/kg		5.0	1		03/12/12 13:20	107-06-2	
1,1-Dichloroethene	ND ug/kg		5.0	1		03/12/12 13:20	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		5.0	1		03/12/12 13:20	156-59-2	

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059789

Sample: GP-5 0-5 Lab ID: 5059789003 Collected: 03/08/12 14:12 Received: 03/10/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
trans-1,2-Dichloroethene	ND ug/kg		5.0	1		03/12/12 13:20	156-60-5	
1,2-Dichloropropane	ND ug/kg		5.0	1		03/12/12 13:20	78-87-5	
1,3-Dichloropropane	ND ug/kg		5.0	1		03/12/12 13:20	142-28-9	
2,2-Dichloropropane	ND ug/kg		5.0	1		03/12/12 13:20	594-20-7	
1,1-Dichloropropene	ND ug/kg		5.0	1		03/12/12 13:20	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		5.0	1		03/12/12 13:20	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		5.0	1		03/12/12 13:20	10061-02-6	
Ethylbenzene	ND ug/kg		5.0	1		03/12/12 13:20	100-41-4	
Ethyl methacrylate	ND ug/kg		99.3	1		03/12/12 13:20	97-63-2	
Hexachloro-1,3-butadiene	ND ug/kg		5.0	1		03/12/12 13:20	87-68-3	
n-Hexane	ND ug/kg		5.0	1		03/12/12 13:20	110-54-3	
2-Hexanone	ND ug/kg		99.3	1		03/12/12 13:20	591-78-6	
Iodomethane	ND ug/kg		99.3	1		03/12/12 13:20	74-88-4	
Isopropylbenzene (Cumene)	ND ug/kg		5.0	1		03/12/12 13:20	98-82-8	
p-Isopropyltoluene	ND ug/kg		5.0	1		03/12/12 13:20	99-87-6	
Methylene Chloride	ND ug/kg		19.9	1		03/12/12 13:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		24.8	1		03/12/12 13:20	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		5.0	1		03/12/12 13:20	1634-04-4	
Naphthalene	ND ug/kg		5.0	1		03/12/12 13:20	91-20-3	
n-Propylbenzene	ND ug/kg		5.0	1		03/12/12 13:20	103-65-1	
Styrene	ND ug/kg		5.0	1		03/12/12 13:20	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		5.0	1		03/12/12 13:20	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		5.0	1		03/12/12 13:20	79-34-5	
Tetrachloroethene	ND ug/kg		5.0	1		03/12/12 13:20	127-18-4	
Toluene	ND ug/kg		5.0	1		03/12/12 13:20	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		5.0	1		03/12/12 13:20	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		5.0	1		03/12/12 13:20	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		5.0	1		03/12/12 13:20	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		5.0	1		03/12/12 13:20	79-00-5	
Trichloroethene	ND ug/kg		5.0	1		03/12/12 13:20	79-01-6	
Trichlorofluoromethane	ND ug/kg		5.0	1		03/12/12 13:20	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		5.0	1		03/12/12 13:20	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		5.0	1		03/12/12 13:20	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		5.0	1		03/12/12 13:20	108-67-8	
Vinyl acetate	ND ug/kg		99.3	1		03/12/12 13:20	108-05-4	
Vinyl chloride	ND ug/kg		5.0	1		03/12/12 13:20	75-01-4	
Xylene (Total)	ND ug/kg		9.9	1		03/12/12 13:20	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102 %.		71-125	1		03/12/12 13:20	1868-53-7	
Toluene-d8 (S)	101 %.		76-124	1		03/12/12 13:20	2037-26-5	
4-Bromofluorobenzene (S)	102 %.		67-134	1		03/12/12 13:20	460-00-4	
Percent Moisture								
Analytical Method: ASTM D2974-87								
Percent Moisture	7.1 %		0.10	1		03/14/12 15:14		

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059789

Sample: GP-5 15-20 Lab ID: 5059789004 Collected: 03/08/12 14:29 Received: 03/10/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Benzo(a)anthracene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 04:26	56-55-3	
Benzo(a)pyrene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 04:26	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 04:26	205-99-2	
Benzo(k)fluoranthene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 04:26	207-08-9	
Chrysene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 04:26	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 04:26	53-70-3	
Indeno(1,2,3-cd)pyrene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 04:26	193-39-5	
Naphthalene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 04:26	91-20-3	
Surrogates								
2-Fluorobiphenyl (S)	61 %.		46-109	1	03/14/12 12:15	03/15/12 04:26	321-60-8	
p-Terphenyl-d14 (S)	79 %.		43-107	1	03/14/12 12:15	03/15/12 04:26	1718-51-0	
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
Acetone	ND ug/kg		97.6	1		03/12/12 13:58	67-64-1	
Acrolein	ND ug/kg		97.6	1		03/12/12 13:58	107-02-8	
Acrylonitrile	ND ug/kg		97.6	1		03/12/12 13:58	107-13-1	
Benzene	ND ug/kg		4.9	1		03/12/12 13:58	71-43-2	
Bromobenzene	ND ug/kg		4.9	1		03/12/12 13:58	108-86-1	
Bromoform	ND ug/kg		4.9	1		03/12/12 13:58	74-97-5	
Bromochloromethane	ND ug/kg		4.9	1		03/12/12 13:58	75-27-4	
Bromodichloromethane	ND ug/kg		4.9	1		03/12/12 13:58	75-25-2	
Bromoform	ND ug/kg		4.9	1		03/12/12 13:58	74-83-9	
2-Butanone (MEK)	ND ug/kg		24.4	1		03/12/12 13:58	78-93-3	
n-Butylbenzene	ND ug/kg		4.9	1		03/12/12 13:58	104-51-8	
sec-Butylbenzene	ND ug/kg		4.9	1		03/12/12 13:58	135-98-8	
tert-Butylbenzene	ND ug/kg		4.9	1		03/12/12 13:58	98-06-6	
Carbon disulfide	ND ug/kg		9.8	1		03/12/12 13:58	75-15-0	
Carbon tetrachloride	ND ug/kg		4.9	1		03/12/12 13:58	56-23-5	
Chlorobenzene	ND ug/kg		4.9	1		03/12/12 13:58	108-90-7	
Chloroethane	ND ug/kg		4.9	1		03/12/12 13:58	75-00-3	
Chloroform	ND ug/kg		4.9	1		03/12/12 13:58	67-66-3	
Chloromethane	ND ug/kg		4.9	1		03/12/12 13:58	74-87-3	
2-Chlorotoluene	ND ug/kg		4.9	1		03/12/12 13:58	95-49-8	
4-Chlorotoluene	ND ug/kg		4.9	1		03/12/12 13:58	106-43-4	
Dibromochloromethane	ND ug/kg		4.9	1		03/12/12 13:58	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		4.9	1		03/12/12 13:58	106-93-4	
Dibromomethane	ND ug/kg		4.9	1		03/12/12 13:58	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		4.9	1		03/12/12 13:58	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		4.9	1		03/12/12 13:58	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		4.9	1		03/12/12 13:58	106-46-7	
trans-1,4-Dichloro-2-butene	ND ug/kg		97.6	1		03/12/12 13:58	110-57-6	
Dichlorodifluoromethane	ND ug/kg		4.9	1		03/12/12 13:58	75-71-8	
1,1-Dichloroethane	ND ug/kg		4.9	1		03/12/12 13:58	75-34-3	
1,2-Dichloroethane	ND ug/kg		4.9	1		03/12/12 13:58	107-06-2	
1,1-Dichloroethene	ND ug/kg		4.9	1		03/12/12 13:58	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		4.9	1		03/12/12 13:58	156-59-2	

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059789

Sample: GP-5 15-20 Lab ID: 5059789004 Collected: 03/08/12 14:29 Received: 03/10/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
trans-1,2-Dichloroethene	ND ug/kg		4.9	1		03/12/12 13:58	156-60-5	
1,2-Dichloropropane	ND ug/kg		4.9	1		03/12/12 13:58	78-87-5	
1,3-Dichloropropane	ND ug/kg		4.9	1		03/12/12 13:58	142-28-9	
2,2-Dichloropropane	ND ug/kg		4.9	1		03/12/12 13:58	594-20-7	
1,1-Dichloropropene	ND ug/kg		4.9	1		03/12/12 13:58	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		4.9	1		03/12/12 13:58	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		4.9	1		03/12/12 13:58	10061-02-6	
Ethylbenzene	ND ug/kg		4.9	1		03/12/12 13:58	100-41-4	
Ethyl methacrylate	ND ug/kg		97.6	1		03/12/12 13:58	97-63-2	
Hexachloro-1,3-butadiene	ND ug/kg		4.9	1		03/12/12 13:58	87-68-3	
n-Hexane	ND ug/kg		4.9	1		03/12/12 13:58	110-54-3	
2-Hexanone	ND ug/kg		97.6	1		03/12/12 13:58	591-78-6	
Iodomethane	ND ug/kg		97.6	1		03/12/12 13:58	74-88-4	
Isopropylbenzene (Cumene)	ND ug/kg		4.9	1		03/12/12 13:58	98-82-8	
p-Isopropyltoluene	ND ug/kg		4.9	1		03/12/12 13:58	99-87-6	
Methylene Chloride	ND ug/kg		19.5	1		03/12/12 13:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		24.4	1		03/12/12 13:58	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		4.9	1		03/12/12 13:58	1634-04-4	
Naphthalene	ND ug/kg		4.9	1		03/12/12 13:58	91-20-3	
n-Propylbenzene	ND ug/kg		4.9	1		03/12/12 13:58	103-65-1	
Styrene	ND ug/kg		4.9	1		03/12/12 13:58	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		4.9	1		03/12/12 13:58	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		4.9	1		03/12/12 13:58	79-34-5	
Tetrachloroethene	ND ug/kg		4.9	1		03/12/12 13:58	127-18-4	
Toluene	ND ug/kg		4.9	1		03/12/12 13:58	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		4.9	1		03/12/12 13:58	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		4.9	1		03/12/12 13:58	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		4.9	1		03/12/12 13:58	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		4.9	1		03/12/12 13:58	79-00-5	
Trichloroethene	ND ug/kg		4.9	1		03/12/12 13:58	79-01-6	
Trichlorofluoromethane	ND ug/kg		4.9	1		03/12/12 13:58	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		4.9	1		03/12/12 13:58	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		4.9	1		03/12/12 13:58	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		4.9	1		03/12/12 13:58	108-67-8	
Vinyl acetate	ND ug/kg		97.6	1		03/12/12 13:58	108-05-4	
Vinyl chloride	ND ug/kg		4.9	1		03/12/12 13:58	75-01-4	
Xylene (Total)	ND ug/kg		9.8	1		03/12/12 13:58	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102 %.		71-125	1		03/12/12 13:58	1868-53-7	
Toluene-d8 (S)	100 %.		76-124	1		03/12/12 13:58	2037-26-5	
4-Bromofluorobenzene (S)	101 %.		67-134	1		03/12/12 13:58	460-00-4	
Percent Moisture								
Analytical Method: ASTM D2974-87								
Percent Moisture	4.2 %		0.10	1		03/14/12 15:15		

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059789

Sample: GP-6 0-5 Lab ID: 5059789005 Collected: 03/09/12 08:38 Received: 03/10/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Benzo(a)anthracene	ND ug/kg		5.4	1	03/14/12 12:15	03/15/12 04:43	56-55-3	
Benzo(a)pyrene	ND ug/kg		5.4	1	03/14/12 12:15	03/15/12 04:43	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		5.4	1	03/14/12 12:15	03/15/12 04:43	205-99-2	
Benzo(k)fluoranthene	ND ug/kg		5.4	1	03/14/12 12:15	03/15/12 04:43	207-08-9	
Chrysene	ND ug/kg		5.4	1	03/14/12 12:15	03/15/12 04:43	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		5.4	1	03/14/12 12:15	03/15/12 04:43	53-70-3	
Indeno(1,2,3-cd)pyrene	ND ug/kg		5.4	1	03/14/12 12:15	03/15/12 04:43	193-39-5	
Naphthalene	ND ug/kg		5.4	1	03/14/12 12:15	03/15/12 04:43	91-20-3	
Surrogates								
2-Fluorobiphenyl (S)	66 %.		46-109	1	03/14/12 12:15	03/15/12 04:43	321-60-8	
p-Terphenyl-d14 (S)	80 %.		43-107	1	03/14/12 12:15	03/15/12 04:43	1718-51-0	
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
Acetone	ND ug/kg		131	1		03/12/12 14:36	67-64-1	
Acrolein	ND ug/kg		131	1		03/12/12 14:36	107-02-8	
Acrylonitrile	ND ug/kg		131	1		03/12/12 14:36	107-13-1	
Benzene	ND ug/kg		6.5	1		03/12/12 14:36	71-43-2	
Bromobenzene	ND ug/kg		6.5	1		03/12/12 14:36	108-86-1	
Bromoform	ND ug/kg		6.5	1		03/12/12 14:36	74-97-5	
Bromochloromethane	ND ug/kg		6.5	1		03/12/12 14:36	75-27-4	
Bromodichloromethane	ND ug/kg		6.5	1		03/12/12 14:36	75-25-2	
Bromoform	ND ug/kg		6.5	1		03/12/12 14:36	74-83-9	
2-Butanone (MEK)	ND ug/kg		32.7	1		03/12/12 14:36	78-93-3	
n-Butylbenzene	ND ug/kg		6.5	1		03/12/12 14:36	104-51-8	
sec-Butylbenzene	ND ug/kg		6.5	1		03/12/12 14:36	135-98-8	
tert-Butylbenzene	ND ug/kg		6.5	1		03/12/12 14:36	98-06-6	
Carbon disulfide	ND ug/kg		13.1	1		03/12/12 14:36	75-15-0	
Carbon tetrachloride	ND ug/kg		6.5	1		03/12/12 14:36	56-23-5	
Chlorobenzene	ND ug/kg		6.5	1		03/12/12 14:36	108-90-7	
Chloroethane	ND ug/kg		6.5	1		03/12/12 14:36	75-00-3	
Chloroform	ND ug/kg		6.5	1		03/12/12 14:36	67-66-3	
Chloromethane	ND ug/kg		6.5	1		03/12/12 14:36	74-87-3	
2-Chlorotoluene	ND ug/kg		6.5	1		03/12/12 14:36	95-49-8	
4-Chlorotoluene	ND ug/kg		6.5	1		03/12/12 14:36	106-43-4	
Dibromochloromethane	ND ug/kg		6.5	1		03/12/12 14:36	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		6.5	1		03/12/12 14:36	106-93-4	
Dibromomethane	ND ug/kg		6.5	1		03/12/12 14:36	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		6.5	1		03/12/12 14:36	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		6.5	1		03/12/12 14:36	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		6.5	1		03/12/12 14:36	106-46-7	
trans-1,4-Dichloro-2-butene	ND ug/kg		131	1		03/12/12 14:36	110-57-6	
Dichlorodifluoromethane	ND ug/kg		6.5	1		03/12/12 14:36	75-71-8	
1,1-Dichloroethane	ND ug/kg		6.5	1		03/12/12 14:36	75-34-3	
1,2-Dichloroethane	ND ug/kg		6.5	1		03/12/12 14:36	107-06-2	
1,1-Dichloroethene	ND ug/kg		6.5	1		03/12/12 14:36	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		6.5	1		03/12/12 14:36	156-59-2	

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059789

Sample: GP-6 0-5 Lab ID: 5059789005 Collected: 03/09/12 08:38 Received: 03/10/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
trans-1,2-Dichloroethene	ND ug/kg		6.5	1		03/12/12 14:36	156-60-5	
1,2-Dichloropropane	ND ug/kg		6.5	1		03/12/12 14:36	78-87-5	
1,3-Dichloropropane	ND ug/kg		6.5	1		03/12/12 14:36	142-28-9	
2,2-Dichloropropane	ND ug/kg		6.5	1		03/12/12 14:36	594-20-7	
1,1-Dichloropropene	ND ug/kg		6.5	1		03/12/12 14:36	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		6.5	1		03/12/12 14:36	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		6.5	1		03/12/12 14:36	10061-02-6	
Ethylbenzene	ND ug/kg		6.5	1		03/12/12 14:36	100-41-4	
Ethyl methacrylate	ND ug/kg		131	1		03/12/12 14:36	97-63-2	
Hexachloro-1,3-butadiene	ND ug/kg		6.5	1		03/12/12 14:36	87-68-3	
n-Hexane	ND ug/kg		6.5	1		03/12/12 14:36	110-54-3	
2-Hexanone	ND ug/kg		131	1		03/12/12 14:36	591-78-6	
Iodomethane	ND ug/kg		131	1		03/12/12 14:36	74-88-4	
Isopropylbenzene (Cumene)	ND ug/kg		6.5	1		03/12/12 14:36	98-82-8	
p-Isopropyltoluene	ND ug/kg		6.5	1		03/12/12 14:36	99-87-6	
Methylene Chloride	ND ug/kg		26.1	1		03/12/12 14:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		32.7	1		03/12/12 14:36	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		6.5	1		03/12/12 14:36	1634-04-4	
Naphthalene	ND ug/kg		6.5	1		03/12/12 14:36	91-20-3	
n-Propylbenzene	ND ug/kg		6.5	1		03/12/12 14:36	103-65-1	
Styrene	ND ug/kg		6.5	1		03/12/12 14:36	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		6.5	1		03/12/12 14:36	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		6.5	1		03/12/12 14:36	79-34-5	
Tetrachloroethene	ND ug/kg		6.5	1		03/12/12 14:36	127-18-4	
Toluene	ND ug/kg		6.5	1		03/12/12 14:36	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		6.5	1		03/12/12 14:36	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		6.5	1		03/12/12 14:36	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		6.5	1		03/12/12 14:36	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		6.5	1		03/12/12 14:36	79-00-5	
Trichloroethene	ND ug/kg		6.5	1		03/12/12 14:36	79-01-6	
Trichlorofluoromethane	ND ug/kg		6.5	1		03/12/12 14:36	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		6.5	1		03/12/12 14:36	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		6.5	1		03/12/12 14:36	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		6.5	1		03/12/12 14:36	108-67-8	
Vinyl acetate	ND ug/kg		131	1		03/12/12 14:36	108-05-4	
Vinyl chloride	ND ug/kg		6.5	1		03/12/12 14:36	75-01-4	
Xylene (Total)	ND ug/kg		13.1	1		03/12/12 14:36	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	98 %.		71-125	1		03/12/12 14:36	1868-53-7	
Toluene-d8 (S)	78 %.		76-124	1		03/12/12 14:36	2037-26-5	
4-Bromofluorobenzene (S)	99 %.		67-134	1		03/12/12 14:36	460-00-4	
Percent Moisture								
Analytical Method: ASTM D2974-87								
Percent Moisture	7.6 %		0.10	1		03/14/12 15:15		

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059789

Sample: GP-6 15-20 Lab ID: 5059789006 Collected: 03/09/12 09:28 Received: 03/10/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Benzo(a)anthracene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 05:01	56-55-3	
Benzo(a)pyrene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 05:01	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 05:01	205-99-2	
Benzo(k)fluoranthene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 05:01	207-08-9	
Chrysene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 05:01	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 05:01	53-70-3	
Indeno(1,2,3-cd)pyrene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 05:01	193-39-5	
Naphthalene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 05:01	91-20-3	
Surrogates								
2-Fluorobiphenyl (S)	66 %.		46-109	1	03/14/12 12:15	03/15/12 05:01	321-60-8	
p-Terphenyl-d14 (S)	84 %.		43-107	1	03/14/12 12:15	03/15/12 05:01	1718-51-0	
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
Acetone	ND ug/kg		92.3	1		03/12/12 15:14	67-64-1	
Acrolein	ND ug/kg		92.3	1		03/12/12 15:14	107-02-8	
Acrylonitrile	ND ug/kg		92.3	1		03/12/12 15:14	107-13-1	
Benzene	ND ug/kg		4.6	1		03/12/12 15:14	71-43-2	
Bromobenzene	ND ug/kg		4.6	1		03/12/12 15:14	108-86-1	
Bromoform	ND ug/kg		4.6	1		03/12/12 15:14	74-97-5	
Bromochloromethane	ND ug/kg		4.6	1		03/12/12 15:14	75-27-4	
Bromodichloromethane	ND ug/kg		4.6	1		03/12/12 15:14	75-25-2	
Bromoform	ND ug/kg		4.6	1		03/12/12 15:14	74-83-9	
2-Butanone (MEK)	ND ug/kg		23.1	1		03/12/12 15:14	78-93-3	
n-Butylbenzene	ND ug/kg		4.6	1		03/12/12 15:14	104-51-8	
sec-Butylbenzene	ND ug/kg		4.6	1		03/12/12 15:14	135-98-8	
tert-Butylbenzene	ND ug/kg		4.6	1		03/12/12 15:14	98-06-6	
Carbon disulfide	ND ug/kg		9.2	1		03/12/12 15:14	75-15-0	
Carbon tetrachloride	ND ug/kg		4.6	1		03/12/12 15:14	56-23-5	
Chlorobenzene	ND ug/kg		4.6	1		03/12/12 15:14	108-90-7	
Chloroethane	ND ug/kg		4.6	1		03/12/12 15:14	75-00-3	
Chloroform	ND ug/kg		4.6	1		03/12/12 15:14	67-66-3	
Chloromethane	ND ug/kg		4.6	1		03/12/12 15:14	74-87-3	
2-Chlorotoluene	ND ug/kg		4.6	1		03/12/12 15:14	95-49-8	
4-Chlorotoluene	ND ug/kg		4.6	1		03/12/12 15:14	106-43-4	
Dibromochloromethane	ND ug/kg		4.6	1		03/12/12 15:14	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		4.6	1		03/12/12 15:14	106-93-4	
Dibromomethane	ND ug/kg		4.6	1		03/12/12 15:14	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		4.6	1		03/12/12 15:14	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		4.6	1		03/12/12 15:14	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		4.6	1		03/12/12 15:14	106-46-7	
trans-1,4-Dichloro-2-butene	ND ug/kg		92.3	1		03/12/12 15:14	110-57-6	
Dichlorodifluoromethane	ND ug/kg		4.6	1		03/12/12 15:14	75-71-8	
1,1-Dichloroethane	ND ug/kg		4.6	1		03/12/12 15:14	75-34-3	
1,2-Dichloroethane	ND ug/kg		4.6	1		03/12/12 15:14	107-06-2	
1,1-Dichloroethene	ND ug/kg		4.6	1		03/12/12 15:14	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		4.6	1		03/12/12 15:14	156-59-2	

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059789

Sample: GP-6 15-20 Lab ID: 5059789006 Collected: 03/09/12 09:28 Received: 03/10/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
trans-1,2-Dichloroethene	ND ug/kg		4.6	1		03/12/12 15:14	156-60-5	
1,2-Dichloropropane	ND ug/kg		4.6	1		03/12/12 15:14	78-87-5	
1,3-Dichloropropane	ND ug/kg		4.6	1		03/12/12 15:14	142-28-9	
2,2-Dichloropropane	ND ug/kg		4.6	1		03/12/12 15:14	594-20-7	
1,1-Dichloropropene	ND ug/kg		4.6	1		03/12/12 15:14	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		4.6	1		03/12/12 15:14	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		4.6	1		03/12/12 15:14	10061-02-6	
Ethylbenzene	ND ug/kg		4.6	1		03/12/12 15:14	100-41-4	
Ethyl methacrylate	ND ug/kg		92.3	1		03/12/12 15:14	97-63-2	
Hexachloro-1,3-butadiene	ND ug/kg		4.6	1		03/12/12 15:14	87-68-3	
n-Hexane	ND ug/kg		4.6	1		03/12/12 15:14	110-54-3	
2-Hexanone	ND ug/kg		92.3	1		03/12/12 15:14	591-78-6	
Iodomethane	ND ug/kg		92.3	1		03/12/12 15:14	74-88-4	
Isopropylbenzene (Cumene)	ND ug/kg		4.6	1		03/12/12 15:14	98-82-8	
p-Isopropyltoluene	ND ug/kg		4.6	1		03/12/12 15:14	99-87-6	
Methylene Chloride	ND ug/kg		18.5	1		03/12/12 15:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		23.1	1		03/12/12 15:14	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		4.6	1		03/12/12 15:14	1634-04-4	
Naphthalene	ND ug/kg		4.6	1		03/12/12 15:14	91-20-3	
n-Propylbenzene	ND ug/kg		4.6	1		03/12/12 15:14	103-65-1	
Styrene	ND ug/kg		4.6	1		03/12/12 15:14	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		4.6	1		03/12/12 15:14	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		4.6	1		03/12/12 15:14	79-34-5	
Tetrachloroethene	ND ug/kg		4.6	1		03/12/12 15:14	127-18-4	
Toluene	ND ug/kg		4.6	1		03/12/12 15:14	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		4.6	1		03/12/12 15:14	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		4.6	1		03/12/12 15:14	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		4.6	1		03/12/12 15:14	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		4.6	1		03/12/12 15:14	79-00-5	
Trichloroethene	ND ug/kg		4.6	1		03/12/12 15:14	79-01-6	
Trichlorofluoromethane	ND ug/kg		4.6	1		03/12/12 15:14	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		4.6	1		03/12/12 15:14	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		4.6	1		03/12/12 15:14	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		4.6	1		03/12/12 15:14	108-67-8	
Vinyl acetate	ND ug/kg		92.3	1		03/12/12 15:14	108-05-4	
Vinyl chloride	ND ug/kg		4.6	1		03/12/12 15:14	75-01-4	
Xylene (Total)	ND ug/kg		9.2	1		03/12/12 15:14	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	103 %.		71-125	1		03/12/12 15:14	1868-53-7	
Toluene-d8 (S)	88 %.		76-124	1		03/12/12 15:14	2037-26-5	
4-Bromofluorobenzene (S)	92 %.		67-134	1		03/12/12 15:14	460-00-4	
Percent Moisture								
Analytical Method: ASTM D2974-87								
Percent Moisture	3.7 %		0.10	1		03/14/12 15:22		

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059789

Sample: GP-7 0-5 Lab ID: 5059789007 Collected: 03/09/12 11:09 Received: 03/10/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Benzo(a)anthracene	ND ug/kg		5.5	1	03/14/12 12:15	03/15/12 05:19	56-55-3	
Benzo(a)pyrene	ND ug/kg		5.5	1	03/14/12 12:15	03/15/12 05:19	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		5.5	1	03/14/12 12:15	03/15/12 05:19	205-99-2	
Benzo(k)fluoranthene	ND ug/kg		5.5	1	03/14/12 12:15	03/15/12 05:19	207-08-9	
Chrysene	ND ug/kg		5.5	1	03/14/12 12:15	03/15/12 05:19	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		5.5	1	03/14/12 12:15	03/15/12 05:19	53-70-3	
Indeno(1,2,3-cd)pyrene	ND ug/kg		5.5	1	03/14/12 12:15	03/15/12 05:19	193-39-5	
Naphthalene	ND ug/kg		5.5	1	03/14/12 12:15	03/15/12 05:19	91-20-3	
Surrogates								
2-Fluorobiphenyl (S)	76 %.		46-109	1	03/14/12 12:15	03/15/12 05:19	321-60-8	
p-Terphenyl-d14 (S)	95 %.		43-107	1	03/14/12 12:15	03/15/12 05:19	1718-51-0	
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
Acetone	ND ug/kg		80.8	1		03/12/12 15:52	67-64-1	
Acrolein	ND ug/kg		80.8	1		03/12/12 15:52	107-02-8	
Acrylonitrile	ND ug/kg		80.8	1		03/12/12 15:52	107-13-1	
Benzene	ND ug/kg		4.0	1		03/12/12 15:52	71-43-2	
Bromobenzene	ND ug/kg		4.0	1		03/12/12 15:52	108-86-1	
Bromoform	ND ug/kg		4.0	1		03/12/12 15:52	74-97-5	
Bromochloromethane	ND ug/kg		4.0	1		03/12/12 15:52	75-27-4	
Bromodichloromethane	ND ug/kg		4.0	1		03/12/12 15:52	75-25-2	
Bromoform	ND ug/kg		4.0	1		03/12/12 15:52	74-83-9	
2-Butanone (MEK)	ND ug/kg		20.2	1		03/12/12 15:52	78-93-3	
n-Butylbenzene	ND ug/kg		4.0	1		03/12/12 15:52	104-51-8	
sec-Butylbenzene	ND ug/kg		4.0	1		03/12/12 15:52	135-98-8	
tert-Butylbenzene	ND ug/kg		4.0	1		03/12/12 15:52	98-06-6	
Carbon disulfide	ND ug/kg		8.1	1		03/12/12 15:52	75-15-0	
Carbon tetrachloride	ND ug/kg		4.0	1		03/12/12 15:52	56-23-5	
Chlorobenzene	ND ug/kg		4.0	1		03/12/12 15:52	108-90-7	
Chloroethane	ND ug/kg		4.0	1		03/12/12 15:52	75-00-3	
Chloroform	ND ug/kg		4.0	1		03/12/12 15:52	67-66-3	
Chloromethane	ND ug/kg		4.0	1		03/12/12 15:52	74-87-3	
2-Chlorotoluene	ND ug/kg		4.0	1		03/12/12 15:52	95-49-8	
4-Chlorotoluene	ND ug/kg		4.0	1		03/12/12 15:52	106-43-4	
Dibromochloromethane	ND ug/kg		4.0	1		03/12/12 15:52	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		4.0	1		03/12/12 15:52	106-93-4	
Dibromomethane	ND ug/kg		4.0	1		03/12/12 15:52	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		4.0	1		03/12/12 15:52	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		4.0	1		03/12/12 15:52	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		4.0	1		03/12/12 15:52	106-46-7	
trans-1,4-Dichloro-2-butene	ND ug/kg		80.8	1		03/12/12 15:52	110-57-6	
Dichlorodifluoromethane	ND ug/kg		4.0	1		03/12/12 15:52	75-71-8	
1,1-Dichloroethane	ND ug/kg		4.0	1		03/12/12 15:52	75-34-3	
1,2-Dichloroethane	ND ug/kg		4.0	1		03/12/12 15:52	107-06-2	
1,1-Dichloroethene	ND ug/kg		4.0	1		03/12/12 15:52	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		4.0	1		03/12/12 15:52	156-59-2	

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059789

Sample: GP-7 0-5 Lab ID: 5059789007 Collected: 03/09/12 11:09 Received: 03/10/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
trans-1,2-Dichloroethene	ND ug/kg		4.0	1		03/12/12 15:52	156-60-5	
1,2-Dichloropropane	ND ug/kg		4.0	1		03/12/12 15:52	78-87-5	
1,3-Dichloropropane	ND ug/kg		4.0	1		03/12/12 15:52	142-28-9	
2,2-Dichloropropane	ND ug/kg		4.0	1		03/12/12 15:52	594-20-7	
1,1-Dichloropropene	ND ug/kg		4.0	1		03/12/12 15:52	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		4.0	1		03/12/12 15:52	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		4.0	1		03/12/12 15:52	10061-02-6	
Ethylbenzene	ND ug/kg		4.0	1		03/12/12 15:52	100-41-4	
Ethyl methacrylate	ND ug/kg		80.8	1		03/12/12 15:52	97-63-2	
Hexachloro-1,3-butadiene	ND ug/kg		4.0	1		03/12/12 15:52	87-68-3	
n-Hexane	ND ug/kg		4.0	1		03/12/12 15:52	110-54-3	
2-Hexanone	ND ug/kg		80.8	1		03/12/12 15:52	591-78-6	
Iodomethane	ND ug/kg		80.8	1		03/12/12 15:52	74-88-4	
Isopropylbenzene (Cumene)	ND ug/kg		4.0	1		03/12/12 15:52	98-82-8	
p-Isopropyltoluene	ND ug/kg		4.0	1		03/12/12 15:52	99-87-6	
Methylene Chloride	ND ug/kg		16.2	1		03/12/12 15:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		20.2	1		03/12/12 15:52	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		4.0	1		03/12/12 15:52	1634-04-4	
Naphthalene	ND ug/kg		4.0	1		03/12/12 15:52	91-20-3	
n-Propylbenzene	ND ug/kg		4.0	1		03/12/12 15:52	103-65-1	
Styrene	ND ug/kg		4.0	1		03/12/12 15:52	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		4.0	1		03/12/12 15:52	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		4.0	1		03/12/12 15:52	79-34-5	
Tetrachloroethene	ND ug/kg		4.0	1		03/12/12 15:52	127-18-4	
Toluene	ND ug/kg		4.0	1		03/12/12 15:52	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		4.0	1		03/12/12 15:52	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		4.0	1		03/12/12 15:52	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		4.0	1		03/12/12 15:52	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		4.0	1		03/12/12 15:52	79-00-5	
Trichloroethene	ND ug/kg		4.0	1		03/12/12 15:52	79-01-6	
Trichlorofluoromethane	ND ug/kg		4.0	1		03/12/12 15:52	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		4.0	1		03/12/12 15:52	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		4.0	1		03/12/12 15:52	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		4.0	1		03/12/12 15:52	108-67-8	
Vinyl acetate	ND ug/kg		80.8	1		03/12/12 15:52	108-05-4	
Vinyl chloride	ND ug/kg		4.0	1		03/12/12 15:52	75-01-4	
Xylene (Total)	ND ug/kg		8.1	1		03/12/12 15:52	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	103 %.		71-125	1		03/12/12 15:52	1868-53-7	
Toluene-d8 (S)	93 %.		76-124	1		03/12/12 15:52	2037-26-5	
4-Bromofluorobenzene (S)	100 %.		67-134	1		03/12/12 15:52	460-00-4	
Percent Moisture								
Analytical Method: ASTM D2974-87								
Percent Moisture	8.4 %		0.10	1		03/14/12 15:22		

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059789

Sample: GP-7 15-20 Lab ID: 5059789008 Collected: 03/09/12 11:28 Received: 03/10/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Benzo(a)anthracene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 06:48	56-55-3	
Benzo(a)pyrene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 06:48	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 06:48	205-99-2	
Benzo(k)fluoranthene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 06:48	207-08-9	
Chrysene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 06:48	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 06:48	53-70-3	
Indeno(1,2,3-cd)pyrene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 06:48	193-39-5	
Naphthalene	ND ug/kg		5.2	1	03/14/12 12:15	03/15/12 06:48	91-20-3	
Surrogates								
2-Fluorobiphenyl (S)	71 %.		46-109	1	03/14/12 12:15	03/15/12 06:48	321-60-8	
p-Terphenyl-d14 (S)	81 %.		43-107	1	03/14/12 12:15	03/15/12 06:48	1718-51-0	
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
Acetone	ND ug/kg		90.7	1		03/12/12 16:30	67-64-1	
Acrolein	ND ug/kg		90.7	1		03/12/12 16:30	107-02-8	
Acrylonitrile	ND ug/kg		90.7	1		03/12/12 16:30	107-13-1	
Benzene	ND ug/kg		4.5	1		03/12/12 16:30	71-43-2	
Bromobenzene	ND ug/kg		4.5	1		03/12/12 16:30	108-86-1	
Bromoform	ND ug/kg		4.5	1		03/12/12 16:30	74-97-5	
Bromochloromethane	ND ug/kg		4.5	1		03/12/12 16:30	75-27-4	
Bromodichloromethane	ND ug/kg		4.5	1		03/12/12 16:30	75-25-2	
Bromoform	ND ug/kg		4.5	1		03/12/12 16:30	74-83-9	
2-Butanone (MEK)	ND ug/kg		22.7	1		03/12/12 16:30	78-93-3	
n-Butylbenzene	ND ug/kg		4.5	1		03/12/12 16:30	104-51-8	
sec-Butylbenzene	ND ug/kg		4.5	1		03/12/12 16:30	135-98-8	
tert-Butylbenzene	ND ug/kg		4.5	1		03/12/12 16:30	98-06-6	
Carbon disulfide	ND ug/kg		9.1	1		03/12/12 16:30	75-15-0	
Carbon tetrachloride	ND ug/kg		4.5	1		03/12/12 16:30	56-23-5	
Chlorobenzene	ND ug/kg		4.5	1		03/12/12 16:30	108-90-7	
Chloroethane	ND ug/kg		4.5	1		03/12/12 16:30	75-00-3	
Chloroform	ND ug/kg		4.5	1		03/12/12 16:30	67-66-3	
Chloromethane	ND ug/kg		4.5	1		03/12/12 16:30	74-87-3	
2-Chlorotoluene	ND ug/kg		4.5	1		03/12/12 16:30	95-49-8	
4-Chlorotoluene	ND ug/kg		4.5	1		03/12/12 16:30	106-43-4	
Dibromochloromethane	ND ug/kg		4.5	1		03/12/12 16:30	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		4.5	1		03/12/12 16:30	106-93-4	
Dibromomethane	ND ug/kg		4.5	1		03/12/12 16:30	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		4.5	1		03/12/12 16:30	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		4.5	1		03/12/12 16:30	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		4.5	1		03/12/12 16:30	106-46-7	
trans-1,4-Dichloro-2-butene	ND ug/kg		90.7	1		03/12/12 16:30	110-57-6	
Dichlorodifluoromethane	ND ug/kg		4.5	1		03/12/12 16:30	75-71-8	
1,1-Dichloroethane	ND ug/kg		4.5	1		03/12/12 16:30	75-34-3	
1,2-Dichloroethane	ND ug/kg		4.5	1		03/12/12 16:30	107-06-2	
1,1-Dichloroethene	ND ug/kg		4.5	1		03/12/12 16:30	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		4.5	1		03/12/12 16:30	156-59-2	

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059789

Sample: GP-7 15-20 Lab ID: 5059789008 Collected: 03/09/12 11:28 Received: 03/10/12 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
trans-1,2-Dichloroethene	ND ug/kg		4.5	1		03/12/12 16:30	156-60-5	
1,2-Dichloropropane	ND ug/kg		4.5	1		03/12/12 16:30	78-87-5	
1,3-Dichloropropane	ND ug/kg		4.5	1		03/12/12 16:30	142-28-9	
2,2-Dichloropropane	ND ug/kg		4.5	1		03/12/12 16:30	594-20-7	
1,1-Dichloropropene	ND ug/kg		4.5	1		03/12/12 16:30	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		4.5	1		03/12/12 16:30	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		4.5	1		03/12/12 16:30	10061-02-6	
Ethylbenzene	ND ug/kg		4.5	1		03/12/12 16:30	100-41-4	
Ethyl methacrylate	ND ug/kg		90.7	1		03/12/12 16:30	97-63-2	
Hexachloro-1,3-butadiene	ND ug/kg		4.5	1		03/12/12 16:30	87-68-3	
n-Hexane	ND ug/kg		4.5	1		03/12/12 16:30	110-54-3	
2-Hexanone	ND ug/kg		90.7	1		03/12/12 16:30	591-78-6	
Iodomethane	ND ug/kg		90.7	1		03/12/12 16:30	74-88-4	
Isopropylbenzene (Cumene)	ND ug/kg		4.5	1		03/12/12 16:30	98-82-8	
p-Isopropyltoluene	ND ug/kg		4.5	1		03/12/12 16:30	99-87-6	
Methylene Chloride	ND ug/kg		18.1	1		03/12/12 16:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		22.7	1		03/12/12 16:30	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		4.5	1		03/12/12 16:30	1634-04-4	
Naphthalene	ND ug/kg		4.5	1		03/12/12 16:30	91-20-3	
n-Propylbenzene	ND ug/kg		4.5	1		03/12/12 16:30	103-65-1	
Styrene	ND ug/kg		4.5	1		03/12/12 16:30	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		4.5	1		03/12/12 16:30	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		4.5	1		03/12/12 16:30	79-34-5	
Tetrachloroethene	41.7 ug/kg		4.5	1		03/12/12 16:30	127-18-4	
Toluene	ND ug/kg		4.5	1		03/12/12 16:30	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		4.5	1		03/12/12 16:30	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		4.5	1		03/12/12 16:30	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		4.5	1		03/12/12 16:30	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		4.5	1		03/12/12 16:30	79-00-5	
Trichloroethene	ND ug/kg		4.5	1		03/12/12 16:30	79-01-6	
Trichlorofluoromethane	ND ug/kg		4.5	1		03/12/12 16:30	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		4.5	1		03/12/12 16:30	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		4.5	1		03/12/12 16:30	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		4.5	1		03/12/12 16:30	108-67-8	
Vinyl acetate	ND ug/kg		90.7	1		03/12/12 16:30	108-05-4	
Vinyl chloride	ND ug/kg		4.5	1		03/12/12 16:30	75-01-4	
Xylene (Total)	ND ug/kg		9.1	1		03/12/12 16:30	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	103 %.		71-125	1		03/12/12 16:30	1868-53-7	
Toluene-d8 (S)	100 %.		76-124	1		03/12/12 16:30	2037-26-5	
4-Bromofluorobenzene (S)	102 %.		67-134	1		03/12/12 16:30	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	3.7 %		0.10	1		03/14/12 15:22		

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QUALITY CONTROL DATA

Project: Ivy Tower
Pace Project No.: 5059789

QC Batch:	MSV/40331	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV 5035A Volatile Organics
Associated Lab Samples:	5059789001, 5059789002, 5059789003, 5059789004, 5059789005, 5059789006, 5059789007, 5059789008		

METHOD BLANK: 701746 Matrix: Solid

Associated Lab Samples: 5059789001, 5059789002, 5059789003, 5059789004, 5059789005, 5059789006, 5059789007, 5059789008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.0	03/12/12 08:55	
1,1,1-Trichloroethane	ug/kg	ND	5.0	03/12/12 08:55	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	03/12/12 08:55	
1,1,2-Trichloroethane	ug/kg	ND	5.0	03/12/12 08:55	
1,1-Dichloroethane	ug/kg	ND	5.0	03/12/12 08:55	
1,1-Dichloroethene	ug/kg	ND	5.0	03/12/12 08:55	
1,1-Dichloropropene	ug/kg	ND	5.0	03/12/12 08:55	
1,2,3-Trichlorobenzene	ug/kg	ND	5.0	03/12/12 08:55	
1,2,3-Trichloropropane	ug/kg	ND	5.0	03/12/12 08:55	
1,2,4-Trichlorobenzene	ug/kg	ND	5.0	03/12/12 08:55	
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	03/12/12 08:55	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.0	03/12/12 08:55	
1,2-Dichlorobenzene	ug/kg	ND	5.0	03/12/12 08:55	
1,2-Dichloroethane	ug/kg	ND	5.0	03/12/12 08:55	
1,2-Dichloropropane	ug/kg	ND	5.0	03/12/12 08:55	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	03/12/12 08:55	
1,3-Dichlorobenzene	ug/kg	ND	5.0	03/12/12 08:55	
1,3-Dichloropropane	ug/kg	ND	5.0	03/12/12 08:55	
1,4-Dichlorobenzene	ug/kg	ND	5.0	03/12/12 08:55	
2,2-Dichloropropane	ug/kg	ND	5.0	03/12/12 08:55	
2-Butanone (MEK)	ug/kg	ND	25.0	03/12/12 08:55	
2-Chlorotoluene	ug/kg	ND	5.0	03/12/12 08:55	
2-Hexanone	ug/kg	ND	100	03/12/12 08:55	
4-Chlorotoluene	ug/kg	ND	5.0	03/12/12 08:55	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	25.0	03/12/12 08:55	
Acetone	ug/kg	ND	100	03/12/12 08:55	
Acrolein	ug/kg	ND	100	03/12/12 08:55	
Acrylonitrile	ug/kg	ND	100	03/12/12 08:55	
Benzene	ug/kg	ND	5.0	03/12/12 08:55	
Bromobenzene	ug/kg	ND	5.0	03/12/12 08:55	
Bromochloromethane	ug/kg	ND	5.0	03/12/12 08:55	
Bromodichloromethane	ug/kg	ND	5.0	03/12/12 08:55	
Bromoform	ug/kg	ND	5.0	03/12/12 08:55	
Bromomethane	ug/kg	ND	5.0	03/12/12 08:55	
Carbon disulfide	ug/kg	ND	10.0	03/12/12 08:55	
Carbon tetrachloride	ug/kg	ND	5.0	03/12/12 08:55	
Chlorobenzene	ug/kg	ND	5.0	03/12/12 08:55	
Chloroethane	ug/kg	ND	5.0	03/12/12 08:55	
Chloroform	ug/kg	ND	5.0	03/12/12 08:55	
Chloromethane	ug/kg	ND	5.0	03/12/12 08:55	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	03/12/12 08:55	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	03/12/12 08:55	
Dibromochloromethane	ug/kg	ND	5.0	03/12/12 08:55	

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QUALITY CONTROL DATA

Project: Ivy Tower
Pace Project No.: 5059789

METHOD BLANK: 701746

Matrix: Solid

Associated Lab Samples: 5059789001, 5059789002, 5059789003, 5059789004, 5059789005, 5059789006, 5059789007, 5059789008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/kg	ND	5.0	03/12/12 08:55	
Dichlorodifluoromethane	ug/kg	ND	5.0	03/12/12 08:55	
Ethyl methacrylate	ug/kg	ND	100	03/12/12 08:55	
Ethylbenzene	ug/kg	ND	5.0	03/12/12 08:55	
Hexachloro-1,3-butadiene	ug/kg	ND	5.0	03/12/12 08:55	
Iodomethane	ug/kg	ND	100	03/12/12 08:55	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	03/12/12 08:55	
Methyl-tert-butyl ether	ug/kg	ND	5.0	03/12/12 08:55	
Methylene Chloride	ug/kg	ND	20.0	03/12/12 08:55	
n-Butylbenzene	ug/kg	ND	5.0	03/12/12 08:55	
n-Hexane	ug/kg	ND	5.0	03/12/12 08:55	
n-Propylbenzene	ug/kg	ND	5.0	03/12/12 08:55	
Naphthalene	ug/kg	ND	5.0	03/12/12 08:55	
p-Isopropyltoluene	ug/kg	ND	5.0	03/12/12 08:55	
sec-Butylbenzene	ug/kg	ND	5.0	03/12/12 08:55	
Styrene	ug/kg	ND	5.0	03/12/12 08:55	
tert-Butylbenzene	ug/kg	ND	5.0	03/12/12 08:55	
Tetrachloroethene	ug/kg	ND	5.0	03/12/12 08:55	
Toluene	ug/kg	ND	5.0	03/12/12 08:55	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	03/12/12 08:55	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	03/12/12 08:55	
trans-1,4-Dichloro-2-butene	ug/kg	ND	100	03/12/12 08:55	
Trichloroethene	ug/kg	ND	5.0	03/12/12 08:55	
Trichlorofluoromethane	ug/kg	ND	5.0	03/12/12 08:55	
Vinyl acetate	ug/kg	ND	100	03/12/12 08:55	
Vinyl chloride	ug/kg	ND	5.0	03/12/12 08:55	
Xylene (Total)	ug/kg	ND	10.0	03/12/12 08:55	
4-Bromofluorobenzene (S)	%.	103	67-134	03/12/12 08:55	
Dibromofluoromethane (S)	%.	105	71-125	03/12/12 08:55	
Toluene-d8 (S)	%.	98	76-124	03/12/12 08:55	

LABORATORY CONTROL SAMPLE: 701747

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	50	54.9	110	68-125	
1,1,1-Trichloroethane	ug/kg	50	54.0	108	63-124	
1,1,2,2-Tetrachloroethane	ug/kg	50	50.6	101	73-123	
1,1,2-Trichloroethane	ug/kg	50	51.1	102	70-124	
1,1-Dichloroethane	ug/kg	50	52.4	105	63-122	
1,1-Dichloroethene	ug/kg	50	52.5	105	71-129	
1,1-Dichloropropene	ug/kg	50	50.8	102	71-122	
1,2,3-Trichlorobenzene	ug/kg	50	55.5	111	68-123	
1,2,3-Trichloropropane	ug/kg	50	99.8	200	47-117 L3	
1,2,4-Trichlorobenzene	ug/kg	50	54.6	109	68-125	
1,2,4-Trimethylbenzene	ug/kg	50	47.6	95	69-120	

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QUALITY CONTROL DATA

Project: Ivy Tower
Pace Project No.: 5059789

LABORATORY CONTROL SAMPLE: 701747

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/kg	50	51.8	104	67-121	
1,2-Dichlorobenzene	ug/kg	50	48.9	98	71-121	
1,2-Dichloroethane	ug/kg	50	56.3	113	74-120	
1,2-Dichloropropane	ug/kg	50	56.0	112	71-117	
1,3,5-Trimethylbenzene	ug/kg	50	48.6	97	64-119	
1,3-Dichlorobenzene	ug/kg	50	47.6	95	70-122	
1,3-Dichloropropane	ug/kg	50	50.1	100	68-118	
1,4-Dichlorobenzene	ug/kg	50	49.9	100	71-118	
2,2-Dichloropropane	ug/kg	50	55.0	110	62-119	
2-Butanone (MEK)	ug/kg	250	339	136	38-154	
2-Chlorotoluene	ug/kg	50	47.7	95	71-120	
2-Hexanone	ug/kg	250	316	126	50-134	
4-Chlorotoluene	ug/kg	50	51.0	102	72-123	
4-Methyl-2-pentanone (MIBK)	ug/kg	250	255	102	66-122	
Acetone	ug/kg	250	444	177	10-200	
Acrolein	ug/kg	1000	784	78	11-200	
Acrylonitrile	ug/kg	1000	1070	107	66-120	
Benzene	ug/kg	50	51.1	102	73-115	
Bromobenzene	ug/kg	50	49.3	99	64-130	
Bromochloromethane	ug/kg	50	52.1	104	71-127	
Bromodichloromethane	ug/kg	50	54.7	109	60-121	
Bromoform	ug/kg	50	48.7	97	44-130	
Bromomethane	ug/kg	50	52.1	104	48-175	
Carbon disulfide	ug/kg	100	101	101	71-126	
Carbon tetrachloride	ug/kg	50	50.3	101	57-127	
Chlorobenzene	ug/kg	50	51.3	103	72-121	
Chloroethane	ug/kg	50	50.3	101	72-141	
Chloroform	ug/kg	50	50.6	101	74-114	
Chloromethane	ug/kg	50	46.2	92	51-126	
cis-1,2-Dichloroethene	ug/kg	50	53.7	107	72-115	
cis-1,3-Dichloropropene	ug/kg	50	55.3	111	64-115	
Dibromochloromethane	ug/kg	50	53.6	107	58-114	
Dibromomethane	ug/kg	50	56.4	113	73-120	
Dichlorodifluoromethane	ug/kg	50	48.4	97	32-167	
Ethyl methacrylate	ug/kg	200	230	115	65-117	
Ethylbenzene	ug/kg	50	49.3	99	73-120	
Hexachloro-1,3-butadiene	ug/kg	50	55.1	110	65-121	
Iodomethane	ug/kg	100	102	102	45-156	
Isopropylbenzene (Cumene)	ug/kg	50	51.6	103	74-123	
Methyl-tert-butyl ether	ug/kg	100	109	109	69-123	
Methylene Chloride	ug/kg	50	64.6	129	58-124 L3	
n-Butylbenzene	ug/kg	50	55.0	110	71-118	
n-Hexane	ug/kg	50	47.3	95	50-106	
n-Propylbenzene	ug/kg	50	48.8	98	70-120	
Naphthalene	ug/kg	50	53.5	107	67-124	
p-Isopropyltoluene	ug/kg	50	50.7	101	71-123	
sec-Butylbenzene	ug/kg	50	48.9	98	66-122	
Styrene	ug/kg	50	51.3	103	75-118	

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QUALITY CONTROL DATA

Project: Ivy Tower
Pace Project No.: 5059789

LABORATORY CONTROL SAMPLE: 701747

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
tert-Butylbenzene	ug/kg	50	37.6	75	54-124	
Tetrachloroethene	ug/kg	50	52.1	104	66-126	
Toluene	ug/kg	50	48.0	96	69-115	
trans-1,2-Dichloroethene	ug/kg	50	57.3	115	69-120	
trans-1,3-Dichloropropene	ug/kg	50	52.6	105	61-116	
trans-1,4-Dichloro-2-butene	ug/kg	200	218	109	59-130	
Trichloroethene	ug/kg	50	56.1	112	71-117	
Trichlorofluoromethane	ug/kg	50	48.0	96	67-138	
Vinyl acetate	ug/kg	200	212	106	35-134	
Vinyl chloride	ug/kg	50	49.1	98	64-127	
Xylene (Total)	ug/kg	150	152	101	69-117	
4-Bromofluorobenzene (S)	%.			101	65-117	
Dibromofluoromethane (S)	%.			102	82-130	
Toluene-d8 (S)	%.			97	81-120	



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QUALITY CONTROL DATA

Project: Ivy Tower
Pace Project No.: 5059789

QC Batch: OEXT/29038 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3546 Analysis Description: 8270 MSSV PAH by SIM
Associated Lab Samples: 5059789001, 5059789002, 5059789003, 5059789004, 5059789005, 5059789006, 5059789007, 5059789008

METHOD BLANK: 703303 Matrix: Solid

Associated Lab Samples: 5059789001, 5059789002, 5059789003, 5059789004, 5059789005, 5059789006, 5059789007, 5059789008

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
Benzo(a)anthracene	ug/kg	ND	5.0	03/14/12 15:23	
Benzo(a)pyrene	ug/kg	ND	5.0	03/14/12 15:23	
Benzo(b)fluoranthene	ug/kg	ND	5.0	03/14/12 15:23	
Benzo(k)fluoranthene	ug/kg	ND	5.0	03/14/12 15:23	
Chrysene	ug/kg	ND	5.0	03/14/12 15:23	
Dibenz(a,h)anthracene	ug/kg	ND	5.0	03/14/12 15:23	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	5.0	03/14/12 15:23	
Naphthalene	ug/kg	ND	5.0	03/14/12 15:23	
2-Fluorobiphenyl (S)	%.	73	46-109	03/14/12 15:23	
p-Terphenyl-d14 (S)	%.	95	43-107	03/14/12 15:23	

LABORATORY CONTROL SAMPLE: 703304

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzo(a)anthracene	ug/kg	333	308	92	52-122	
Benzo(a)pyrene	ug/kg	333	295	88	56-131	
Benzo(b)fluoranthene	ug/kg	333	275	83	54-125	
Benzo(k)fluoranthene	ug/kg	333	268	80	55-128	
Chrysene	ug/kg	333	246	74	56-118	
Dibenz(a,h)anthracene	ug/kg	333	274	82	56-125	
Indeno(1,2,3-cd)pyrene	ug/kg	333	270	81	56-124	
Naphthalene	ug/kg	333	221	66	52-112	
2-Fluorobiphenyl (S)	%.			68	46-109	
p-Terphenyl-d14 (S)	%.			80	43-107	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 703305 703306

Parameter	Units	Result	MS		MSD		MS		MSD		% Rec		Max	
			Spike	Spike	Spike	MS	MSD	% Rec	% Rec	% Rec	Limits	RPD	RPD	Qual
Benzo(a)anthracene	ug/kg	26.1	418	418	333	368	73	82	36-105	10	20			
Benzo(a)pyrene	ug/kg	29.2	418	418	318	345	69	76	34-113	8	20			
Benzo(b)fluoranthene	ug/kg	27.6	418	418	309	333	67	73	33-111	7	20			
Benzo(k)fluoranthene	ug/kg	25.1	418	418	282	313	61	69	31-116	11	20			
Chrysene	ug/kg	29.4	418	418	285	302	61	65	34-109	6	20			
Dibenz(a,h)anthracene	ug/kg	8.6	418	418	254	303	59	70	32-111	17	20			
Indeno(1,2,3-cd)pyrene	ug/kg	19.0	418	418	268	304	59	68	27-113	13	20			
Naphthalene	ug/kg	46.7	418	418	299	301	60	61	45-106	.8	20			
2-Fluorobiphenyl (S)	%.						53	67	46-109		20	R1		
p-Terphenyl-d14 (S)	%.						57	73	43-107		20	R1		

Date: 03/15/2012 04:14 PM

REPORT OF LABORATORY ANALYSIS

Page 25 of 30

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QUALITY CONTROL DATA

Project: Ivy Tower
Pace Project No.: 5059789

QC Batch:	PMST/6813	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples: 5059789001, 5059789002, 5059789003, 5059789004, 5059789005			

SAMPLE DUPLICATE: 703635

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	23.5	23.9	2	5	

SAMPLE DUPLICATE: 703636

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	7.6	5.9	25	5	R2

QUALITY CONTROL DATA

Project: Ivy Tower
 Pace Project No.: 5059789

QC Batch:	PMST/6815	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples: 5059789006, 5059789007			

SAMPLE DUPLICATE: 703650

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	9.8	9.8	.02	5	

SAMPLE DUPLICATE: 703651

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	8.4	8.4	.1	5	

QUALITY CONTROL DATA

Project: Ivy Tower
 Pace Project No.: 5059789

QC Batch:	PMST/6816	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	5059789008		

SAMPLE DUPLICATE: 703656

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	3.7	4.0	9	5	R2

QUALIFIERS

Project: Ivy Tower
Pace Project No.: 5059789

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

- L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
R1 RPD value was outside control limits.
R2 RPD value was outside control limits due to matrix interference

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ivy Tower
Pace Project No.: 5059789

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5059789001	GP-4 0-5	EPA 3546	OEXT/29038	EPA 8270 by SIM	MSSV/9758
5059789002	GP-4 15-20	EPA 3546	OEXT/29038	EPA 8270 by SIM	MSSV/9758
5059789003	GP-5 0-5	EPA 3546	OEXT/29038	EPA 8270 by SIM	MSSV/9758
5059789004	GP-5 15-20	EPA 3546	OEXT/29038	EPA 8270 by SIM	MSSV/9758
5059789005	GP-6 0-5	EPA 3546	OEXT/29038	EPA 8270 by SIM	MSSV/9758
5059789006	GP-6 15-20	EPA 3546	OEXT/29038	EPA 8270 by SIM	MSSV/9758
5059789007	GP-7 0-5	EPA 3546	OEXT/29038	EPA 8270 by SIM	MSSV/9758
5059789008	GP-7 15-20	EPA 3546	OEXT/29038	EPA 8270 by SIM	MSSV/9758
5059789001	GP-4 0-5	EPA 8260	MSV/40331		
5059789002	GP-4 15-20	EPA 8260	MSV/40331		
5059789003	GP-5 0-5	EPA 8260	MSV/40331		
5059789004	GP-5 15-20	EPA 8260	MSV/40331		
5059789005	GP-6 0-5	EPA 8260	MSV/40331		
5059789006	GP-6 15-20	EPA 8260	MSV/40331		
5059789007	GP-7 0-5	EPA 8260	MSV/40331		
5059789008	GP-7 15-20	EPA 8260	MSV/40331		
5059789001	GP-4 0-5	ASTM D2974-87	PMST/6813		
5059789002	GP-4 15-20	ASTM D2974-87	PMST/6813		
5059789003	GP-5 0-5	ASTM D2974-87	PMST/6813		
5059789004	GP-5 15-20	ASTM D2974-87	PMST/6813		
5059789005	GP-6 0-5	ASTM D2974-87	PMST/6813		
5059789006	GP-6 15-20	ASTM D2974-87	PMST/6815		
5059789007	GP-7 0-5	ASTM D2974-87	PMST/6815		
5059789008	GP-7 15-20	ASTM D2974-87	PMST/6816		



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:

Company:	Wrightman Petrie	Report To:	Conley phifer
Address:	412 S Lafayette St	Copy To:	Andy Soens
Email To:	S_Brod_1146601@wrightman.com	Purchase Order No.:	
Phone:	373-4351	Project Name:	UVy Tower
Requested Due Date/TAT:		Project Number:	

Section B Required Project Information:

Attention:	Kim Bowman
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

Section C Invoice Information:

REGULATORY AGENCY	<input type="checkbox"/> NPDES	<input type="checkbox"/> GROUND WATER	<input type="checkbox"/> DRINKING WATER
RCRA	<input type="checkbox"/> UST	<input type="checkbox"/> OTHER	
Site Location	N	STATE	

Residual Chlorine (Y/N)	
Requested Analysis Filtered (Y/N)	✓
905-9789	

SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	# TEST #	SAMPLE TEMP AT COLLECTION			# OF CONTAINERS	Unpreserved	Preservatives	Y/N	Requested Test	Pace Project No./Lab I.D.
		MATRIX CODES MATRIX / CODE	COLLECTED COMPOSITE ENDRAG	DATE COMPOSITE START						
GP-1	0-S	SLG		3/8/12	12:39			X		-010
GP-1	5-0				12:42					HOLD
GP-4	10-5				12:47					HOLD
GP-4	15-20				2:52					-010
GP-4	20-25				2:58					HOLD
GP-5	0-S				2:12					-013
GP-5	5-0				2:19					HOLD
GP-5	10-15				2:24					-013
GP-5	15-20				2:29					HOLD
GP-5	20-25				2:31					-014
GP-6	0-S				3/9/12	8:38				HOLD
GP-6	5-0				3/9/12	8:42				-015
ADDITIONAL COMMENTS		REINQUISITION BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME			SAMPLE CONDITIONS
			3/9/12	4:05	C-Acid Trace	3/6/12	10:00	✓	✓	

SAMPLER NAME AND SIGNATURE	PRINT Name of SAMPLER: Andrew Soens	DATE Signed: 3/10/12
SAMPLER NAME AND SIGNATURE	SIGNATURE of SAMPLER:	
Temp in °C	Received on C	Received by C
Customer Name (Y/N)	Sealed Container (Y/N)	Samples intact (Y/N)

WT/Fedex 2
Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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Section A
Required Client Information:

Company: <i>Wrightman Petrie</i>	Report To: <i>C</i>
Address: <i>S. Penn S LaSalette</i>	Copy To: <i>A. Sojouran</i>
Email To: <i>lcr@wrightmanpetrie.com</i>	Purchase Order No.: <i>46601</i>
Phone: <i>574-232-7281</i>	Project Name: <i>Troy Tires</i>
Requested Due Date/TAT:	Project Number:

Section B
Required Project Information:

Matrix Codes	MATRIX / CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

SAMPLE ID	(A-Z, 0-9 / -)	Sample IDs MUST BE UNIQUE					
ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
1	<i>Gp-6</i>	12-15	SLG	3/9/12	9:22		
14	<i>Gp-6</i>	13-20			9:28		
15	<i>Gp-7</i>	0-S					
16	<i>Gp-7</i>	S-10			11:09		
17	<i>Gp-7</i>	10-15			11:15		
18	<i>Gp-7</i>	15-20			11:22		
19	<i>Gp-7</i>	20-25			11:35		
20	<i>Gp-6</i>	20-25					
9					9:37		
10					-ASX		
11	<i>TEMP BLANK</i>						
12							

Section C
Invoice Information:

Attention: <i>Kim Bowman</i>
Company Name: <i></i>
Address: <i></i>
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

Requested Analysis Filtered (Y/N)							
G054784							
Analysis Test							
# OF CONTAINERS	Preservatives						
	NaOH	HCl	HNO ₃	H ₂ SO ₄	Upholstered	Other	Metathiol
SAMPLE TEMP AT COLLECTION	COMPOSITE	ENDGRAB	ENDGRAB	ENDGRAB	ENDGRAB	ENDGRAB	ENDGRAB
	START	ENDGRAB	ENDGRAB	ENDGRAB	ENDGRAB	ENDGRAB	ENDGRAB
MATRIX CODE (see valid codes to left)	DW	WT	WW	P	SL	OL	OT
	WT	WW	P	SL	OL	OT	
SAMPLE TYPE (G=GRAB C=COMP)	G	G	G	G	G	G	G
	C	C	C	C	C	C	C
Pace Project No./Lab ID.							
<i>HOLD-HOLD-HOLD-HOLD-HOLD-HOLD-HOLD-HOLD</i>							

SAMPLE NAME AND SIGNATURE

PRINT NAME of SAMPLER:

SIGNATURE of SAMPLER:

Page:

of

(Y/N)

Samples intact

Received on

Date (Y/N)

Custody

Received Cooper

Temp in °C

(Y/N)

Samples intact

FALL-O-020rev.01 15-May-2007

Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.



Section A

Required Client Information:

Company: 1549066		Report To:	Attention: <i>John Johnson</i>
Address:		Copy To:	Company Name: <i>John Johnson</i>
			Address: <i>1549066</i>
		Purchase Order No.:	Pace Quote Reference: _____
Email To:	Project Name: <i>1549066</i>	Phone: <i>319-365-1333</i>	Pace Project Manager: _____
Fax:	Project Number: <i>1549066</i>	Requested Due Date/TAT:	Pace Profile #: _____
		Site Location: <i>1549066</i>	
		State: _____	
REGULATORY AGENCY <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER			

Section C

Required Project Information:

Company: <i>Waste Management Inc.</i>		Report To: <i>Waste Management Inc.</i>	Attention: <i>John B. Johnson</i>
Address: <i>1000 W. Cypress Creek Rd., Suite 1000, Ft. Lauderdale, FL 33309</i>		Copy To: <i>Waste Management Inc.</i>	Company Name: <i>Waste Management Inc.</i>
		Purchase Order No.: <i>1549066</i>	Address: <i>1000 W. Cypress Creek Rd., Suite 1000, Ft. Lauderdale, FL 33309</i>
Email To: <i>John.B.Johnson@waste.com</i>	Phone: <i>(954) 467-1000</i>	Project Name: <i>Waste Management Inc.</i>	Pace Quote Reference: <i>1549066</i>
Fax: <i>(954) 467-1000</i>	Requested Due Date/TAT: <i>1549066</i>	Project Number: <i>1549066</i>	Pace Project Manager: <i>John B. Johnson</i>
		Site Location: <i>Waste Management Inc.</i>	Pace Profile #: <i>1549066</i>
Invoice Information:			
<input type="checkbox"/> NPDES <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER			
REGULATORY AGENCY		GROUND WATER	DRINKING WATER

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Company: <i>Waste Management Inc.</i>		Report To: <i>Waste Management Inc.</i>	Attention: <i>John B. Johnson</i>
Address: <i>1000 W. Cypress Creek Rd., Suite 1000, Ft. Lauderdale, FL 33309</i>		Copy To: <i>Waste Management Inc.</i>	Company Name: <i>Waste Management Inc.</i>
		Purchase Order No.: <i>1549066</i>	Address: <i>1000 W. Cypress Creek Rd., Suite 1000, Ft. Lauderdale, FL 33309</i>
Email To: <i>John.B.Johnson@waste.com</i>	Phone: <i>(954) 467-1000</i>	Project Name: <i>Waste Management Inc.</i>	Pace Quote Reference: <i>1549066</i>
Fax: <i>(954) 467-1000</i>	Requested Due Date/TAT: <i>1549066</i>	Project Number: <i>1549066</i>	Pace Project Manager: <i>John B. Johnson</i>
		Site Location: <i>Waste Management Inc.</i>	Pace Profile #: <i>1549066</i>
Invoice Information:			
<input type="checkbox"/> NPDES <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER			
REGULATORY AGENCY		GROUND WATER	DRINKING WATER

Requested Analysis Filtered (Y/N)

Section D Required Client Information		ITEM # (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	SAMPLE ID	Matrix Codes MATRIX / CODE Drinking Water Water Waste Water Product Soil/Solid Oil Wipe Air Tissue Other	COLLECTED		Preservatives		Pace Project No./Lab I.D. <i>SOS 97789</i>	Residual Chlorine (Y/N)	
Date	Time				COMPOSITE START	COMPOSITE END/GRAB	TIME	TIME			
1	10:30	10:30	10:30	10:45	10:45					-001	
2	10:30	10:30	10:30	10:45	10:45					-009	
3	10:30	10:30	10:30	10:45	10:45					-010	
4	10:30	10:30	10:30	10:45	10:45					-011	
5	10:30	10:30	10:30	10:45	10:45					-012	
6	10:30	10:30	10:30	10:45	10:45					-013	
7	10:30	10:30	10:30	10:45	10:45					-014	
8	10:30	10:30	10:30	10:45	10:45					-015	
9	10:30	10:30	10:30	10:45	10:45					-016	
10	10:30	10:30	10:30	10:45	10:45					-017	
11	10:30	10:30	10:30	10:45	10:45					-018	
12	10:30	10:30	10:30	10:45	10:45					-019	
										SAMPLE TEMP AT COLLECTION	
										# OF CONTAINERS	
										Unpreserved	
										<chem>H2SO4</chem>	
										<chem>HNO3</chem>	
										<chem>HCl</chem>	
										<chem>NaOH</chem>	
										<chem>Na2S2O3</chem>	
										Methanol	
										Other	
										Analyses Test ↑ Y/N ↑	
										Pace Project No./Lab I.D.	
										Residual Chlorine (Y/N)	

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PRINT Name of SAMPLER:

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SIGNATURE of SAMPLER:

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and agreeing to late charges of 1.5% per month.

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and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days;

E-ALL-Q-020rev.07, 15-May-2007



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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Section A
Required Client Information:

Company: Wrightman Refine
Address: 412 S Lafayette
S. Bend, IN 46701
Email To: scrwrightanalytic@comcast.net
Phone: (515) 232-4188 Fax:
Requested Due Date/TAT:

Section B
Required Project Information:

Report To:	C Phifer	Copy To:	A Soens
Purchase Order No.:		Project Name:	19 Tower
Project Number:		Project Manager:	
Request Due Date/TAT:		Pace Profile #:	

Section C
Invoice Information:

Attention:	Karen Bowman
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

Section D
Required Client Information:

Matrix Codes	MATRIX / CODE	COLLECTED	COLLECTED
Drinking Water	WT	COMPOSITE START	COMPOSITE END/GRAB
Water	WT		
Waste Water	WW		
Product	P		
Soil/Solid	SL		
Oil	OL		
Wipe	WP		
Air	AR		
Tissue	TS		
Other	OT		

SAMPLE ID

Sample IDs MUST BE UNIQUE

#TEEN

Matrix Code (G=GRAB C=COMP)

SAMPLE TYPE (see valid codes to left)

TIME

DATE

TIME

Page: 4 of 4**1512590**

REGULATORY AGENCY

 NPDES
 GROUND WATER
 DRINKING WATER
 OTHER

RCRA

UST

Site Location

STATE

N

Residual Chlorine (Y/N)

Pace Project No./Lab I.D.

Hold

-C14

-C05

Hold

-C15

Hold

-C16

Hold

-C06

Hold

-C17

Hold

-C07

Hold

-C18

Hold

-C19

Hold

-C08

Hold

-C20

Hold

-C21

Hold

-C22

Hold

-C23

Hold

-C24

Hold

-C25

Hold

-C26

Hold

-C27

Hold

-C28

Hold

-C29

Hold

-C30

Hold

-C31

Hold

-C32

Hold

-C33

Hold

Requested Analysis Filtered (Y/N)

PAC15

Analysis Test

OF CONTAINERS

SAMPLE TEMPERATURE

Preservatives

HCl

HNO3

H2SO4

NaOH

Na2SO4

Methanol

Other

Liquorpreserved

OF CONTAINERS

SAMPLE CONTAINER

COMPOSITE

END/GRAB

COMPOSITE

START

COMPOSITE

END/GRAB

Sample Condition Upon Receipt

Pace Analytical

Client Name: Wightman Petrie Project # SD59789

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 89966612604

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used 12346ABC

Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature

2.5°C

(Corrected, if applicable)

Ice Visible in Sample Containers:

yes no

Date/Time 5035A kits placed in freezer
3/10/12 10:03

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: KD 3/10/12

Chain of Custody Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5. <u>T C's</u>
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	9. (Circle) HNO3 H ₂ SO4 NaOH HCl
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Project Manager Review:		
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review:

Kenwith Hunt

Date: 3/10/12

CLIENT: Wightman Petrie

Sample Container Count

COC PAGE 1 of 2
COC ID#

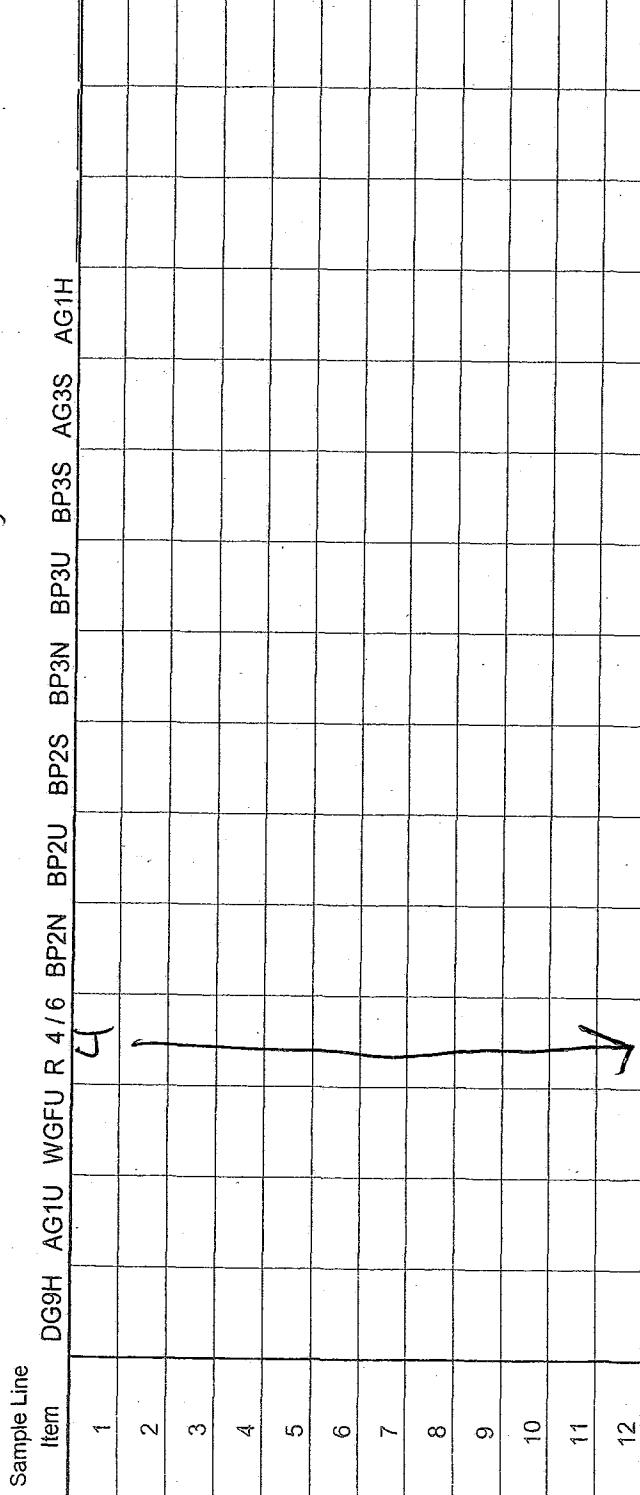
Project # SDS9719



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Sample Line

Item	DG9H	AG1U	WG FU R	R 4 / 6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	Comments
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													



Container Codes

DG9H	40mL HCL amber voa vial	AF	Air Filter	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1 liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WG FU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	Terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved amber vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	JGFU	4oz unpreserved amber wide
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	I	Wipe/Swab
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	BP3A	250mL NaOH, Asc Acid plastic	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved clear vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

CLIENT: Wrightman Petrie

COC PAGE ____ of ____
COC ID# _____

Sample Container Count

Project # 57059789



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Sample Line

Item	DG9H	AG1U	WG FU R 4/6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	Comments
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

4 →

Container Codes

DG9H	40mL HCl amber vial	AF	Air Filter	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCl amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WG FU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R terra core kit		AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved amber vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	-	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500ml unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	BP3A	250mL NaOh, Asc Acid plastic	VGGH	40mL HCl clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCl clear glass	BP3C	250mL NaOH plastic	VGGT	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VGGU	40mL unpreserved clear vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCl
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

CLIENT: Wrightman Potrue
 COC PAGE 3 of 4
 COC ID# 1549066

Sample Container Count

Project # 9099789

Pace Analytical
 www.pacealabs.com

Sample Line

Item	DG9H	AG1U	WG FU R	4 / 6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	Comments
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													

Container Codes

DG9H	40mL HCl amber vial	AF	Air Filter	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCl amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WG FU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R terra core kit		AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved amber vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I Wipe/Swab	
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U Summa Can	
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	BP3A	250mL NaOH, Asc Acid plastic	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	AG3S	250mL H2SO4 plastic	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BP1H	1 liter HCl clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved clear vial
AG3S	250mL H2SO4 glass amber	BP1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	C Air Cassettes	VSG Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BP1T	1 liter Na Thiosulfate clear gla	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

CLIENT: Wright-Jordan Potrero
 COC PAGE 4 of 15
 COC ID# 1512590

Sample Container Count

Project # 5059789



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Sample Line

Item	DG9H	AG1U	WG FU R	R 4 / 6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	Comments
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													

Container Codes

DG9H	40mL HCl amber vial	AF	Air Filter	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCl amber glass	BP1S	1 liter H ₂ SO ₄ plastic	DG9S	40mL H ₂ SO ₄ amber vial
WG FU	4oz clear soil jar	AG1S	1 liter H ₂ SO ₄ amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved amber vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H ₂ SO ₄ amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H ₂ SO ₄ plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	J	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	BP3A	250mL NaOH, Asc Acid plastic	VG9H	40mL HCl clear vial
BP3U	250mL unpreserved plastic	BP1H	1 liter HCl clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio, clear vial
BP3S	250mL H ₂ SO ₄ plastic	BP1S	1 liter H ₂ SO ₄ clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved clear vial
AG3S	250mL H ₂ SO ₄ glass amber	BP1T	1 liter Na Thiosulfate clear gla	C	Air Cassette	VSG	Headspace septa vial & HCL
AG1S	1 liter H ₂ SO ₄ amber glass	BP1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

March 19, 2012

Mr. Conley Phifer
Wightman Petrie Environmental
412 S. Lafayette
South Bend, IN 46601

RE: Project: Ivy Tower
Pace Project No.: 5059917

Dear Mr. Phifer:

Enclosed are the analytical results for sample(s) received by the laboratory on March 13, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Lyle Cable

lyle.cable@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Ivy Tower
Pace Project No.: 5059917

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 100418
Indiana Certification #: C-49-06
Kansas Certification #: E-10247

Kentucky Certification #: 0042
Louisiana/NELAC Certification #: 04076
Ohio VAP: CL0065
West Virginia Certification #: 330

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SAMPLE SUMMARY

Project: Ivy Tower
 Pace Project No.: 5059917

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5059917001	GP-1	Water	03/08/12 09:18	03/13/12 11:15
5059917002	GP-2	Water	03/08/12 10:31	03/13/12 11:15
5059917003	GP-3	Water	03/08/12 11:52	03/13/12 11:15
5059917004	GP-4	Water	03/08/12 13:20	03/13/12 11:15
5059917005	GP-5	Water	03/08/12 14:54	03/13/12 11:15
5059917006	GP-6	Water	03/09/12 10:03	03/13/12 11:15
5059917007	GP-7	Water	03/09/12 11:50	03/13/12 11:15
5059917008	GP-1/2	Water	03/08/12 09:27	03/13/12 11:15
5059917009	GP-4/2	Water	03/08/12 13:40	03/13/12 11:15
5059917010	GP-6/2	Water	03/09/12 10:20	03/13/12 11:15
5059917011	GP-7/2	Water	03/09/12 12:11	03/13/12 11:15

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Ivy Tower
Pace Project No.: 5059917

Lab ID	Sample ID	Method	Analysts	Analytes Reported
5059917001	GP-1	EPA 8270 by SIM	RRB	10
		EPA 8260	ALA	73
5059917002	GP-2	EPA 8270 by SIM	RRB	10
		EPA 8260	ALA	73
5059917003	GP-3	EPA 8270 by SIM	RRB	10
		EPA 8260	ALA	73
5059917004	GP-4	EPA 8270 by SIM	RRB	10
		EPA 8260	ALA	73
5059917005	GP-5	EPA 8270 by SIM	RRB	10
		EPA 8260	ALA	73
5059917006	GP-6	EPA 8270 by SIM	RRB	10
		EPA 8260	ALA	73
5059917007	GP-7	EPA 8270 by SIM	RRB	10
		EPA 8260	ALA	73
5059917008	GP-1/2	EPA 8260	ALA	73
5059917009	GP-4/2	EPA 8260	ALA	73
5059917010	GP-6/2	EPA 8260	ALA	73
5059917011	GP-7/2	EPA 8260	ALA	73

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059917

Sample: GP-1	Lab ID: 5059917001	Collected: 03/08/12 09:18	Received: 03/13/12 11:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Benzo(a)anthracene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 19:52	56-55-3	
Benzo(a)pyrene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 19:52	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 19:52	205-99-2	
Benzo(k)fluoranthene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 19:52	207-08-9	
Chrysene	ND ug/L		0.50	1	03/14/12 15:10	03/15/12 19:52	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 19:52	53-70-3	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 19:52	193-39-5	
Naphthalene	ND ug/L		1.0	1	03/14/12 15:10	03/15/12 19:52	91-20-3	
Surrogates								
2-Fluorobiphenyl (S)	60 %.		26-106	1	03/14/12 15:10	03/15/12 19:52	321-60-8	
p-Terphenyl-d14 (S)	52 %.		16-111	1	03/14/12 15:10	03/15/12 19:52	1718-51-0	
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND ug/L		100	1		03/16/12 23:15	67-64-1	
Acrolein	ND ug/L		50.0	1		03/16/12 23:15	107-02-8	
Acrylonitrile	ND ug/L		100	1		03/16/12 23:15	107-13-1	
Benzene	ND ug/L		5.0	1		03/16/12 23:15	71-43-2	
Bromobenzene	ND ug/L		5.0	1		03/16/12 23:15	108-86-1	
Bromoform	ND ug/L		5.0	1		03/16/12 23:15	74-97-5	
Bromochloromethane	ND ug/L		5.0	1		03/16/12 23:15	75-27-4	
Bromodichloromethane	ND ug/L		5.0	1		03/16/12 23:15	75-25-2	
Bromoform	ND ug/L		5.0	1		03/16/12 23:15	74-83-9	
Bromomethane	ND ug/L		25.0	1		03/16/12 23:15	78-93-3	
2-Butanone (MEK)	ND ug/L		5.0	1		03/16/12 23:15	104-51-8	
n-Butylbenzene	ND ug/L		10.0	1		03/16/12 23:15	135-98-8	
sec-Butylbenzene	ND ug/L		5.0	1		03/16/12 23:15	98-06-6	
tert-Butylbenzene	ND ug/L		5.0	1		03/16/12 23:15	75-15-0	
Carbon disulfide	ND ug/L		5.0	1		03/16/12 23:15	56-23-5	
Carbon tetrachloride	ND ug/L		5.0	1		03/16/12 23:15	108-90-7	
Chlorobenzene	ND ug/L		5.0	1		03/16/12 23:15	75-00-3	
Chloroethane	ND ug/L		5.0	1		03/16/12 23:15	67-66-3	
Chloroform	ND ug/L		5.0	1		03/16/12 23:15	74-87-3	
Chloromethane	ND ug/L		5.0	1		03/16/12 23:15	95-49-8	
2-Chlorotoluene	ND ug/L		5.0	1		03/16/12 23:15	124-48-1	
4-Chlorotoluene	ND ug/L		5.0	1		03/16/12 23:15	106-93-4	
Dibromochloromethane	ND ug/L		5.0	1		03/16/12 23:15	74-95-3	
1,2-Dibromoethane (EDB)	ND ug/L		5.0	1		03/16/12 23:15	106-46-7	
Dibromomethane	ND ug/L		5.0	1		03/16/12 23:15	541-73-1	
1,2-Dichlorobenzene	ND ug/L		5.0	1		03/16/12 23:15	110-57-6	
1,3-Dichlorobenzene	ND ug/L		5.0	1		03/16/12 23:15	95-50-1	
1,4-Dichlorobenzene	ND ug/L		5.0	1		03/16/12 23:15	75-34-3	
trans-1,4-Dichloro-2-butene	ND ug/L		100	1		03/16/12 23:15	107-06-2	
Dichlorodifluoromethane	ND ug/L		5.0	1		03/16/12 23:15	156-59-2	
1,1-Dichloroethane	ND ug/L		5.0	1		03/16/12 23:15	156-60-5	
1,2-Dichloroethane	ND ug/L		5.0	1		03/16/12 23:15	75-35-4	
1,1-Dichloroethene	ND ug/L		5.0	1		03/16/12 23:15	156-59-2	
cis-1,2-Dichloroethene	ND ug/L		5.0	1		03/16/12 23:15	156-60-5	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		03/16/12 23:15	156-60-5	

Date: 03/19/2012 12:43 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059917

Sample: GP-1	Lab ID: 5059917001	Collected: 03/08/12 09:18	Received: 03/13/12 11:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
1,2-Dichloropropane	ND ug/L		5.0	1		03/16/12 23:15	78-87-5	
1,3-Dichloropropane	ND ug/L		5.0	1		03/16/12 23:15	142-28-9	
2,2-Dichloropropane	ND ug/L		5.0	1		03/16/12 23:15	594-20-7	
1,1-Dichloropropene	ND ug/L		5.0	1		03/16/12 23:15	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		5.0	1		03/16/12 23:15	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		5.0	1		03/16/12 23:15	10061-02-6	
Ethylbenzene	ND ug/L		5.0	1		03/16/12 23:15	100-41-4	
Ethyl methacrylate	ND ug/L		100	1		03/16/12 23:15	97-63-2	
Hexachloro-1,3-butadiene	ND ug/L		5.0	1		03/16/12 23:15	87-68-3	
n-Hexane	ND ug/L		5.0	1		03/16/12 23:15	110-54-3	N2
2-Hexanone	ND ug/L		25.0	1		03/16/12 23:15	591-78-6	
Iodomethane	ND ug/L		10.0	1		03/16/12 23:15	74-88-4	
Isopropylbenzene (Cumene)	ND ug/L		5.0	1		03/16/12 23:15	98-82-8	
p-Isopropyltoluene	ND ug/L		5.0	1		03/16/12 23:15	99-87-6	
Methylene Chloride	ND ug/L		5.0	1		03/16/12 23:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		25.0	1		03/16/12 23:15	108-10-1	
Methyl-tert-butyl ether	ND ug/L		4.0	1		03/16/12 23:15	1634-04-4	
Naphthalene	ND ug/L		5.0	1		03/16/12 23:15	91-20-3	
n-Propylbenzene	ND ug/L		5.0	1		03/16/12 23:15	103-65-1	
Styrene	ND ug/L		5.0	1		03/16/12 23:15	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		5.0	1		03/16/12 23:15	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		5.0	1		03/16/12 23:15	79-34-5	
Tetrachloroethene	ND ug/L		5.0	1		03/16/12 23:15	127-18-4	
Toluene	ND ug/L		5.0	1		03/16/12 23:15	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		5.0	1		03/16/12 23:15	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		5.0	1		03/16/12 23:15	120-82-1	
1,1,1-Trichloroethane	ND ug/L		5.0	1		03/16/12 23:15	71-55-6	
1,1,2-Trichloroethane	ND ug/L		5.0	1		03/16/12 23:15	79-00-5	
Trichloroethene	ND ug/L		5.0	1		03/16/12 23:15	79-01-6	
Trichlorofluoromethane	ND ug/L		5.0	1		03/16/12 23:15	75-69-4	
1,2,3-Trichloropropane	ND ug/L		5.0	1		03/16/12 23:15	96-18-4	
1,2,4-Trimethylbenzene	ND ug/L		5.0	1		03/16/12 23:15	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		5.0	1		03/16/12 23:15	108-67-8	
Vinyl acetate	ND ug/L		50.0	1		03/16/12 23:15	108-05-4	
Vinyl chloride	ND ug/L		2.0	1		03/16/12 23:15	75-01-4	
Xylene (Total)	ND ug/L		10.0	1		03/16/12 23:15	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	101 %.		83-123	1		03/16/12 23:15	1868-53-7	
4-Bromofluorobenzene (S)	104 %.		72-125	1		03/16/12 23:15	460-00-4	
Toluene-d8 (S)	98 %.		81-114	1		03/16/12 23:15	2037-26-5	

ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059917

Sample: GP-2	Lab ID: 5059917002	Collected: 03/08/12 10:31	Received: 03/13/12 11:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Benzo(a)anthracene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 20:10	56-55-3	
Benzo(a)pyrene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 20:10	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 20:10	205-99-2	
Benzo(k)fluoranthene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 20:10	207-08-9	
Chrysene	ND ug/L		0.50	1	03/14/12 15:10	03/15/12 20:10	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 20:10	53-70-3	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 20:10	193-39-5	
Naphthalene	ND ug/L		1.0	1	03/14/12 15:10	03/15/12 20:10	91-20-3	
Surrogates								
2-Fluorobiphenyl (S)	61 %.		26-106	1	03/14/12 15:10	03/15/12 20:10	321-60-8	
p-Terphenyl-d14 (S)	47 %.		16-111	1	03/14/12 15:10	03/15/12 20:10	1718-51-0	
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND ug/L		100	1		03/15/12 21:21	67-64-1	
Acrolein	ND ug/L		50.0	1		03/15/12 21:21	107-02-8	
Acrylonitrile	ND ug/L		100	1		03/15/12 21:21	107-13-1	
Benzene	ND ug/L		5.0	1		03/15/12 21:21	71-43-2	
Bromobenzene	ND ug/L		5.0	1		03/15/12 21:21	108-86-1	
Bromoform	ND ug/L		5.0	1		03/15/12 21:21	74-97-5	
Bromochloromethane	ND ug/L		5.0	1		03/15/12 21:21	75-27-4	
Bromodichloromethane	ND ug/L		5.0	1		03/15/12 21:21	75-25-2	
Bromoform	ND ug/L		5.0	1		03/15/12 21:21	74-83-9	
Bromomethane	ND ug/L		25.0	1		03/15/12 21:21	78-93-3	
2-Butanone (MEK)	ND ug/L		5.0	1		03/15/12 21:21	104-51-8	
n-Butylbenzene	ND ug/L		10.0	1		03/15/12 21:21	135-98-8	
sec-Butylbenzene	ND ug/L		5.0	1		03/15/12 21:21	98-06-6	
tert-Butylbenzene	ND ug/L		5.0	1		03/15/12 21:21	75-15-0	
Carbon disulfide	ND ug/L		5.0	1		03/15/12 21:21	56-23-5	
Carbon tetrachloride	ND ug/L		5.0	1		03/15/12 21:21	108-90-7	
Chlorobenzene	ND ug/L		5.0	1		03/15/12 21:21	75-00-3	
Chloroethane	ND ug/L		5.0	1		03/15/12 21:21	67-66-3	
Chloroform	ND ug/L		5.0	1		03/15/12 21:21	74-87-3	
Chloromethane	ND ug/L		5.0	1		03/15/12 21:21	95-49-8	
2-Chlorotoluene	ND ug/L		5.0	1		03/15/12 21:21	124-48-1	
4-Chlorotoluene	ND ug/L		5.0	1		03/15/12 21:21	106-93-4	
Dibromochloromethane	ND ug/L		5.0	1		03/15/12 21:21	74-95-3	
1,2-Dibromoethane (EDB)	ND ug/L		5.0	1		03/15/12 21:21	106-46-7	
Dibromomethane	ND ug/L		5.0	1		03/15/12 21:21	541-73-1	
1,2-Dichlorobenzene	ND ug/L		5.0	1		03/15/12 21:21	106-46-7	
1,3-Dichlorobenzene	ND ug/L		5.0	1		03/15/12 21:21	110-57-6	
1,4-Dichlorobenzene	ND ug/L		5.0	1		03/15/12 21:21	75-34-3	
trans-1,4-Dichloro-2-butene	ND ug/L		100	1		03/15/12 21:21	107-06-2	
Dichlorodifluoromethane	ND ug/L		5.0	1		03/15/12 21:21	156-59-2	
1,1-Dichloroethane	ND ug/L		5.0	1		03/15/12 21:21	156-60-5	
1,2-Dichloroethane	ND ug/L		5.0	1		03/15/12 21:21	156-59-2	
1,1-Dichloroethene	ND ug/L		5.0	1		03/15/12 21:21	156-59-2	
cis-1,2-Dichloroethene	ND ug/L		5.0	1		03/15/12 21:21	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		03/15/12 21:21	156-59-2	

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059917

Sample: GP-2	Lab ID: 5059917002	Collected: 03/08/12 10:31	Received: 03/13/12 11:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
1,2-Dichloropropane	ND ug/L		5.0	1		03/15/12 21:21	78-87-5	
1,3-Dichloropropane	ND ug/L		5.0	1		03/15/12 21:21	142-28-9	
2,2-Dichloropropane	ND ug/L		5.0	1		03/15/12 21:21	594-20-7	
1,1-Dichloropropene	ND ug/L		5.0	1		03/15/12 21:21	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		5.0	1		03/15/12 21:21	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		5.0	1		03/15/12 21:21	10061-02-6	
Ethylbenzene	ND ug/L		5.0	1		03/15/12 21:21	100-41-4	
Ethyl methacrylate	ND ug/L		100	1		03/15/12 21:21	97-63-2	
Hexachloro-1,3-butadiene	ND ug/L		5.0	1		03/15/12 21:21	87-68-3	
n-Hexane	ND ug/L		5.0	1		03/15/12 21:21	110-54-3	N2
2-Hexanone	ND ug/L		25.0	1		03/15/12 21:21	591-78-6	
Iodomethane	ND ug/L		10.0	1		03/15/12 21:21	74-88-4	
Isopropylbenzene (Cumene)	ND ug/L		5.0	1		03/15/12 21:21	98-82-8	
p-Isopropyltoluene	ND ug/L		5.0	1		03/15/12 21:21	99-87-6	
Methylene Chloride	ND ug/L		5.0	1		03/15/12 21:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		25.0	1		03/15/12 21:21	108-10-1	
Methyl-tert-butyl ether	ND ug/L		4.0	1		03/15/12 21:21	1634-04-4	
Naphthalene	ND ug/L		5.0	1		03/15/12 21:21	91-20-3	
n-Propylbenzene	ND ug/L		5.0	1		03/15/12 21:21	103-65-1	
Styrene	ND ug/L		5.0	1		03/15/12 21:21	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		5.0	1		03/15/12 21:21	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		5.0	1		03/15/12 21:21	79-34-5	
Tetrachloroethene	ND ug/L		5.0	1		03/15/12 21:21	127-18-4	
Toluene	ND ug/L		5.0	1		03/15/12 21:21	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		5.0	1		03/15/12 21:21	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		5.0	1		03/15/12 21:21	120-82-1	
1,1,1-Trichloroethane	ND ug/L		5.0	1		03/15/12 21:21	71-55-6	
1,1,2-Trichloroethane	ND ug/L		5.0	1		03/15/12 21:21	79-00-5	
Trichloroethene	ND ug/L		5.0	1		03/15/12 21:21	79-01-6	
Trichlorofluoromethane	ND ug/L		5.0	1		03/15/12 21:21	75-69-4	
1,2,3-Trichloropropane	ND ug/L		5.0	1		03/15/12 21:21	96-18-4	
1,2,4-Trimethylbenzene	ND ug/L		5.0	1		03/15/12 21:21	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		5.0	1		03/15/12 21:21	108-67-8	
Vinyl acetate	ND ug/L		50.0	1		03/15/12 21:21	108-05-4	
Vinyl chloride	ND ug/L		2.0	1		03/15/12 21:21	75-01-4	
Xylene (Total)	ND ug/L		10.0	1		03/15/12 21:21	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	95 %.		83-123	1		03/15/12 21:21	1868-53-7	
4-Bromofluorobenzene (S)	102 %.		72-125	1		03/15/12 21:21	460-00-4	
Toluene-d8 (S)	99 %.		81-114	1		03/15/12 21:21	2037-26-5	

ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059917

Sample: GP-3	Lab ID: 5059917003	Collected: 03/08/12 11:52	Received: 03/13/12 11:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Benzo(a)anthracene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 20:28	56-55-3	
Benzo(a)pyrene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 20:28	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 20:28	205-99-2	
Benzo(k)fluoranthene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 20:28	207-08-9	
Chrysene	ND ug/L		0.50	1	03/14/12 15:10	03/15/12 20:28	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 20:28	53-70-3	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 20:28	193-39-5	
Naphthalene	ND ug/L		1.0	1	03/14/12 15:10	03/15/12 20:28	91-20-3	
Surrogates								
2-Fluorobiphenyl (S)	37 %.		26-106	1	03/14/12 15:10	03/15/12 20:28	321-60-8	
p-Terphenyl-d14 (S)	32 %.		16-111	1	03/14/12 15:10	03/15/12 20:28	1718-51-0	
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND ug/L		100	1		03/15/12 21:58	67-64-1	
Acrolein	ND ug/L		50.0	1		03/15/12 21:58	107-02-8	
Acrylonitrile	ND ug/L		100	1		03/15/12 21:58	107-13-1	
Benzene	ND ug/L		5.0	1		03/15/12 21:58	71-43-2	
Bromobenzene	ND ug/L		5.0	1		03/15/12 21:58	108-86-1	
Bromoform	ND ug/L		5.0	1		03/15/12 21:58	74-97-5	
Bromochloromethane	ND ug/L		5.0	1		03/15/12 21:58	75-27-4	
Bromodichloromethane	ND ug/L		5.0	1		03/15/12 21:58	75-25-2	
Bromoform	ND ug/L		5.0	1		03/15/12 21:58	74-83-9	
Bromomethane	ND ug/L		25.0	1		03/15/12 21:58	78-93-3	
2-Butanone (MEK)	ND ug/L		5.0	1		03/15/12 21:58	104-51-8	
n-Butylbenzene	ND ug/L		10.0	1		03/15/12 21:58	135-98-8	
sec-Butylbenzene	ND ug/L		5.0	1		03/15/12 21:58	98-06-6	
tert-Butylbenzene	ND ug/L		5.0	1		03/15/12 21:58	75-15-0	
Carbon disulfide	ND ug/L		5.0	1		03/15/12 21:58	56-23-5	
Carbon tetrachloride	ND ug/L		5.0	1		03/15/12 21:58	108-90-7	
Chlorobenzene	ND ug/L		5.0	1		03/15/12 21:58	75-00-3	
Chloroethane	ND ug/L		5.0	1		03/15/12 21:58	67-66-3	
Chloroform	ND ug/L		5.0	1		03/15/12 21:58	74-87-3	
Chloromethane	ND ug/L		5.0	1		03/15/12 21:58	95-49-8	
2-Chlorotoluene	ND ug/L		5.0	1		03/15/12 21:58	124-48-1	
4-Chlorotoluene	ND ug/L		5.0	1		03/15/12 21:58	106-93-4	
Dibromochloromethane	ND ug/L		5.0	1		03/15/12 21:58	74-95-3	
1,2-Dibromoethane (EDB)	ND ug/L		5.0	1		03/15/12 21:58	106-46-7	
Dibromomethane	ND ug/L		5.0	1		03/15/12 21:58	541-73-1	
1,2-Dichlorobenzene	ND ug/L		5.0	1		03/15/12 21:58	110-57-6	
1,3-Dichlorobenzene	ND ug/L		5.0	1		03/15/12 21:58	75-71-8	
1,4-Dichlorobenzene	ND ug/L		5.0	1		03/15/12 21:58	75-34-3	
trans-1,4-Dichloro-2-butene	ND ug/L		100	1		03/15/12 21:58	107-06-2	
Dichlorodifluoromethane	ND ug/L		5.0	1		03/15/12 21:58	156-59-2	
1,1-Dichloroethane	ND ug/L		5.0	1		03/15/12 21:58	156-60-5	
1,2-Dichloroethane	ND ug/L		5.0	1		03/15/12 21:58	75-35-4	
1,1-Dichloroethene	ND ug/L		5.0	1		03/15/12 21:58	156-59-2	
cis-1,2-Dichloroethene	ND ug/L		5.0	1		03/15/12 21:58	110-57-6	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		03/15/12 21:58	75-71-8	

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059917

Sample: GP-3	Lab ID: 5059917003	Collected: 03/08/12 11:52	Received: 03/13/12 11:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
1,2-Dichloropropane	ND ug/L		5.0	1		03/15/12 21:58	78-87-5	
1,3-Dichloropropane	ND ug/L		5.0	1		03/15/12 21:58	142-28-9	
2,2-Dichloropropane	ND ug/L		5.0	1		03/15/12 21:58	594-20-7	
1,1-Dichloropropene	ND ug/L		5.0	1		03/15/12 21:58	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		5.0	1		03/15/12 21:58	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		5.0	1		03/15/12 21:58	10061-02-6	
Ethylbenzene	ND ug/L		5.0	1		03/15/12 21:58	100-41-4	
Ethyl methacrylate	ND ug/L		100	1		03/15/12 21:58	97-63-2	
Hexachloro-1,3-butadiene	ND ug/L		5.0	1		03/15/12 21:58	87-68-3	
n-Hexane	ND ug/L		5.0	1		03/15/12 21:58	110-54-3	N2
2-Hexanone	ND ug/L		25.0	1		03/15/12 21:58	591-78-6	
Iodomethane	ND ug/L		10.0	1		03/15/12 21:58	74-88-4	
Isopropylbenzene (Cumene)	ND ug/L		5.0	1		03/15/12 21:58	98-82-8	
p-Isopropyltoluene	ND ug/L		5.0	1		03/15/12 21:58	99-87-6	
Methylene Chloride	ND ug/L		5.0	1		03/15/12 21:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		25.0	1		03/15/12 21:58	108-10-1	
Methyl-tert-butyl ether	ND ug/L		4.0	1		03/15/12 21:58	1634-04-4	
Naphthalene	ND ug/L		5.0	1		03/15/12 21:58	91-20-3	
n-Propylbenzene	ND ug/L		5.0	1		03/15/12 21:58	103-65-1	
Styrene	ND ug/L		5.0	1		03/15/12 21:58	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		5.0	1		03/15/12 21:58	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		5.0	1		03/15/12 21:58	79-34-5	
Tetrachloroethene	ND ug/L		5.0	1		03/15/12 21:58	127-18-4	
Toluene	ND ug/L		5.0	1		03/15/12 21:58	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		5.0	1		03/15/12 21:58	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		5.0	1		03/15/12 21:58	120-82-1	
1,1,1-Trichloroethane	ND ug/L		5.0	1		03/15/12 21:58	71-55-6	
1,1,2-Trichloroethane	ND ug/L		5.0	1		03/15/12 21:58	79-00-5	
Trichloroethene	ND ug/L		5.0	1		03/15/12 21:58	79-01-6	
Trichlorofluoromethane	ND ug/L		5.0	1		03/15/12 21:58	75-69-4	
1,2,3-Trichloropropane	ND ug/L		5.0	1		03/15/12 21:58	96-18-4	
1,2,4-Trimethylbenzene	ND ug/L		5.0	1		03/15/12 21:58	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		5.0	1		03/15/12 21:58	108-67-8	
Vinyl acetate	ND ug/L		50.0	1		03/15/12 21:58	108-05-4	
Vinyl chloride	ND ug/L		2.0	1		03/15/12 21:58	75-01-4	
Xylene (Total)	ND ug/L		10.0	1		03/15/12 21:58	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	99 %.		83-123	1		03/15/12 21:58	1868-53-7	
4-Bromofluorobenzene (S)	100 %.		72-125	1		03/15/12 21:58	460-00-4	
Toluene-d8 (S)	101 %.		81-114	1		03/15/12 21:58	2037-26-5	

ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059917

Sample: GP-4	Lab ID: 5059917004	Collected: 03/08/12 13:20	Received: 03/13/12 11:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Benzo(a)anthracene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 20:46	56-55-3	
Benzo(a)pyrene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 20:46	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 20:46	205-99-2	
Benzo(k)fluoranthene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 20:46	207-08-9	
Chrysene	ND ug/L		0.50	1	03/14/12 15:10	03/15/12 20:46	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 20:46	53-70-3	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 20:46	193-39-5	
Naphthalene	ND ug/L		1.0	1	03/14/12 15:10	03/15/12 20:46	91-20-3	
Surrogates								
2-Fluorobiphenyl (S)	53 %.		26-106	1	03/14/12 15:10	03/15/12 20:46	321-60-8	
p-Terphenyl-d14 (S)	54 %.		16-111	1	03/14/12 15:10	03/15/12 20:46	1718-51-0	
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND ug/L		100	1		03/15/12 22:33	67-64-1	
Acrolein	ND ug/L		50.0	1		03/15/12 22:33	107-02-8	
Acrylonitrile	ND ug/L		100	1		03/15/12 22:33	107-13-1	
Benzene	ND ug/L		5.0	1		03/15/12 22:33	71-43-2	
Bromobenzene	ND ug/L		5.0	1		03/15/12 22:33	108-86-1	
Bromoform	ND ug/L		5.0	1		03/15/12 22:33	74-97-5	
Bromochloromethane	ND ug/L		5.0	1		03/15/12 22:33	75-27-4	
Bromodichloromethane	ND ug/L		5.0	1		03/15/12 22:33	75-25-2	
Bromoform	ND ug/L		5.0	1		03/15/12 22:33	74-83-9	
Bromomethane	ND ug/L		25.0	1		03/15/12 22:33	78-93-3	
2-Butanone (MEK)	ND ug/L		5.0	1		03/15/12 22:33	104-51-8	
n-Butylbenzene	ND ug/L		10.0	1		03/15/12 22:33	135-98-8	
sec-Butylbenzene	ND ug/L		5.0	1		03/15/12 22:33	98-06-6	
tert-Butylbenzene	ND ug/L		5.0	1		03/15/12 22:33	75-15-0	
Carbon disulfide	ND ug/L		5.0	1		03/15/12 22:33	56-23-5	
Carbon tetrachloride	ND ug/L		5.0	1		03/15/12 22:33	108-90-7	
Chlorobenzene	ND ug/L		5.0	1		03/15/12 22:33	75-00-3	
Chloroethane	ND ug/L		5.0	1		03/15/12 22:33	67-66-3	
Chloroform	ND ug/L		5.0	1		03/15/12 22:33	74-87-3	
Chloromethane	ND ug/L		5.0	1		03/15/12 22:33	95-49-8	
2-Chlorotoluene	ND ug/L		5.0	1		03/15/12 22:33	124-48-1	
4-Chlorotoluene	ND ug/L		5.0	1		03/15/12 22:33	106-93-4	
Dibromochloromethane	ND ug/L		5.0	1		03/15/12 22:33	74-95-3	
1,2-Dibromoethane (EDB)	ND ug/L		5.0	1		03/15/12 22:33	106-46-7	
Dibromomethane	ND ug/L		5.0	1		03/15/12 22:33	95-50-1	
1,2-Dichlorobenzene	ND ug/L		5.0	1		03/15/12 22:33	541-73-1	
1,3-Dichlorobenzene	ND ug/L		5.0	1		03/15/12 22:33	106-46-7	
1,4-Dichlorobenzene	ND ug/L		5.0	1		03/15/12 22:33	110-57-6	
trans-1,4-Dichloro-2-butene	ND ug/L		100	1		03/15/12 22:33	75-71-8	
Dichlorodifluoromethane	ND ug/L		5.0	1		03/15/12 22:33	75-34-3	
1,1-Dichloroethane	ND ug/L		5.0	1		03/15/12 22:33	107-06-2	
1,2-Dichloroethane	ND ug/L		5.0	1		03/15/12 22:33	75-35-4	
1,1-Dichloroethene	ND ug/L		5.0	1		03/15/12 22:33	156-59-2	
cis-1,2-Dichloroethene	ND ug/L		5.0	1		03/15/12 22:33	156-60-5	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		03/15/12 22:33		

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059917

Sample: GP-4	Lab ID: 5059917004	Collected: 03/08/12 13:20	Received: 03/13/12 11:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
1,2-Dichloropropane	ND ug/L		5.0	1		03/15/12 22:33	78-87-5	
1,3-Dichloropropane	ND ug/L		5.0	1		03/15/12 22:33	142-28-9	
2,2-Dichloropropane	ND ug/L		5.0	1		03/15/12 22:33	594-20-7	
1,1-Dichloropropene	ND ug/L		5.0	1		03/15/12 22:33	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		5.0	1		03/15/12 22:33	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		5.0	1		03/15/12 22:33	10061-02-6	
Ethylbenzene	ND ug/L		5.0	1		03/15/12 22:33	100-41-4	
Ethyl methacrylate	ND ug/L		100	1		03/15/12 22:33	97-63-2	
Hexachloro-1,3-butadiene	ND ug/L		5.0	1		03/15/12 22:33	87-68-3	
n-Hexane	ND ug/L		5.0	1		03/15/12 22:33	110-54-3	N2
2-Hexanone	ND ug/L		25.0	1		03/15/12 22:33	591-78-6	
Iodomethane	ND ug/L		10.0	1		03/15/12 22:33	74-88-4	
Isopropylbenzene (Cumene)	ND ug/L		5.0	1		03/15/12 22:33	98-82-8	
p-Isopropyltoluene	ND ug/L		5.0	1		03/15/12 22:33	99-87-6	
Methylene Chloride	ND ug/L		5.0	1		03/15/12 22:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		25.0	1		03/15/12 22:33	108-10-1	
Methyl-tert-butyl ether	ND ug/L		4.0	1		03/15/12 22:33	1634-04-4	
Naphthalene	ND ug/L		5.0	1		03/15/12 22:33	91-20-3	
n-Propylbenzene	ND ug/L		5.0	1		03/15/12 22:33	103-65-1	
Styrene	ND ug/L		5.0	1		03/15/12 22:33	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		5.0	1		03/15/12 22:33	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		5.0	1		03/15/12 22:33	79-34-5	
Tetrachloroethene	ND ug/L		5.0	1		03/15/12 22:33	127-18-4	
Toluene	ND ug/L		5.0	1		03/15/12 22:33	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		5.0	1		03/15/12 22:33	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		5.0	1		03/15/12 22:33	120-82-1	
1,1,1-Trichloroethane	ND ug/L		5.0	1		03/15/12 22:33	71-55-6	
1,1,2-Trichloroethane	ND ug/L		5.0	1		03/15/12 22:33	79-00-5	
Trichloroethene	ND ug/L		5.0	1		03/15/12 22:33	79-01-6	
Trichlorofluoromethane	ND ug/L		5.0	1		03/15/12 22:33	75-69-4	
1,2,3-Trichloropropane	ND ug/L		5.0	1		03/15/12 22:33	96-18-4	
1,2,4-Trimethylbenzene	ND ug/L		5.0	1		03/15/12 22:33	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		5.0	1		03/15/12 22:33	108-67-8	
Vinyl acetate	ND ug/L		50.0	1		03/15/12 22:33	108-05-4	
Vinyl chloride	ND ug/L		2.0	1		03/15/12 22:33	75-01-4	
Xylene (Total)	ND ug/L		10.0	1		03/15/12 22:33	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	104 %.		83-123	1		03/15/12 22:33	1868-53-7	
4-Bromofluorobenzene (S)	104 %.		72-125	1		03/15/12 22:33	460-00-4	
Toluene-d8 (S)	95 %.		81-114	1		03/15/12 22:33	2037-26-5	

ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059917

Sample: GP-5	Lab ID: 5059917005	Collected: 03/08/12 14:54	Received: 03/13/12 11:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Benzo(a)anthracene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 21:04	56-55-3	
Benzo(a)pyrene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 21:04	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 21:04	205-99-2	
Benzo(k)fluoranthene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 21:04	207-08-9	
Chrysene	ND ug/L		0.50	1	03/14/12 15:10	03/15/12 21:04	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 21:04	53-70-3	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 21:04	193-39-5	
Naphthalene	ND ug/L		1.0	1	03/14/12 15:10	03/15/12 21:04	91-20-3	
Surrogates								
2-Fluorobiphenyl (S)	58 %.		26-106	1	03/14/12 15:10	03/15/12 21:04	321-60-8	
p-Terphenyl-d14 (S)	48 %.		16-111	1	03/14/12 15:10	03/15/12 21:04	1718-51-0	
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND ug/L		100	1		03/15/12 23:11	67-64-1	
Acrolein	ND ug/L		50.0	1		03/15/12 23:11	107-02-8	
Acrylonitrile	ND ug/L		100	1		03/15/12 23:11	107-13-1	
Benzene	ND ug/L		5.0	1		03/15/12 23:11	71-43-2	
Bromobenzene	ND ug/L		5.0	1		03/15/12 23:11	108-86-1	
Bromoform	ND ug/L		5.0	1		03/15/12 23:11	74-97-5	
Bromochloromethane	ND ug/L		5.0	1		03/15/12 23:11	75-27-4	
Bromodichloromethane	ND ug/L		5.0	1		03/15/12 23:11	75-25-2	
Bromoform	ND ug/L		5.0	1		03/15/12 23:11	74-83-9	
Bromomethane	ND ug/L		25.0	1		03/15/12 23:11	78-93-3	
2-Butanone (MEK)	ND ug/L		5.0	1		03/15/12 23:11	104-51-8	
n-Butylbenzene	ND ug/L		10.0	1		03/15/12 23:11	135-98-8	
sec-Butylbenzene	ND ug/L		5.0	1		03/15/12 23:11	98-06-6	
tert-Butylbenzene	ND ug/L		5.0	1		03/15/12 23:11	75-15-0	
Carbon disulfide	ND ug/L		5.0	1		03/15/12 23:11	56-23-5	
Carbon tetrachloride	ND ug/L		5.0	1		03/15/12 23:11	108-90-7	
Chlorobenzene	ND ug/L		5.0	1		03/15/12 23:11	75-00-3	
Chloroethane	ND ug/L		5.0	1		03/15/12 23:11	67-66-3	
Chloroform	ND ug/L		5.0	1		03/15/12 23:11	74-87-3	
Chloromethane	ND ug/L		5.0	1		03/15/12 23:11	95-49-8	
2-Chlorotoluene	ND ug/L		5.0	1		03/15/12 23:11	124-48-1	
4-Chlorotoluene	ND ug/L		5.0	1		03/15/12 23:11	106-93-4	
Dibromochloromethane	ND ug/L		5.0	1		03/15/12 23:11	74-95-3	
1,2-Dibromoethane (EDB)	ND ug/L		5.0	1		03/15/12 23:11	156-59-2	
Dibromomethane	ND ug/L		5.0	1		03/15/12 23:11	541-73-1	
1,2-Dichlorobenzene	ND ug/L		5.0	1		03/15/12 23:11	106-46-7	
1,3-Dichlorobenzene	ND ug/L		5.0	1		03/15/12 23:11	110-57-6	
1,4-Dichlorobenzene	ND ug/L		5.0	1		03/15/12 23:11	75-34-3	
trans-1,4-Dichloro-2-butene	ND ug/L		100	1		03/15/12 23:11	107-06-2	
Dichlorodifluoromethane	ND ug/L		5.0	1		03/15/12 23:11	156-59-2	
1,1-Dichloroethane	ND ug/L		5.0	1		03/15/12 23:11	110-57-6	
1,2-Dichloroethane	ND ug/L		5.0	1		03/15/12 23:11	75-35-4	
1,1-Dichloroethene	ND ug/L		5.0	1		03/15/12 23:11	156-59-2	
cis-1,2-Dichloroethene	ND ug/L		5.0	1		03/15/12 23:11	156-60-5	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		03/15/12 23:11	156-60-5	

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059917

Sample: GP-5	Lab ID: 5059917005	Collected: 03/08/12 14:54	Received: 03/13/12 11:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
1,2-Dichloropropane	ND ug/L		5.0	1		03/15/12 23:11	78-87-5	
1,3-Dichloropropane	ND ug/L		5.0	1		03/15/12 23:11	142-28-9	
2,2-Dichloropropane	ND ug/L		5.0	1		03/15/12 23:11	594-20-7	
1,1-Dichloropropene	ND ug/L		5.0	1		03/15/12 23:11	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		5.0	1		03/15/12 23:11	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		5.0	1		03/15/12 23:11	10061-02-6	
Ethylbenzene	ND ug/L		5.0	1		03/15/12 23:11	100-41-4	
Ethyl methacrylate	ND ug/L		100	1		03/15/12 23:11	97-63-2	
Hexachloro-1,3-butadiene	ND ug/L		5.0	1		03/15/12 23:11	87-68-3	
n-Hexane	ND ug/L		5.0	1		03/15/12 23:11	110-54-3	N2
2-Hexanone	ND ug/L		25.0	1		03/15/12 23:11	591-78-6	
Iodomethane	ND ug/L		10.0	1		03/15/12 23:11	74-88-4	
Isopropylbenzene (Cumene)	ND ug/L		5.0	1		03/15/12 23:11	98-82-8	
p-Isopropyltoluene	ND ug/L		5.0	1		03/15/12 23:11	99-87-6	
Methylene Chloride	ND ug/L		5.0	1		03/15/12 23:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		25.0	1		03/15/12 23:11	108-10-1	
Methyl-tert-butyl ether	ND ug/L		4.0	1		03/15/12 23:11	1634-04-4	
Naphthalene	ND ug/L		5.0	1		03/15/12 23:11	91-20-3	
n-Propylbenzene	ND ug/L		5.0	1		03/15/12 23:11	103-65-1	
Styrene	ND ug/L		5.0	1		03/15/12 23:11	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		5.0	1		03/15/12 23:11	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		5.0	1		03/15/12 23:11	79-34-5	
Tetrachloroethene	ND ug/L		5.0	1		03/15/12 23:11	127-18-4	
Toluene	ND ug/L		5.0	1		03/15/12 23:11	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		5.0	1		03/15/12 23:11	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		5.0	1		03/15/12 23:11	120-82-1	
1,1,1-Trichloroethane	ND ug/L		5.0	1		03/15/12 23:11	71-55-6	
1,1,2-Trichloroethane	ND ug/L		5.0	1		03/15/12 23:11	79-00-5	
Trichloroethene	ND ug/L		5.0	1		03/15/12 23:11	79-01-6	
Trichlorofluoromethane	ND ug/L		5.0	1		03/15/12 23:11	75-69-4	
1,2,3-Trichloropropane	ND ug/L		5.0	1		03/15/12 23:11	96-18-4	
1,2,4-Trimethylbenzene	ND ug/L		5.0	1		03/15/12 23:11	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		5.0	1		03/15/12 23:11	108-67-8	
Vinyl acetate	ND ug/L		50.0	1		03/15/12 23:11	108-05-4	
Vinyl chloride	ND ug/L		2.0	1		03/15/12 23:11	75-01-4	
Xylene (Total)	ND ug/L		10.0	1		03/15/12 23:11	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	100 %.		83-123	1		03/15/12 23:11	1868-53-7	
4-Bromofluorobenzene (S)	102 %.		72-125	1		03/15/12 23:11	460-00-4	
Toluene-d8 (S)	101 %.		81-114	1		03/15/12 23:11	2037-26-5	

ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059917

Sample: GP-6	Lab ID: 5059917006	Collected: 03/09/12 10:03	Received: 03/13/12 11:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Benzo(a)anthracene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 21:58	56-55-3	
Benzo(a)pyrene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 21:58	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 21:58	205-99-2	
Benzo(k)fluoranthene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 21:58	207-08-9	
Chrysene	ND ug/L		0.50	1	03/14/12 15:10	03/15/12 21:58	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 21:58	53-70-3	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 21:58	193-39-5	
Naphthalene	ND ug/L		1.0	1	03/14/12 15:10	03/15/12 21:58	91-20-3	
Surrogates								
2-Fluorobiphenyl (S)	66 %.		26-106	1	03/14/12 15:10	03/15/12 21:58	321-60-8	
p-Terphenyl-d14 (S)	49 %.		16-111	1	03/14/12 15:10	03/15/12 21:58	1718-51-0	
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND ug/L		100	1		03/16/12 02:09	67-64-1	
Acrolein	ND ug/L		50.0	1		03/16/12 02:09	107-02-8	
Acrylonitrile	ND ug/L		100	1		03/16/12 02:09	107-13-1	
Benzene	ND ug/L		5.0	1		03/16/12 02:09	71-43-2	
Bromobenzene	ND ug/L		5.0	1		03/16/12 02:09	108-86-1	
Bromoform	ND ug/L		5.0	1		03/16/12 02:09	74-97-5	
Bromochloromethane	ND ug/L		5.0	1		03/16/12 02:09	75-27-4	
Bromodichloromethane	ND ug/L		5.0	1		03/16/12 02:09	75-25-2	
Bromoform	ND ug/L		5.0	1		03/16/12 02:09	74-83-9	
Bromomethane	ND ug/L		25.0	1		03/16/12 02:09	78-93-3	
2-Butanone (MEK)	ND ug/L		5.0	1		03/16/12 02:09	104-51-8	
n-Butylbenzene	ND ug/L		10.0	1		03/16/12 02:09	135-98-8	
sec-Butylbenzene	ND ug/L		5.0	1		03/16/12 02:09	98-06-6	
tert-Butylbenzene	ND ug/L		5.0	1		03/16/12 02:09	75-15-0	
Carbon disulfide	ND ug/L		5.0	1		03/16/12 02:09	56-23-5	
Carbon tetrachloride	ND ug/L		5.0	1		03/16/12 02:09	108-90-7	
Chlorobenzene	ND ug/L		5.0	1		03/16/12 02:09	75-00-3	
Chloroethane	ND ug/L		5.0	1		03/16/12 02:09	67-66-3	
Chloroform	ND ug/L		5.0	1		03/16/12 02:09	74-87-3	
Chloromethane	ND ug/L		5.0	1		03/16/12 02:09	95-49-8	
2-Chlorotoluene	ND ug/L		5.0	1		03/16/12 02:09	124-48-1	
4-Chlorotoluene	ND ug/L		5.0	1		03/16/12 02:09	106-93-4	
Dibromochloromethane	ND ug/L		5.0	1		03/16/12 02:09	74-95-3	
1,2-Dibromoethane (EDB)	ND ug/L		5.0	1		03/16/12 02:09	106-46-7	
Dibromomethane	ND ug/L		5.0	1		03/16/12 02:09	110-57-6	
1,2-Dichlorobenzene	ND ug/L		5.0	1		03/16/12 02:09	95-50-1	
1,3-Dichlorobenzene	ND ug/L		5.0	1		03/16/12 02:09	541-73-1	
1,4-Dichlorobenzene	ND ug/L		5.0	1		03/16/12 02:09	75-34-3	
trans-1,4-Dichloro-2-butene	ND ug/L		100	1		03/16/12 02:09	107-06-2	
Dichlorodifluoromethane	ND ug/L		5.0	1		03/16/12 02:09	156-59-2	
1,1-Dichloroethane	ND ug/L		5.0	1		03/16/12 02:09	75-35-4	
1,2-Dichloroethane	ND ug/L		5.0	1		03/16/12 02:09	156-60-5	
1,1-Dichloroethene	ND ug/L		5.0	1		03/16/12 02:09	156-59-2	
cis-1,2-Dichloroethene	ND ug/L		5.0	1		03/16/12 02:09	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		03/16/12 02:09	156-60-5	

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059917

Sample: GP-6	Lab ID: 5059917006	Collected: 03/09/12 10:03	Received: 03/13/12 11:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
1,2-Dichloropropane	ND ug/L		5.0	1		03/16/12 02:09	78-87-5	
1,3-Dichloropropane	ND ug/L		5.0	1		03/16/12 02:09	142-28-9	
2,2-Dichloropropane	ND ug/L		5.0	1		03/16/12 02:09	594-20-7	
1,1-Dichloropropene	ND ug/L		5.0	1		03/16/12 02:09	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		5.0	1		03/16/12 02:09	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		5.0	1		03/16/12 02:09	10061-02-6	
Ethylbenzene	ND ug/L		5.0	1		03/16/12 02:09	100-41-4	
Ethyl methacrylate	ND ug/L		100	1		03/16/12 02:09	97-63-2	
Hexachloro-1,3-butadiene	ND ug/L		5.0	1		03/16/12 02:09	87-68-3	
n-Hexane	ND ug/L		5.0	1		03/16/12 02:09	110-54-3	N2
2-Hexanone	ND ug/L		25.0	1		03/16/12 02:09	591-78-6	
Iodomethane	ND ug/L		10.0	1		03/16/12 02:09	74-88-4	
Isopropylbenzene (Cumene)	ND ug/L		5.0	1		03/16/12 02:09	98-82-8	
p-Isopropyltoluene	ND ug/L		5.0	1		03/16/12 02:09	99-87-6	
Methylene Chloride	ND ug/L		5.0	1		03/16/12 02:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		25.0	1		03/16/12 02:09	108-10-1	
Methyl-tert-butyl ether	ND ug/L		4.0	1		03/16/12 02:09	1634-04-4	
Naphthalene	ND ug/L		5.0	1		03/16/12 02:09	91-20-3	
n-Propylbenzene	ND ug/L		5.0	1		03/16/12 02:09	103-65-1	
Styrene	ND ug/L		5.0	1		03/16/12 02:09	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		5.0	1		03/16/12 02:09	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		5.0	1		03/16/12 02:09	79-34-5	
Tetrachloroethene	ND ug/L		5.0	1		03/16/12 02:09	127-18-4	
Toluene	ND ug/L		5.0	1		03/16/12 02:09	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		5.0	1		03/16/12 02:09	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		5.0	1		03/16/12 02:09	120-82-1	
1,1,1-Trichloroethane	ND ug/L		5.0	1		03/16/12 02:09	71-55-6	
1,1,2-Trichloroethane	ND ug/L		5.0	1		03/16/12 02:09	79-00-5	
Trichloroethene	ND ug/L		5.0	1		03/16/12 02:09	79-01-6	
Trichlorofluoromethane	ND ug/L		5.0	1		03/16/12 02:09	75-69-4	
1,2,3-Trichloropropane	ND ug/L		5.0	1		03/16/12 02:09	96-18-4	
1,2,4-Trimethylbenzene	ND ug/L		5.0	1		03/16/12 02:09	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		5.0	1		03/16/12 02:09	108-67-8	
Vinyl acetate	ND ug/L		50.0	1		03/16/12 02:09	108-05-4	
Vinyl chloride	ND ug/L		2.0	1		03/16/12 02:09	75-01-4	
Xylene (Total)	ND ug/L		10.0	1		03/16/12 02:09	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	101 %.		83-123	1		03/16/12 02:09	1868-53-7	
4-Bromofluorobenzene (S)	106 %.		72-125	1		03/16/12 02:09	460-00-4	
Toluene-d8 (S)	100 %.		81-114	1		03/16/12 02:09	2037-26-5	

ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059917

Sample: GP-7	Lab ID: 5059917007	Collected: 03/09/12 11:50	Received: 03/13/12 11:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Benzo(a)anthracene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 22:16	56-55-3	
Benzo(a)pyrene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 22:16	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 22:16	205-99-2	
Benzo(k)fluoranthene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 22:16	207-08-9	
Chrysene	ND ug/L		0.50	1	03/14/12 15:10	03/15/12 22:16	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 22:16	53-70-3	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.10	1	03/14/12 15:10	03/15/12 22:16	193-39-5	
Naphthalene	ND ug/L		1.0	1	03/14/12 15:10	03/15/12 22:16	91-20-3	
Surrogates								
2-Fluorobiphenyl (S)	26 %.		26-106	1	03/14/12 15:10	03/15/12 22:16	321-60-8	
p-Terphenyl-d14 (S)	19 %.		16-111	1	03/14/12 15:10	03/15/12 22:16	1718-51-0	
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND ug/L		100	1		03/16/12 02:43	67-64-1	
Acrolein	ND ug/L		50.0	1		03/16/12 02:43	107-02-8	
Acrylonitrile	ND ug/L		100	1		03/16/12 02:43	107-13-1	
Benzene	ND ug/L		5.0	1		03/16/12 02:43	71-43-2	
Bromobenzene	ND ug/L		5.0	1		03/16/12 02:43	108-86-1	
Bromoform	ND ug/L		5.0	1		03/16/12 02:43	74-97-5	
Bromochloromethane	ND ug/L		5.0	1		03/16/12 02:43	75-27-4	
Bromodichloromethane	ND ug/L		5.0	1		03/16/12 02:43	75-25-2	
Bromoform	ND ug/L		5.0	1		03/16/12 02:43	74-83-9	
Bromomethane	ND ug/L		25.0	1		03/16/12 02:43	78-93-3	
2-Butanone (MEK)	ND ug/L		5.0	1		03/16/12 02:43	104-51-8	
n-Butylbenzene	ND ug/L		10.0	1		03/16/12 02:43	135-98-8	
sec-Butylbenzene	ND ug/L		5.0	1		03/16/12 02:43	98-06-6	
tert-Butylbenzene	ND ug/L		5.0	1		03/16/12 02:43	75-15-0	
Carbon disulfide	ND ug/L		5.0	1		03/16/12 02:43	56-23-5	
Carbon tetrachloride	ND ug/L		5.0	1		03/16/12 02:43	108-90-7	
Chlorobenzene	ND ug/L		5.0	1		03/16/12 02:43	75-00-3	
Chloroethane	ND ug/L		5.0	1		03/16/12 02:43	67-66-3	
Chloroform	ND ug/L		5.0	1		03/16/12 02:43	74-87-3	
Chloromethane	ND ug/L		5.0	1		03/16/12 02:43	95-49-8	
2-Chlorotoluene	ND ug/L		5.0	1		03/16/12 02:43	106-43-4	
4-Chlorotoluene	ND ug/L		5.0	1		03/16/12 02:43	124-48-1	
Dibromochloromethane	ND ug/L		5.0	1		03/16/12 02:43	106-93-4	
1,2-Dibromoethane (EDB)	ND ug/L		5.0	1		03/16/12 02:43	74-95-3	
Dibromomethane	ND ug/L		5.0	1		03/16/12 02:43	95-50-1	
1,2-Dichlorobenzene	ND ug/L		5.0	1		03/16/12 02:43	541-73-1	
1,3-Dichlorobenzene	ND ug/L		5.0	1		03/16/12 02:43	106-46-7	
1,4-Dichlorobenzene	ND ug/L		5.0	1		03/16/12 02:43	110-57-6	
trans-1,4-Dichloro-2-butene	ND ug/L		100	1		03/16/12 02:43	75-71-8	
Dichlorodifluoromethane	ND ug/L		5.0	1		03/16/12 02:43	75-34-3	
1,1-Dichloroethane	ND ug/L		5.0	1		03/16/12 02:43	107-06-2	
1,2-Dichloroethane	ND ug/L		5.0	1		03/16/12 02:43	75-35-4	
1,1-Dichloroethene	ND ug/L		5.0	1		03/16/12 02:43	156-59-2	
cis-1,2-Dichloroethene	ND ug/L		5.0	1		03/16/12 02:43	156-60-5	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		03/16/12 02:43		

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059917

Sample: GP-7	Lab ID: 5059917007	Collected: 03/09/12 11:50	Received: 03/13/12 11:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
1,2-Dichloropropane	ND ug/L		5.0	1		03/16/12 02:43	78-87-5	
1,3-Dichloropropane	ND ug/L		5.0	1		03/16/12 02:43	142-28-9	
2,2-Dichloropropane	ND ug/L		5.0	1		03/16/12 02:43	594-20-7	
1,1-Dichloropropene	ND ug/L		5.0	1		03/16/12 02:43	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		5.0	1		03/16/12 02:43	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		5.0	1		03/16/12 02:43	10061-02-6	
Ethylbenzene	ND ug/L		5.0	1		03/16/12 02:43	100-41-4	
Ethyl methacrylate	ND ug/L		100	1		03/16/12 02:43	97-63-2	
Hexachloro-1,3-butadiene	ND ug/L		5.0	1		03/16/12 02:43	87-68-3	
n-Hexane	ND ug/L		5.0	1		03/16/12 02:43	110-54-3	N2
2-Hexanone	ND ug/L		25.0	1		03/16/12 02:43	591-78-6	
Iodomethane	ND ug/L		10.0	1		03/16/12 02:43	74-88-4	
Isopropylbenzene (Cumene)	ND ug/L		5.0	1		03/16/12 02:43	98-82-8	
p-Isopropyltoluene	ND ug/L		5.0	1		03/16/12 02:43	99-87-6	
Methylene Chloride	ND ug/L		5.0	1		03/16/12 02:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		25.0	1		03/16/12 02:43	108-10-1	
Methyl-tert-butyl ether	ND ug/L		4.0	1		03/16/12 02:43	1634-04-4	
Naphthalene	ND ug/L		5.0	1		03/16/12 02:43	91-20-3	
n-Propylbenzene	ND ug/L		5.0	1		03/16/12 02:43	103-65-1	
Styrene	ND ug/L		5.0	1		03/16/12 02:43	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		5.0	1		03/16/12 02:43	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		5.0	1		03/16/12 02:43	79-34-5	
Tetrachloroethene	37.1 ug/L		5.0	1		03/16/12 02:43	127-18-4	
Toluene	ND ug/L		5.0	1		03/16/12 02:43	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		5.0	1		03/16/12 02:43	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		5.0	1		03/16/12 02:43	120-82-1	
1,1,1-Trichloroethane	ND ug/L		5.0	1		03/16/12 02:43	71-55-6	
1,1,2-Trichloroethane	ND ug/L		5.0	1		03/16/12 02:43	79-00-5	
Trichloroethene	ND ug/L		5.0	1		03/16/12 02:43	79-01-6	
Trichlorofluoromethane	ND ug/L		5.0	1		03/16/12 02:43	75-69-4	
1,2,3-Trichloropropane	ND ug/L		5.0	1		03/16/12 02:43	96-18-4	
1,2,4-Trimethylbenzene	ND ug/L		5.0	1		03/16/12 02:43	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		5.0	1		03/16/12 02:43	108-67-8	
Vinyl acetate	ND ug/L		50.0	1		03/16/12 02:43	108-05-4	
Vinyl chloride	ND ug/L		2.0	1		03/16/12 02:43	75-01-4	
Xylene (Total)	ND ug/L		10.0	1		03/16/12 02:43	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	101 %.		83-123	1		03/16/12 02:43	1868-53-7	
4-Bromofluorobenzene (S)	105 %.		72-125	1		03/16/12 02:43	460-00-4	
Toluene-d8 (S)	96 %.		81-114	1		03/16/12 02:43	2037-26-5	

ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059917

Sample: GP-1/2	Lab ID: 5059917008	Collected: 03/08/12 09:27	Received: 03/13/12 11:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND ug/L		100	1		03/16/12 03:17	67-64-1	
Acrolein	ND ug/L		50.0	1		03/16/12 03:17	107-02-8	
Acrylonitrile	ND ug/L		100	1		03/16/12 03:17	107-13-1	
Benzene	ND ug/L		5.0	1		03/16/12 03:17	71-43-2	
Bromobenzene	ND ug/L		5.0	1		03/16/12 03:17	108-86-1	
Bromoform	ND ug/L		5.0	1		03/16/12 03:17	74-97-5	
Bromochloromethane	ND ug/L		5.0	1		03/16/12 03:17	75-27-4	
Bromodichloromethane	ND ug/L		5.0	1		03/16/12 03:17	75-25-2	
Bromoform	ND ug/L		5.0	1		03/16/12 03:17	74-83-9	
2-Butanone (MEK)	ND ug/L		25.0	1		03/16/12 03:17	78-93-3	
n-Butylbenzene	ND ug/L		5.0	1		03/16/12 03:17	104-51-8	
sec-Butylbenzene	ND ug/L		5.0	1		03/16/12 03:17	135-98-8	
tert-Butylbenzene	ND ug/L		5.0	1		03/16/12 03:17	98-06-6	
Carbon disulfide	ND ug/L		10.0	1		03/16/12 03:17	75-15-0	
Carbon tetrachloride	ND ug/L		5.0	1		03/16/12 03:17	56-23-5	
Chlorobenzene	ND ug/L		5.0	1		03/16/12 03:17	108-90-7	
Chloroethane	ND ug/L		5.0	1		03/16/12 03:17	75-00-3	
Chloroform	ND ug/L		5.0	1		03/16/12 03:17	67-66-3	
Chloromethane	ND ug/L		5.0	1		03/16/12 03:17	74-87-3	
2-Chlorotoluene	ND ug/L		5.0	1		03/16/12 03:17	95-49-8	
4-Chlorotoluene	ND ug/L		5.0	1		03/16/12 03:17	106-43-4	
Dibromochloromethane	ND ug/L		5.0	1		03/16/12 03:17	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		5.0	1		03/16/12 03:17	106-93-4	
Dibromomethane	ND ug/L		5.0	1		03/16/12 03:17	74-95-3	
1,2-Dichlorobenzene	ND ug/L		5.0	1		03/16/12 03:17	95-50-1	
1,3-Dichlorobenzene	ND ug/L		5.0	1		03/16/12 03:17	541-73-1	
1,4-Dichlorobenzene	ND ug/L		5.0	1		03/16/12 03:17	106-46-7	
trans-1,4-Dichloro-2-butene	ND ug/L		100	1		03/16/12 03:17	110-57-6	
Dichlorodifluoromethane	ND ug/L		5.0	1		03/16/12 03:17	75-71-8	
1,1-Dichloroethane	ND ug/L		5.0	1		03/16/12 03:17	75-34-3	
1,2-Dichloroethane	ND ug/L		5.0	1		03/16/12 03:17	107-06-2	
1,1-Dichloroethene	ND ug/L		5.0	1		03/16/12 03:17	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		5.0	1		03/16/12 03:17	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		03/16/12 03:17	156-60-5	
1,2-Dichloropropane	ND ug/L		5.0	1		03/16/12 03:17	78-87-5	
1,3-Dichloropropane	ND ug/L		5.0	1		03/16/12 03:17	142-28-9	
2,2-Dichloropropane	ND ug/L		5.0	1		03/16/12 03:17	594-20-7	
1,1-Dichloropropene	ND ug/L		5.0	1		03/16/12 03:17	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		5.0	1		03/16/12 03:17	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		5.0	1		03/16/12 03:17	10061-02-6	
Ethylbenzene	ND ug/L		5.0	1		03/16/12 03:17	100-41-4	
Ethyl methacrylate	ND ug/L		100	1		03/16/12 03:17	97-63-2	
Hexachloro-1,3-butadiene	ND ug/L		5.0	1		03/16/12 03:17	87-68-3	
n-Hexane	ND ug/L		5.0	1		03/16/12 03:17	110-54-3	N2
2-Hexanone	ND ug/L		25.0	1		03/16/12 03:17	591-78-6	
Iodomethane	ND ug/L		10.0	1		03/16/12 03:17	74-88-4	
Isopropylbenzene (Cumene)	ND ug/L		5.0	1		03/16/12 03:17	98-82-8	

Date: 03/19/2012 12:43 PM

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059917

Sample: GP-1/2	Lab ID: 5059917008	Collected: 03/08/12 09:27	Received: 03/13/12 11:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
p-Isopropyltoluene	ND	ug/L	5.0	1		03/16/12 03:17	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/16/12 03:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/16/12 03:17	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/16/12 03:17	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		03/16/12 03:17	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/16/12 03:17	103-65-1	
Styrene	ND	ug/L	5.0	1		03/16/12 03:17	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/12 03:17	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/12 03:17	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/16/12 03:17	127-18-4	
Toluene	ND	ug/L	5.0	1		03/16/12 03:17	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/16/12 03:17	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/16/12 03:17	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/16/12 03:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/16/12 03:17	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		03/16/12 03:17	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/16/12 03:17	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/16/12 03:17	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/16/12 03:17	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/16/12 03:17	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/16/12 03:17	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/16/12 03:17	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/16/12 03:17	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	98 %.		83-123	1		03/16/12 03:17	1868-53-7	
4-Bromofluorobenzene (S)	104 %.		72-125	1		03/16/12 03:17	460-00-4	
Toluene-d8 (S)	102 %.		81-114	1		03/16/12 03:17	2037-26-5	

ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059917

Sample: GP-4/2	Lab ID: 5059917009	Collected: 03/08/12 13:40	Received: 03/13/12 11:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND ug/L		100	1		03/16/12 03:52	67-64-1	
Acrolein	ND ug/L		50.0	1		03/16/12 03:52	107-02-8	
Acrylonitrile	ND ug/L		100	1		03/16/12 03:52	107-13-1	
Benzene	ND ug/L		5.0	1		03/16/12 03:52	71-43-2	
Bromobenzene	ND ug/L		5.0	1		03/16/12 03:52	108-86-1	
Bromoform	ND ug/L		5.0	1		03/16/12 03:52	74-97-5	
Bromochloromethane	ND ug/L		5.0	1		03/16/12 03:52	75-27-4	
Bromodichloromethane	ND ug/L		5.0	1		03/16/12 03:52	75-25-2	
Bromoform	ND ug/L		5.0	1		03/16/12 03:52	74-83-9	
Bromomethane	ND ug/L		5.0	1		03/16/12 03:52	78-93-3	
2-Butanone (MEK)	ND ug/L		25.0	1		03/16/12 03:52	104-51-8	
n-Butylbenzene	ND ug/L		5.0	1		03/16/12 03:52	135-98-8	
sec-Butylbenzene	ND ug/L		5.0	1		03/16/12 03:52	98-06-6	
tert-Butylbenzene	ND ug/L		5.0	1		03/16/12 03:52	75-15-0	
Carbon disulfide	ND ug/L		10.0	1		03/16/12 03:52	56-23-5	
Carbon tetrachloride	ND ug/L		5.0	1		03/16/12 03:52	124-48-1	
Chlorobenzene	ND ug/L		5.0	1		03/16/12 03:52	108-90-7	
Chloroethane	ND ug/L		5.0	1		03/16/12 03:52	75-00-3	
Chloroform	ND ug/L		5.0	1		03/16/12 03:52	67-66-3	
Chloromethane	ND ug/L		5.0	1		03/16/12 03:52	74-87-3	
2-Chlorotoluene	ND ug/L		5.0	1		03/16/12 03:52	95-49-8	
4-Chlorotoluene	ND ug/L		5.0	1		03/16/12 03:52	106-43-4	
Dibromochloromethane	ND ug/L		5.0	1		03/16/12 03:52	110-57-6	
1,2-Dibromoethane (EDB)	ND ug/L		5.0	1		03/16/12 03:52	124-48-1	
Dibromomethane	ND ug/L		5.0	1		03/16/12 03:52	106-93-4	
1,2-Dichlorobenzene	ND ug/L		5.0	1		03/16/12 03:52	74-95-3	
1,3-Dichlorobenzene	ND ug/L		5.0	1		03/16/12 03:52	95-50-1	
1,4-Dichlorobenzene	ND ug/L		5.0	1		03/16/12 03:52	541-73-1	
trans-1,4-Dichloro-2-butene	ND ug/L		100	1		03/16/12 03:52	106-46-7	
Dichlorodifluoromethane	ND ug/L		5.0	1		03/16/12 03:52	156-59-2	
1,1-Dichloroethane	ND ug/L		5.0	1		03/16/12 03:52	75-34-3	
1,2-Dichloroethane	ND ug/L		5.0	1		03/16/12 03:52	107-06-2	
1,1-Dichloroethene	ND ug/L		5.0	1		03/16/12 03:52	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		5.0	1		03/16/12 03:52	156-60-5	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		03/16/12 03:52	78-87-5	
1,2-Dichloropropane	ND ug/L		5.0	1		03/16/12 03:52	142-28-9	
1,3-Dichloropropane	ND ug/L		5.0	1		03/16/12 03:52	594-20-7	
2,2-Dichloropropane	ND ug/L		5.0	1		03/16/12 03:52	563-58-6	
1,1-Dichloropropene	ND ug/L		5.0	1		03/16/12 03:52	10061-01-5	
cis-1,3-Dichloropropene	ND ug/L		5.0	1		03/16/12 03:52	10061-02-6	
trans-1,3-Dichloropropene	ND ug/L		5.0	1		03/16/12 03:52	100-41-4	
Ethylbenzene	ND ug/L		5.0	1		03/16/12 03:52	97-63-2	
Ethyl methacrylate	ND ug/L		100	1		03/16/12 03:52	87-68-3	
Hexachloro-1,3-butadiene	ND ug/L		5.0	1		03/16/12 03:52	591-78-6	
n-Hexane	ND ug/L		5.0	1		03/16/12 03:52	74-88-4	
2-Hexanone	ND ug/L		25.0	1		03/16/12 03:52	98-82-8	
Iodomethane	ND ug/L		10.0	1		03/16/12 03:52	N2	
Isopropylbenzene (Cumene)	ND ug/L		5.0	1		03/16/12 03:52	591-78-6	

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059917

Sample: GP-4/2	Lab ID: 5059917009	Collected: 03/08/12 13:40	Received: 03/13/12 11:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
p-Isopropyltoluene	ND	ug/L	5.0	1		03/16/12 03:52	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/16/12 03:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/16/12 03:52	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/16/12 03:52	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		03/16/12 03:52	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/16/12 03:52	103-65-1	
Styrene	ND	ug/L	5.0	1		03/16/12 03:52	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/12 03:52	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/12 03:52	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/16/12 03:52	127-18-4	
Toluene	ND	ug/L	5.0	1		03/16/12 03:52	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/16/12 03:52	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/16/12 03:52	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/16/12 03:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/16/12 03:52	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		03/16/12 03:52	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/16/12 03:52	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/16/12 03:52	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/16/12 03:52	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/16/12 03:52	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/16/12 03:52	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/16/12 03:52	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/16/12 03:52	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	97 %.		83-123	1		03/16/12 03:52	1868-53-7	
4-Bromofluorobenzene (S)	103 %.		72-125	1		03/16/12 03:52	460-00-4	
Toluene-d8 (S)	100 %.		81-114	1		03/16/12 03:52	2037-26-5	

ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059917

Sample: GP-6/2	Lab ID: 5059917010	Collected: 03/09/12 10:20	Received: 03/13/12 11:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND ug/L		100	1		03/16/12 04:26	67-64-1	
Acrolein	ND ug/L		50.0	1		03/16/12 04:26	107-02-8	
Acrylonitrile	ND ug/L		100	1		03/16/12 04:26	107-13-1	
Benzene	ND ug/L		5.0	1		03/16/12 04:26	71-43-2	
Bromobenzene	ND ug/L		5.0	1		03/16/12 04:26	108-86-1	
Bromoform	ND ug/L		5.0	1		03/16/12 04:26	74-97-5	
Bromochloromethane	ND ug/L		5.0	1		03/16/12 04:26	75-27-4	
Bromodichloromethane	ND ug/L		5.0	1		03/16/12 04:26	75-25-2	
Bromoform	ND ug/L		5.0	1		03/16/12 04:26	74-83-9	
2-Butanone (MEK)	ND ug/L		25.0	1		03/16/12 04:26	78-93-3	
n-Butylbenzene	ND ug/L		5.0	1		03/16/12 04:26	104-51-8	
sec-Butylbenzene	ND ug/L		5.0	1		03/16/12 04:26	135-98-8	
tert-Butylbenzene	ND ug/L		5.0	1		03/16/12 04:26	98-06-6	
Carbon disulfide	ND ug/L		10.0	1		03/16/12 04:26	75-15-0	
Carbon tetrachloride	ND ug/L		5.0	1		03/16/12 04:26	56-23-5	
Chlorobenzene	ND ug/L		5.0	1		03/16/12 04:26	108-90-7	
Chloroethane	ND ug/L		5.0	1		03/16/12 04:26	75-00-3	
Chloroform	ND ug/L		5.0	1		03/16/12 04:26	67-66-3	
Chloromethane	ND ug/L		5.0	1		03/16/12 04:26	74-87-3	
2-Chlorotoluene	ND ug/L		5.0	1		03/16/12 04:26	95-49-8	
4-Chlorotoluene	ND ug/L		5.0	1		03/16/12 04:26	106-43-4	
Dibromochloromethane	ND ug/L		5.0	1		03/16/12 04:26	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		5.0	1		03/16/12 04:26	106-93-4	
Dibromomethane	ND ug/L		5.0	1		03/16/12 04:26	74-95-3	
1,2-Dichlorobenzene	ND ug/L		5.0	1		03/16/12 04:26	95-50-1	
1,3-Dichlorobenzene	ND ug/L		5.0	1		03/16/12 04:26	541-73-1	
1,4-Dichlorobenzene	ND ug/L		5.0	1		03/16/12 04:26	106-46-7	
trans-1,4-Dichloro-2-butene	ND ug/L		100	1		03/16/12 04:26	110-57-6	
Dichlorodifluoromethane	ND ug/L		5.0	1		03/16/12 04:26	75-71-8	
1,1-Dichloroethane	ND ug/L		5.0	1		03/16/12 04:26	75-34-3	
1,2-Dichloroethane	ND ug/L		5.0	1		03/16/12 04:26	107-06-2	
1,1-Dichloroethene	ND ug/L		5.0	1		03/16/12 04:26	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		5.0	1		03/16/12 04:26	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		03/16/12 04:26	156-60-5	
1,2-Dichloropropane	ND ug/L		5.0	1		03/16/12 04:26	78-87-5	
1,3-Dichloropropane	ND ug/L		5.0	1		03/16/12 04:26	142-28-9	
2,2-Dichloropropane	ND ug/L		5.0	1		03/16/12 04:26	594-20-7	
1,1-Dichloropropene	ND ug/L		5.0	1		03/16/12 04:26	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		5.0	1		03/16/12 04:26	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		5.0	1		03/16/12 04:26	10061-02-6	
Ethylbenzene	ND ug/L		5.0	1		03/16/12 04:26	100-41-4	
Ethyl methacrylate	ND ug/L		100	1		03/16/12 04:26	97-63-2	
Hexachloro-1,3-butadiene	ND ug/L		5.0	1		03/16/12 04:26	87-68-3	
n-Hexane	ND ug/L		5.0	1		03/16/12 04:26	110-54-3	N2
2-Hexanone	ND ug/L		25.0	1		03/16/12 04:26	591-78-6	
Iodomethane	ND ug/L		10.0	1		03/16/12 04:26	74-88-4	
Isopropylbenzene (Cumene)	ND ug/L		5.0	1		03/16/12 04:26	98-82-8	

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059917

Sample: GP-6/2	Lab ID: 5059917010	Collected: 03/09/12 10:20	Received: 03/13/12 11:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
p-Isopropyltoluene	ND	ug/L	5.0	1		03/16/12 04:26	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/16/12 04:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/16/12 04:26	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/16/12 04:26	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		03/16/12 04:26	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/16/12 04:26	103-65-1	
Styrene	ND	ug/L	5.0	1		03/16/12 04:26	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/12 04:26	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/12 04:26	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/16/12 04:26	127-18-4	
Toluene	ND	ug/L	5.0	1		03/16/12 04:26	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/16/12 04:26	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/16/12 04:26	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/16/12 04:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/16/12 04:26	79-00-5	
Trichloroethene	6.2	ug/L	5.0	1		03/16/12 04:26	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/16/12 04:26	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/16/12 04:26	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/16/12 04:26	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/16/12 04:26	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/16/12 04:26	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/16/12 04:26	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/16/12 04:26	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	98 %.		83-123	1		03/16/12 04:26	1868-53-7	
4-Bromofluorobenzene (S)	117 %.		72-125	1		03/16/12 04:26	460-00-4	
Toluene-d8 (S)	107 %.		81-114	1		03/16/12 04:26	2037-26-5	

ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059917

Sample: GP-7/2	Lab ID: 5059917011	Collected: 03/09/12 12:11	Received: 03/13/12 11:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND ug/L		100	1		03/16/12 05:00	67-64-1	
Acrolein	ND ug/L		50.0	1		03/16/12 05:00	107-02-8	
Acrylonitrile	ND ug/L		100	1		03/16/12 05:00	107-13-1	
Benzene	ND ug/L		5.0	1		03/16/12 05:00	71-43-2	
Bromobenzene	ND ug/L		5.0	1		03/16/12 05:00	108-86-1	
Bromoform	ND ug/L		5.0	1		03/16/12 05:00	74-97-5	
Bromochloromethane	ND ug/L		5.0	1		03/16/12 05:00	75-27-4	
Bromodichloromethane	ND ug/L		5.0	1		03/16/12 05:00	75-25-2	
Bromoform	ND ug/L		5.0	1		03/16/12 05:00	74-83-9	
2-Butanone (MEK)	ND ug/L		25.0	1		03/16/12 05:00	78-93-3	
n-Butylbenzene	ND ug/L		5.0	1		03/16/12 05:00	104-51-8	
sec-Butylbenzene	ND ug/L		5.0	1		03/16/12 05:00	135-98-8	
tert-Butylbenzene	ND ug/L		5.0	1		03/16/12 05:00	98-06-6	
Carbon disulfide	ND ug/L		10.0	1		03/16/12 05:00	75-15-0	
Carbon tetrachloride	ND ug/L		5.0	1		03/16/12 05:00	56-23-5	
Chlorobenzene	ND ug/L		5.0	1		03/16/12 05:00	108-90-7	
Chloroethane	ND ug/L		5.0	1		03/16/12 05:00	75-00-3	
Chloroform	ND ug/L		5.0	1		03/16/12 05:00	67-66-3	
Chloromethane	ND ug/L		5.0	1		03/16/12 05:00	74-87-3	
2-Chlorotoluene	ND ug/L		5.0	1		03/16/12 05:00	95-49-8	
4-Chlorotoluene	ND ug/L		5.0	1		03/16/12 05:00	106-43-4	
Dibromochloromethane	ND ug/L		5.0	1		03/16/12 05:00	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		5.0	1		03/16/12 05:00	106-93-4	
Dibromomethane	ND ug/L		5.0	1		03/16/12 05:00	74-95-3	
1,2-Dichlorobenzene	ND ug/L		5.0	1		03/16/12 05:00	95-50-1	
1,3-Dichlorobenzene	ND ug/L		5.0	1		03/16/12 05:00	541-73-1	
1,4-Dichlorobenzene	ND ug/L		5.0	1		03/16/12 05:00	106-46-7	
trans-1,4-Dichloro-2-butene	ND ug/L		100	1		03/16/12 05:00	110-57-6	
Dichlorodifluoromethane	ND ug/L		5.0	1		03/16/12 05:00	75-71-8	
1,1-Dichloroethane	ND ug/L		5.0	1		03/16/12 05:00	75-34-3	
1,2-Dichloroethane	ND ug/L		5.0	1		03/16/12 05:00	107-06-2	
1,1-Dichloroethene	ND ug/L		5.0	1		03/16/12 05:00	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		5.0	1		03/16/12 05:00	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		03/16/12 05:00	156-60-5	
1,2-Dichloropropane	ND ug/L		5.0	1		03/16/12 05:00	78-87-5	
1,3-Dichloropropane	ND ug/L		5.0	1		03/16/12 05:00	142-28-9	
2,2-Dichloropropane	ND ug/L		5.0	1		03/16/12 05:00	594-20-7	
1,1-Dichloropropene	ND ug/L		5.0	1		03/16/12 05:00	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		5.0	1		03/16/12 05:00	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		5.0	1		03/16/12 05:00	10061-02-6	
Ethylbenzene	ND ug/L		5.0	1		03/16/12 05:00	100-41-4	
Ethyl methacrylate	ND ug/L		100	1		03/16/12 05:00	97-63-2	
Hexachloro-1,3-butadiene	ND ug/L		5.0	1		03/16/12 05:00	87-68-3	
n-Hexane	ND ug/L		5.0	1		03/16/12 05:00	110-54-3	N2
2-Hexanone	ND ug/L		25.0	1		03/16/12 05:00	591-78-6	
Iodomethane	ND ug/L		10.0	1		03/16/12 05:00	74-88-4	
Isopropylbenzene (Cumene)	ND ug/L		5.0	1		03/16/12 05:00	98-82-8	

Date: 03/19/2012 12:43 PM

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ANALYTICAL RESULTS

Project: Ivy Tower
Pace Project No.: 5059917

Sample: GP-7/2	Lab ID: 5059917011	Collected: 03/09/12 12:11	Received: 03/13/12 11:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/16/12 05:00	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/16/12 05:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/16/12 05:00	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/16/12 05:00	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		03/16/12 05:00	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/16/12 05:00	103-65-1	
Styrene	ND	ug/L	5.0	1		03/16/12 05:00	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/12 05:00	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/12 05:00	79-34-5	
Tetrachloroethene	180	ug/L	5.0	1		03/16/12 05:00	127-18-4	
Toluene	ND	ug/L	5.0	1		03/16/12 05:00	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/16/12 05:00	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/16/12 05:00	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/16/12 05:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/16/12 05:00	79-00-5	
Trichloroethene	7.8	ug/L	5.0	1		03/16/12 05:00	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/16/12 05:00	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/16/12 05:00	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/16/12 05:00	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/16/12 05:00	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/16/12 05:00	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/16/12 05:00	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/16/12 05:00	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	97 %.		83-123	1		03/16/12 05:00	1868-53-7	
4-Bromofluorobenzene (S)	116 %.		72-125	1		03/16/12 05:00	460-00-4	
Toluene-d8 (S)	107 %.		81-114	1		03/16/12 05:00	2037-26-5	

QUALITY CONTROL DATA

Project: Ivy Tower

Pace Project No.: 5059917

QC Batch:	MSV/40453	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
Associated Lab Samples:	5059917002, 5059917003, 5059917004, 5059917005		

METHOD BLANK: 704448	Matrix: Water
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Associated Lab Samples:	5059917002, 5059917003, 5059917004, 5059917005
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Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	03/15/12 13:07	
1,1,1-Trichloroethane	ug/L	ND	5.0	03/15/12 13:07	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	03/15/12 13:07	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/15/12 13:07	
1,1-Dichloroethane	ug/L	ND	5.0	03/15/12 13:07	
1,1-Dichloroethene	ug/L	ND	5.0	03/15/12 13:07	
1,1-Dichloropropene	ug/L	ND	5.0	03/15/12 13:07	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	03/15/12 13:07	
1,2,3-Trichloropropane	ug/L	ND	5.0	03/15/12 13:07	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	03/15/12 13:07	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	03/15/12 13:07	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	03/15/12 13:07	
1,2-Dichlorobenzene	ug/L	ND	5.0	03/15/12 13:07	
1,2-Dichloroethane	ug/L	ND	5.0	03/15/12 13:07	
1,2-Dichloropropane	ug/L	ND	5.0	03/15/12 13:07	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	03/15/12 13:07	
1,3-Dichlorobenzene	ug/L	ND	5.0	03/15/12 13:07	
1,3-Dichloropropane	ug/L	ND	5.0	03/15/12 13:07	
1,4-Dichlorobenzene	ug/L	ND	5.0	03/15/12 13:07	
2,2-Dichloropropane	ug/L	ND	5.0	03/15/12 13:07	
2-Butanone (MEK)	ug/L	ND	25.0	03/15/12 13:07	
2-Chlorotoluene	ug/L	ND	5.0	03/15/12 13:07	
2-Hexanone	ug/L	ND	25.0	03/15/12 13:07	
4-Chlorotoluene	ug/L	ND	5.0	03/15/12 13:07	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	03/15/12 13:07	
Acetone	ug/L	ND	100	03/15/12 13:07	
Acrolein	ug/L	ND	50.0	03/15/12 13:07	
Acrylonitrile	ug/L	ND	100	03/15/12 13:07	
Benzene	ug/L	ND	5.0	03/15/12 13:07	
Bromobenzene	ug/L	ND	5.0	03/15/12 13:07	
Bromochloromethane	ug/L	ND	5.0	03/15/12 13:07	
Bromodichloromethane	ug/L	ND	5.0	03/15/12 13:07	
Bromoform	ug/L	ND	5.0	03/15/12 13:07	
Bromomethane	ug/L	ND	5.0	03/15/12 13:07	
Carbon disulfide	ug/L	ND	10.0	03/15/12 13:07	
Carbon tetrachloride	ug/L	ND	5.0	03/15/12 13:07	
Chlorobenzene	ug/L	ND	5.0	03/15/12 13:07	
Chloroethane	ug/L	ND	5.0	03/15/12 13:07	
Chloroform	ug/L	ND	5.0	03/15/12 13:07	
Chloromethane	ug/L	ND	5.0	03/15/12 13:07	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/15/12 13:07	
cis-1,3-Dichloropropene	ug/L	ND	5.0	03/15/12 13:07	
Dibromochloromethane	ug/L	ND	5.0	03/15/12 13:07	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Ivy Tower
Pace Project No.: 5059917001

METHOD BLANK: 704448 Matrix: Water

Associated Lab Samples: 5059917002, 5059917003, 5059917004, 5059917005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/L	ND	5.0	03/15/12 13:07	
Dichlorodifluoromethane	ug/L	ND	5.0	03/15/12 13:07	
Ethyl methacrylate	ug/L	ND	100	03/15/12 13:07	
Ethylbenzene	ug/L	ND	5.0	03/15/12 13:07	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	03/15/12 13:07	
Iodomethane	ug/L	ND	10.0	03/15/12 13:07	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	03/15/12 13:07	
Methyl-tert-butyl ether	ug/L	ND	4.0	03/15/12 13:07	
Methylene Chloride	ug/L	ND	5.0	03/15/12 13:07	
n-Butylbenzene	ug/L	ND	5.0	03/15/12 13:07	
n-Hexane	ug/L	ND	5.0	03/15/12 13:07	N2
n-Propylbenzene	ug/L	ND	5.0	03/15/12 13:07	
Naphthalene	ug/L	ND	5.0	03/15/12 13:07	
p-Isopropyltoluene	ug/L	ND	5.0	03/15/12 13:07	
sec-Butylbenzene	ug/L	ND	5.0	03/15/12 13:07	
Styrene	ug/L	ND	5.0	03/15/12 13:07	
tert-Butylbenzene	ug/L	ND	5.0	03/15/12 13:07	
Tetrachloroethene	ug/L	ND	5.0	03/15/12 13:07	
Toluene	ug/L	ND	5.0	03/15/12 13:07	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/15/12 13:07	
trans-1,3-Dichloropropene	ug/L	ND	5.0	03/15/12 13:07	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	03/15/12 13:07	
Trichloroethene	ug/L	ND	5.0	03/15/12 13:07	
Trichlorofluoromethane	ug/L	ND	5.0	03/15/12 13:07	
Vinyl acetate	ug/L	ND	50.0	03/15/12 13:07	
Vinyl chloride	ug/L	ND	2.0	03/15/12 13:07	
Xylene (Total)	ug/L	ND	10.0	03/15/12 13:07	
4-Bromofluorobenzene (S)	%.	98	72-125	03/15/12 13:07	
Dibromofluoromethane (S)	%.	91	83-123	03/15/12 13:07	
Toluene-d8 (S)	%.	101	81-114	03/15/12 13:07	

LABORATORY CONTROL SAMPLE: 704449

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	48.4	97	69-122	
1,1,1-Trichloroethane	ug/L	50	47.0	94	69-126	
1,1,2,2-Tetrachloroethane	ug/L	50	47.8	96	68-134	
1,1,2-Trichloroethane	ug/L	50	48.8	98	77-129	
1,1-Dichloroethane	ug/L	50	42.7	85	70-127	
1,1-Dichloroethene	ug/L	50	51.0	102	75-145	
1,1-Dichloropropene	ug/L	50	48.3	97	75-126	
1,2,3-Trichlorobenzene	ug/L	50	53.1	106	63-130	
1,2,3-Trichloropropane	ug/L	50	68.1	136	45-121 L3	
1,2,4-Trichlorobenzene	ug/L	50	52.2	104	64-122	
1,2,4-Trimethylbenzene	ug/L	50	50.6	101	68-129	

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QUALITY CONTROL DATA

Project: Ivy Tower
Pace Project No.: 5059917

LABORATORY CONTROL SAMPLE: 704449

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	50	48.1	96	77-123	
1,2-Dichlorobenzene	ug/L	50	52.5	105	74-123	
1,2-Dichloroethane	ug/L	50	50.2	100	71-127	
1,2-Dichloropropane	ug/L	50	48.8	98	75-126	
1,3,5-Trimethylbenzene	ug/L	50	49.0	98	69-129	
1,3-Dichlorobenzene	ug/L	50	52.6	105	76-123	
1,3-Dichloropropane	ug/L	50	49.0	98	77-126	
1,4-Dichlorobenzene	ug/L	50	50.6	101	77-121	
2,2-Dichloropropane	ug/L	50	45.4	91	45-138	
2-Butanone (MEK)	ug/L	250	247	99	42-177	
2-Chlorotoluene	ug/L	50	49.1	98	74-129	
2-Hexanone	ug/L	250	249	100	57-162	
4-Chlorotoluene	ug/L	50	50.7	101	70-125	
4-Methyl-2-pentanone (MIBK)	ug/L	250	249	100	64-135	
Acetone	ug/L	250	317	127	10-200	
Acrolein	ug/L	1000	1460	146	10-200	
Acrylonitrile	ug/L	1000	891	89	59-144	
Benzene	ug/L	50	49.0	98	76-123	
Bromobenzene	ug/L	50	60.3	121	67-130	
Bromochloromethane	ug/L	50	48.5	97	58-153	
Bromodichloromethane	ug/L	50	45.0	90	71-124	
Bromoform	ug/L	50	39.3	79	64-116	
Bromomethane	ug/L	50	53.2	106	23-197	
Carbon disulfide	ug/L	100	88.8	89	55-146	
Carbon tetrachloride	ug/L	50	43.6	87	65-125	
Chlorobenzene	ug/L	50	51.5	103	78-120	
Chloroethane	ug/L	50	61.6	123	56-163	
Chloroform	ug/L	50	44.1	88	73-122	
Chloromethane	ug/L	50	55.5	111	46-146	
cis-1,2-Dichloroethene	ug/L	50	47.2	94	79-129	
cis-1,3-Dichloropropene	ug/L	50	45.6	91	66-123	
Dibromochloromethane	ug/L	50	42.0	84	70-123	
Dibromomethane	ug/L	50	51.0	102	73-123	
Dichlorodifluoromethane	ug/L	50	54.3	109	19-200	
Ethyl methacrylate	ug/L	200	183	92	70-127	
Ethylbenzene	ug/L	50	49.2	98	75-120	
Hexachloro-1,3-butadiene	ug/L	50	49.1	98	64-131	
Iodomethane	ug/L	100	70.3	70	16-181	
Isopropylbenzene (Cumene)	ug/L	50	51.4	103	73-123	
Methyl-tert-butyl ether	ug/L	100	94.5	95	66-128	
Methylene Chloride	ug/L	50	47.4	95	61-138	
n-Butylbenzene	ug/L	50	51.8	104	69-130	
n-Hexane	ug/L	50	40.1	80	67-142 N2	
n-Propylbenzene	ug/L	50	48.7	97	71-132	
Naphthalene	ug/L	50	49.7	99	62-130	
p-Isopropyltoluene	ug/L	50	52.3	105	71-126	
sec-Butylbenzene	ug/L	50	49.5	99	69-130	
Styrene	ug/L	50	53.2	106	75-125	

QUALITY CONTROL DATA

Project: Ivy Tower
Pace Project No.: 5059917

LABORATORY CONTROL SAMPLE: 704449

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
tert-Butylbenzene	ug/L	50	39.4	79	49-114	
Tetrachloroethene	ug/L	50	50.2	100	57-125	
Toluene	ug/L	50	46.8	94	72-124	
trans-1,2-Dichloroethene	ug/L	50	47.2	94	71-145	
trans-1,3-Dichloropropene	ug/L	50	42.5	85	58-118	
trans-1,4-Dichloro-2-butene	ug/L	200	186	93	50-121	
Trichloroethene	ug/L	50	49.7	99	77-122	
Trichlorofluoromethane	ug/L	50	60.3	121	56-159	
Vinyl acetate	ug/L	200	171	86	27-119	
Vinyl chloride	ug/L	50	49.6	99	61-146	
Xylene (Total)	ug/L	150	147	98	72-126	
4-Bromofluorobenzene (S)	%.			102	72-125	
Dibromofluoromethane (S)	%.			104	83-123	
Toluene-d8 (S)	%.			99	81-114	



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QUALITY CONTROL DATA

Project: Ivy Tower
Pace Project No.: 5059917

QC Batch: MSV/40465 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 5059917006, 5059917007, 5059917008, 5059917009, 5059917010, 5059917011

METHOD BLANK: 704775 Matrix: Water

Associated Lab Samples: 5059917006, 5059917007, 5059917008, 5059917009, 5059917010, 5059917011

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	03/16/12 01:34	
1,1,1-Trichloroethane	ug/L	ND	5.0	03/16/12 01:34	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	03/16/12 01:34	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/16/12 01:34	
1,1-Dichloroethane	ug/L	ND	5.0	03/16/12 01:34	
1,1-Dichloroethene	ug/L	ND	5.0	03/16/12 01:34	
1,1-Dichloropropene	ug/L	ND	5.0	03/16/12 01:34	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	03/16/12 01:34	
1,2,3-Trichloropropane	ug/L	ND	5.0	03/16/12 01:34	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	03/16/12 01:34	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	03/16/12 01:34	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	03/16/12 01:34	
1,2-Dichlorobenzene	ug/L	ND	5.0	03/16/12 01:34	
1,2-Dichloroethane	ug/L	ND	5.0	03/16/12 01:34	
1,2-Dichloropropane	ug/L	ND	5.0	03/16/12 01:34	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	03/16/12 01:34	
1,3-Dichlorobenzene	ug/L	ND	5.0	03/16/12 01:34	
1,3-Dichloropropane	ug/L	ND	5.0	03/16/12 01:34	
1,4-Dichlorobenzene	ug/L	ND	5.0	03/16/12 01:34	
2,2-Dichloropropane	ug/L	ND	5.0	03/16/12 01:34	
2-Butanone (MEK)	ug/L	ND	25.0	03/16/12 01:34	
2-Chlorotoluene	ug/L	ND	5.0	03/16/12 01:34	
2-Hexanone	ug/L	ND	25.0	03/16/12 01:34	
4-Chlorotoluene	ug/L	ND	5.0	03/16/12 01:34	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	03/16/12 01:34	
Acetone	ug/L	ND	100	03/16/12 01:34	
Acrolein	ug/L	ND	50.0	03/16/12 01:34	
Acrylonitrile	ug/L	ND	100	03/16/12 01:34	
Benzene	ug/L	ND	5.0	03/16/12 01:34	
Bromobenzene	ug/L	ND	5.0	03/16/12 01:34	
Bromochloromethane	ug/L	ND	5.0	03/16/12 01:34	
Bromodichloromethane	ug/L	ND	5.0	03/16/12 01:34	
Bromoform	ug/L	ND	5.0	03/16/12 01:34	
Bromomethane	ug/L	ND	5.0	03/16/12 01:34	
Carbon disulfide	ug/L	ND	10.0	03/16/12 01:34	
Carbon tetrachloride	ug/L	ND	5.0	03/16/12 01:34	
Chlorobenzene	ug/L	ND	5.0	03/16/12 01:34	
Chloroethane	ug/L	ND	5.0	03/16/12 01:34	
Chloroform	ug/L	ND	5.0	03/16/12 01:34	
Chloromethane	ug/L	ND	5.0	03/16/12 01:34	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/16/12 01:34	
cis-1,3-Dichloropropene	ug/L	ND	5.0	03/16/12 01:34	
Dibromochloromethane	ug/L	ND	5.0	03/16/12 01:34	

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QUALITY CONTROL DATA

Project: Ivy Tower
Pace Project No.: 5059917

METHOD BLANK: 704775

Matrix: Water

Associated Lab Samples: 5059917006, 5059917007, 5059917008, 5059917009, 5059917010, 5059917011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/L	ND	5.0	03/16/12 01:34	
Dichlorodifluoromethane	ug/L	ND	5.0	03/16/12 01:34	
Ethyl methacrylate	ug/L	ND	100	03/16/12 01:34	
Ethylbenzene	ug/L	ND	5.0	03/16/12 01:34	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	03/16/12 01:34	
Iodomethane	ug/L	ND	10.0	03/16/12 01:34	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	03/16/12 01:34	
Methyl-tert-butyl ether	ug/L	ND	4.0	03/16/12 01:34	
Methylene Chloride	ug/L	ND	5.0	03/16/12 01:34	
n-Butylbenzene	ug/L	ND	5.0	03/16/12 01:34	
n-Hexane	ug/L	ND	5.0	03/16/12 01:34	N2
n-Propylbenzene	ug/L	ND	5.0	03/16/12 01:34	
Naphthalene	ug/L	ND	5.0	03/16/12 01:34	
p-Isopropyltoluene	ug/L	ND	5.0	03/16/12 01:34	
sec-Butylbenzene	ug/L	ND	5.0	03/16/12 01:34	
Styrene	ug/L	ND	5.0	03/16/12 01:34	
tert-Butylbenzene	ug/L	ND	5.0	03/16/12 01:34	
Tetrachloroethene	ug/L	ND	5.0	03/16/12 01:34	
Toluene	ug/L	ND	5.0	03/16/12 01:34	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/16/12 01:34	
trans-1,3-Dichloropropene	ug/L	ND	5.0	03/16/12 01:34	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	03/16/12 01:34	
Trichloroethene	ug/L	ND	5.0	03/16/12 01:34	
Trichlorofluoromethane	ug/L	ND	5.0	03/16/12 01:34	
Vinyl acetate	ug/L	ND	50.0	03/16/12 01:34	
Vinyl chloride	ug/L	ND	2.0	03/16/12 01:34	
Xylene (Total)	ug/L	ND	10.0	03/16/12 01:34	
4-Bromofluorobenzene (S)	%.	102	72-125	03/16/12 01:34	
Dibromofluoromethane (S)	%.	100	83-123	03/16/12 01:34	
Toluene-d8 (S)	%.	99	81-114	03/16/12 01:34	

LABORATORY CONTROL SAMPLE: 704776

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	51.1	102	69-122	
1,1,1-Trichloroethane	ug/L	50	52.3	105	69-126	
1,1,2,2-Tetrachloroethane	ug/L	50	48.1	96	68-134	
1,1,2-Trichloroethane	ug/L	50	51.1	102	77-129	
1,1-Dichloroethane	ug/L	50	55.1	110	70-127	
1,1-Dichloroethene	ug/L	50	59.2	118	75-145	
1,1-Dichloropropene	ug/L	50	52.8	106	75-126	
1,2,3-Trichlorobenzene	ug/L	50	47.5	95	63-130	
1,2,3-Trichloropropane	ug/L	50	60.9	122	45-121 L3	
1,2,4-Trichlorobenzene	ug/L	50	46.7	93	64-122	
1,2,4-Trimethylbenzene	ug/L	50	50.1	100	68-129	

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QUALITY CONTROL DATA

Project: Ivy Tower
Pace Project No.: 5059917

LABORATORY CONTROL SAMPLE: 704776

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	50	50.1	100	77-123	
1,2-Dichlorobenzene	ug/L	50	52.9	106	74-123	
1,2-Dichloroethane	ug/L	50	50.6	101	71-127	
1,2-Dichloropropane	ug/L	50	53.4	107	75-126	
1,3,5-Trimethylbenzene	ug/L	50	50.4	101	69-129	
1,3-Dichlorobenzene	ug/L	50	52.2	104	76-123	
1,3-Dichloropropane	ug/L	50	51.1	102	77-126	
1,4-Dichlorobenzene	ug/L	50	50.5	101	77-121	
2,2-Dichloropropane	ug/L	50	49.6	99	45-138	
2-Butanone (MEK)	ug/L	250	252	101	42-177	
2-Chlorotoluene	ug/L	50	49.8	100	74-129	
2-Hexanone	ug/L	250	255	102	57-162	
4-Chlorotoluene	ug/L	50	48.9	98	70-125	
4-Methyl-2-pentanone (MIBK)	ug/L	250	258	103	64-135	
Acetone	ug/L	250	286	114	10-200	
Acrolein	ug/L	1000	1550	155	10-200	
Acrylonitrile	ug/L	1000	1090	109	59-144	
Benzene	ug/L	50	51.2	102	76-123	
Bromobenzene	ug/L	50	61.4	123	67-130	
Bromochloromethane	ug/L	50	49.2	98	58-153	
Bromodichloromethane	ug/L	50	49.1	98	71-124	
Bromoform	ug/L	50	39.7	79	64-116	
Bromomethane	ug/L	50	67.8	136	23-197	
Carbon disulfide	ug/L	100	106	106	55-146	
Carbon tetrachloride	ug/L	50	48.9	98	65-125	
Chlorobenzene	ug/L	50	55.2	110	78-120	
Chloroethane	ug/L	50	70.7	141	56-163	
Chloroform	ug/L	50	46.0	92	73-122	
Chloromethane	ug/L	50	58.6	117	46-146	
cis-1,2-Dichloroethene	ug/L	50	52.2	104	79-129	
cis-1,3-Dichloropropene	ug/L	50	46.7	93	66-123	
Dibromochloromethane	ug/L	50	44.2	88	70-123	
Dibromomethane	ug/L	50	54.7	109	73-123	
Dichlorodifluoromethane	ug/L	50	61.3	123	19-200	
Ethyl methacrylate	ug/L	200	185	93	70-127	
Ethylbenzene	ug/L	50	53.0	106	75-120	
Hexachloro-1,3-butadiene	ug/L	50	50.5	101	64-131	
Iodomethane	ug/L	100	97.9	98	16-181	
Isopropylbenzene (Cumene)	ug/L	50	56.4	113	73-123	
Methyl-tert-butyl ether	ug/L	100	106	106	66-128	
Methylene Chloride	ug/L	50	55.9	112	61-138	
n-Butylbenzene	ug/L	50	53.2	106	69-130	
n-Hexane	ug/L	50	50.3	101	67-142 N2	
n-Propylbenzene	ug/L	50	51.0	102	71-132	
Naphthalene	ug/L	50	46.9	94	62-130	
p-Isopropyltoluene	ug/L	50	54.9	110	71-126	
sec-Butylbenzene	ug/L	50	53.1	106	69-130	
Styrene	ug/L	50	54.5	109	75-125	

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QUALITY CONTROL DATA

Project: Ivy Tower
Pace Project No.: 5059917

LABORATORY CONTROL SAMPLE: 704776

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
tert-Butylbenzene	ug/L	50	41.3	83	49-114	
Tetrachloroethene	ug/L	50	55.6	111	57-125	
Toluene	ug/L	50	50.7	101	72-124	
trans-1,2-Dichloroethene	ug/L	50	57.2	114	71-145	
trans-1,3-Dichloropropene	ug/L	50	42.6	85	58-118	
trans-1,4-Dichloro-2-butene	ug/L	200	151	75	50-121	
Trichloroethene	ug/L	50	56.5	113	77-122	
Trichlorofluoromethane	ug/L	50	68.5	137	56-159	
Vinyl acetate	ug/L	200	195	97	27-119	
Vinyl chloride	ug/L	50	53.4	107	61-146	
Xylene (Total)	ug/L	150	158	105	72-126	
4-Bromofluorobenzene (S)	%.			100	72-125	
Dibromofluoromethane (S)	%.			102	83-123	
Toluene-d8 (S)	%.			97	81-114	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 704777 704778

Parameter	Units	5059517001		MS Spike Conc.		MSD Spike Conc.		MS Result		MSD Result		MS % Rec		MSD % Rec		% Rec Limits		Max RPD		Max RPD		Qual	
		Result	Conc.	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	
1,1,1,2-Tetrachloroethane	ug/L	ND	50	50	43.8	43.8	88	88	30-122	.02	20												
1,1,1-Trichloroethane	ug/L	ND	50	50	45.5	43.8	91	88	37-136	4	20												
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	44.4	42.0	89	84	47-132	6	20												
1,1,2-Trichloroethane	ug/L	ND	50	50	48.5	45.8	97	92	53-131	6	20												
1,1-Dichloroethane	ug/L	ND	50	50	56.4	54.1	113	108	47-138	4	20												
1,1-Dichloroethene	ug/L	ND	50	50	51.7	50.8	103	102	54-152	2	20												
1,1-Dichloropropene	ug/L	ND	50	50	50.6	46.2	101	92	47-136	9	20												
1,2,3-Trichlorobenzene	ug/L	ND	50	50	47.8	44.3	96	89	15-132	8	20												
1,2,3-Trichloropropane	ug/L	ND	50	50	56.7	55.0	113	110	24-108	3	20	M0											
1,2,4-Trichlorobenzene	ug/L	ND	50	50	47.9	44.6	96	89	10-130	7	20												
1,2,4-Trimethylbenzene	ug/L	ND	50	50	38.9	34.6	78	69	10-141	12	20												
1,2-Dibromoethane (EDB)	ug/L	ND	50	50	47.6	43.7	95	87	49-130	9	20												
1,2-Dichlorobenzene	ug/L	ND	50	50	53.4	49.5	107	99	20-137	8	20												
1,2-Dichloroethane	ug/L	ND	50	50	51.9	47.6	104	95	42-139	9	20												
1,2-Dichloropropene	ug/L	ND	50	50	51.4	48.3	103	97	50-131	6	20												
1,3,5-Trimethylbenzene	ug/L	ND	50	50	34.8	31.1	70	62	10-145	11	20												
1,3-Dichlorobenzene	ug/L	ND	50	50	52.6	47.8	105	96	13-143	10	20												
1,3-Dichloropropane	ug/L	ND	50	50	49.6	47.2	99	94	53-130	5	20												
1,4-Dichlorobenzene	ug/L	ND	50	50	51.0	46.9	102	94	13-140	9	20												
2,2-Dichloropropane	ug/L	ND	50	50	40.6	39.6	81	79	13-142	3	20												
2-Butanone (MEK)	ug/L	ND	250	250	277	236	111	95	43-142	16	20												
2-Chlorotoluene	ug/L	ND	50	50	48.8	45.6	98	91	15-145	7	20												
2-Hexanone	ug/L	ND	250	250	242	226	97	90	46-139	7	20												
4-Chlorotoluene	ug/L	ND	50	50	49.2	47.8	98	96	12-143	3	20												
4-Methyl-2-pentanone (MIBK)	ug/L	ND	250	250	244	226	98	90	43-140	8	20												
Acetone	ug/L	ND	250	250	263	240	105	96	38-155	9	20												
Acrolein	ug/L	ND	1000	1000	1260	1190	126	119	11-200	6	20												
Acrylonitrile	ug/L	ND	1000	1000	968	908	97	91	42-150	6	20												

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QUALITY CONTROL DATA

Project: Ivy Tower
Pace Project No.: 5059917

Parameter	Units	5059517001		MS Spike		MSD Spike		MS Result		MSD Result		% Rec		Max		
		Result	Conc.	Conc.	MSD	MS	MSD	MS	% Rec	MSD	% Rec	% Rec	Limits	RPD	RPD	Qual
Benzene	ug/L	ND	50	50	52.0	48.3	104	97	52-134	7	20					
Bromobenzene	ug/L	ND	50	50	50.5	53.5	101	107	25-140	6	20					
Bromoform	ug/L	ND	50	50	42.9	42.6	86	85	54-144	10	20					
Bromomethane	ug/L	ND	50	50	34.9	34.8	70	70	42-128	.5	20					
Bromoform	ug/L	ND	50	50	59.6	63.1	119	126	34-116	.3	20					
Carbon disulfide	ug/L	ND	100	100	93.7	92.9	94	93	43-144	.8	20					
Carbon tetrachloride	ug/L	ND	50	50	38.4	39.5	77	79	26-136	3	20					
Chlorobenzene	ug/L	ND	50	50	54.4	50.5	109	101	33-136	7	20					
Chloroethane	ug/L	ND	50	50	59.1	57.1	118	114	21-200	3	20					
Chloroform	ug/L	ND	50	50	46.4	43.2	93	86	50-134	7	20					
Chloromethane	ug/L	ND	50	50	52.8	48.4	106	97	32-160	9	20					
cis-1,2-Dichloroethene	ug/L		50	50	53.6	49.2	107	98	48-145	9	20					
cis-1,3-Dichloropropene	ug/L	ND	50	50	41.1	39.8	82	80	35-116	3	20					
Dibromochloromethane	ug/L	ND	50	50	37.7	37.5	75	75	39-122	.6	20					
Dibromomethane	ug/L	ND	50	50	51.9	48.9	104	98	49-134	6	20					
Dichlorodifluoromethane	ug/L	ND	50	50	52.3	47.9	105	96	35-200	9	20					
Ethyl methacrylate	ug/L	ND	200	200	155	146	77	73	54-123	5	20					
Ethylbenzene	ug/L	ND	50	50	49.5	47.0	99	94	29-132	5	20					
Hexachloro-1,3-butadiene	ug/L	ND	50	50	47.2	42.7	94	85	10-146	10	20					
Iodomethane	ug/L	ND	100	100	93.5	92.7	93	93	10-171	.8	20					
Isopropylbenzene (Cumene)	ug/L	ND	50	50	53.0	49.9	106	100	11-146	6	20					
Methyl-tert-butyl ether	ug/L	ND	100	100	102	96.6	102	97	39-137	6	20					
Methylene Chloride	ug/L	ND	50	50	48.0	46.3	96	93	47-141	4	20					
n-Butylbenzene	ug/L	ND	50	50	49.4	45.0	99	90	10-156	9	20					
n-Hexane	ug/L	ND	50	50	43.6	43.1	87	86	51-137	1	20	N2				
n-Propylbenzene	ug/L	ND	50	50	46.8	44.0	94	88	10-148	6	20					
Naphthalene	ug/L	ND	50	50	43.2	39.3	86	79	40-124	10	20					
p-Isopropyltoluene	ug/L	ND	50	50	49.3	45.0	99	90	10-150	9	20					
sec-Butylbenzene	ug/L	ND	50	50	50.7	47.0	101	94	10-150	8	20					
Styrene	ug/L	ND	50	50	35.4	31.8	71	64	20-143	11	20					
tert-Butylbenzene	ug/L	ND	50	50	42.0	38.6	84	77	10-123	8	20					
Tetrachloroethene	ug/L	ND	50	50	51.1	48.1	102	96	30-124	6	20					
Toluene	ug/L	ND	50	50	46.8	43.1	94	86	42-130	8	20					
trans-1,2-Dichloroethene	ug/L		50	50	50.7	50.0	101	100	48-144	1	20					
trans-1,3-Dichloropropene	ug/L	ND	50	50	36.2	35.6	72	71	24-114	2	20					
trans-1,4-Dichloro-2-butene	ug/L	ND	200	200	157	139	79	70	22-120	12	20					
Trichloroethene	ug/L	ND	50	50	54.0	50.5	108	101	44-130	7	20					
Trichlorofluoromethane	ug/L	ND	50	50	59.0	59.4	118	119	17-200	.8	20					
Vinyl acetate	ug/L	ND	200	200	126	125	63	62	10-115	1	20					
Vinyl chloride	ug/L	ND	50	50	48.3	45.1	97	90	45-159	7	20					
Xylene (Total)	ug/L	ND	150	150	138	127	92	85	29-131	8	20					
4-Bromofluorobenzene (S)	%						101	102	72-125		20					
Dibromofluoromethane (S)	%						103	102	83-123		20					
Toluene-d8 (S)	%						96	97	81-114		20					

QUALITY CONTROL DATA

Project: Ivy Tower

Pace Project No.: 5059917

QC Batch: MSV/40490

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV

Associated Lab Samples: 5059917001

METHOD BLANK: 705467

Matrix: Water

Associated Lab Samples: 5059917001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	03/16/12 17:20	
1,1,1-Trichloroethane	ug/L	ND	5.0	03/16/12 17:20	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	03/16/12 17:20	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/16/12 17:20	
1,1-Dichloroethane	ug/L	ND	5.0	03/16/12 17:20	
1,1-Dichloroethene	ug/L	ND	5.0	03/16/12 17:20	
1,1-Dichloropropene	ug/L	ND	5.0	03/16/12 17:20	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	03/16/12 17:20	
1,2,3-Trichloropropane	ug/L	ND	5.0	03/16/12 17:20	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	03/16/12 17:20	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	03/16/12 17:20	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	03/16/12 17:20	
1,2-Dichlorobenzene	ug/L	ND	5.0	03/16/12 17:20	
1,2-Dichloroethane	ug/L	ND	5.0	03/16/12 17:20	
1,2-Dichloropropane	ug/L	ND	5.0	03/16/12 17:20	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	03/16/12 17:20	
1,3-Dichlorobenzene	ug/L	ND	5.0	03/16/12 17:20	
1,3-Dichloropropane	ug/L	ND	5.0	03/16/12 17:20	
1,4-Dichlorobenzene	ug/L	ND	5.0	03/16/12 17:20	
2,2-Dichloropropane	ug/L	ND	5.0	03/16/12 17:20	
2-Butanone (MEK)	ug/L	ND	25.0	03/16/12 17:20	
2-Chlorotoluene	ug/L	ND	5.0	03/16/12 17:20	
2-Hexanone	ug/L	ND	25.0	03/16/12 17:20	
4-Chlorotoluene	ug/L	ND	5.0	03/16/12 17:20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	03/16/12 17:20	
Acetone	ug/L	ND	100	03/16/12 17:20	
Acrolein	ug/L	ND	50.0	03/16/12 17:20	
Acrylonitrile	ug/L	ND	100	03/16/12 17:20	
Benzene	ug/L	ND	5.0	03/16/12 17:20	
Bromobenzene	ug/L	ND	5.0	03/16/12 17:20	
Bromochloromethane	ug/L	ND	5.0	03/16/12 17:20	
Bromodichloromethane	ug/L	ND	5.0	03/16/12 17:20	
Bromoform	ug/L	ND	5.0	03/16/12 17:20	
Bromomethane	ug/L	ND	5.0	03/16/12 17:20	
Carbon disulfide	ug/L	ND	10.0	03/16/12 17:20	
Carbon tetrachloride	ug/L	ND	5.0	03/16/12 17:20	
Chlorobenzene	ug/L	ND	5.0	03/16/12 17:20	
Chloroethane	ug/L	ND	5.0	03/16/12 17:20	
Chloroform	ug/L	ND	5.0	03/16/12 17:20	
Chloromethane	ug/L	ND	5.0	03/16/12 17:20	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/16/12 17:20	
cis-1,3-Dichloropropene	ug/L	ND	5.0	03/16/12 17:20	
Dibromochloromethane	ug/L	ND	5.0	03/16/12 17:20	

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QUALITY CONTROL DATA

Project: Ivy Tower
Pace Project No.: 5059917

METHOD BLANK: 705467

Matrix: Water

Associated Lab Samples: 5059917001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/L	ND	5.0	03/16/12 17:20	
Dichlorodifluoromethane	ug/L	ND	5.0	03/16/12 17:20	
Ethyl methacrylate	ug/L	ND	100	03/16/12 17:20	
Ethylbenzene	ug/L	ND	5.0	03/16/12 17:20	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	03/16/12 17:20	
Iodomethane	ug/L	ND	10.0	03/16/12 17:20	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	03/16/12 17:20	
Methyl-tert-butyl ether	ug/L	ND	4.0	03/16/12 17:20	
Methylene Chloride	ug/L	ND	5.0	03/16/12 17:20	
n-Butylbenzene	ug/L	ND	5.0	03/16/12 17:20	
n-Hexane	ug/L	ND	5.0	03/16/12 17:20	N2
n-Propylbenzene	ug/L	ND	5.0	03/16/12 17:20	
Naphthalene	ug/L	ND	5.0	03/16/12 17:20	
p-Isopropyltoluene	ug/L	ND	5.0	03/16/12 17:20	
sec-Butylbenzene	ug/L	ND	5.0	03/16/12 17:20	
Styrene	ug/L	ND	5.0	03/16/12 17:20	
tert-Butylbenzene	ug/L	ND	5.0	03/16/12 17:20	
Tetrachloroethene	ug/L	ND	5.0	03/16/12 17:20	
Toluene	ug/L	ND	5.0	03/16/12 17:20	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/16/12 17:20	
trans-1,3-Dichloropropene	ug/L	ND	5.0	03/16/12 17:20	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	03/16/12 17:20	
Trichloroethene	ug/L	ND	5.0	03/16/12 17:20	
Trichlorofluoromethane	ug/L	ND	5.0	03/16/12 17:20	
Vinyl acetate	ug/L	ND	50.0	03/16/12 17:20	
Vinyl chloride	ug/L	ND	2.0	03/16/12 17:20	
Xylene (Total)	ug/L	ND	10.0	03/16/12 17:20	
4-Bromofluorobenzene (S)	%.	103	72-125	03/16/12 17:20	
Dibromofluoromethane (S)	%.	101	83-123	03/16/12 17:20	
Toluene-d8 (S)	%.	97	81-114	03/16/12 17:20	

LABORATORY CONTROL SAMPLE: 705468

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	45.0	90	69-122	
1,1,1-Trichloroethane	ug/L	50	46.3	93	69-126	
1,1,2,2-Tetrachloroethane	ug/L	50	54.5	109	68-134	
1,1,2-Trichloroethane	ug/L	50	52.9	106	77-129	
1,1-Dichloroethane	ug/L	50	56.6	113	70-127	
1,1-Dichloroethene	ug/L	50	50.8	102	75-145	
1,1-Dichloropropene	ug/L	50	50.4	101	75-126	
1,2,3-Trichlorobenzene	ug/L	50	57.1	114	63-130	
1,2,3-Trichloropropane	ug/L	50	67.4	135	45-121 L3	
1,2,4-Trichlorobenzene	ug/L	50	58.9	118	64-122	
1,2,4-Trimethylbenzene	ug/L	50	51.5	103	68-129	

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QUALITY CONTROL DATA

Project: Ivy Tower
Pace Project No.: 5059917

LABORATORY CONTROL SAMPLE: 705468

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	50	50.3	101	77-123	
1,2-Dichlorobenzene	ug/L	50	52.4	105	74-123	
1,2-Dichloroethane	ug/L	50	53.3	107	71-127	
1,2-Dichloropropane	ug/L	50	52.0	104	75-126	
1,3,5-Trimethylbenzene	ug/L	50	51.3	103	69-129	
1,3-Dichlorobenzene	ug/L	50	51.7	103	76-123	
1,3-Dichloropropane	ug/L	50	48.2	96	77-126	
1,4-Dichlorobenzene	ug/L	50	51.2	102	77-121	
2,2-Dichloropropane	ug/L	50	44.1	88	45-138	
2-Butanone (MEK)	ug/L	250	262	105	42-177	
2-Chlorotoluene	ug/L	50	50.7	101	74-129	
2-Hexanone	ug/L	250	261	105	57-162	
4-Chlorotoluene	ug/L	50	52.3	105	70-125	
4-Methyl-2-pentanone (MIBK)	ug/L	250	262	105	64-135	
Acetone	ug/L	250	266	106	10-200	
Acrolein	ug/L	1000	1390	139	10-200	
Acrylonitrile	ug/L	1000	872	87	59-144	
Benzene	ug/L	50	48.6	97	76-123	
Bromobenzene	ug/L	50	60.0	120	67-130	
Bromochloromethane	ug/L	50	50.5	101	58-153	
Bromodichloromethane	ug/L	50	44.8	90	71-124	
Bromoform	ug/L	50	36.2	72	64-116	
Bromomethane	ug/L	50	53.0	106	23-197	
Carbon disulfide	ug/L	100	93.3	93	55-146	
Carbon tetrachloride	ug/L	50	39.9	80	65-125	
Chlorobenzene	ug/L	50	53.3	107	78-120	
Chloroethane	ug/L	50	51.9	104	56-163	
Chloroform	ug/L	50	47.8	96	73-122	
Chloromethane	ug/L	50	49.8	100	46-146	
cis-1,2-Dichloroethene	ug/L	50	52.0	104	79-129	
cis-1,3-Dichloropropene	ug/L	50	43.2	86	66-123	
Dibromochloromethane	ug/L	50	39.8	80	70-123	
Dibromomethane	ug/L	50	52.3	105	73-123	
Dichlorodifluoromethane	ug/L	50	50.2	100	19-200	
Ethyl methacrylate	ug/L	200	185	92	70-127	
Ethylbenzene	ug/L	50	50.8	102	75-120	
Hexachloro-1,3-butadiene	ug/L	50	58.4	117	64-131	
Iodomethane	ug/L	100	101	101	16-181	
Isopropylbenzene (Cumene)	ug/L	50	53.7	107	73-123	
Methyl-tert-butyl ether	ug/L	100	96.7	97	66-128	
Methylene Chloride	ug/L	50	52.4	105	61-138	
n-Butylbenzene	ug/L	50	52.4	105	69-130	
n-Hexane	ug/L	50	43.7	87	67-142 N2	
n-Propylbenzene	ug/L	50	50.4	101	71-132	
Naphthalene	ug/L	50	58.5	117	62-130	
p-Isopropyltoluene	ug/L	50	53.6	107	71-126	
sec-Butylbenzene	ug/L	50	51.8	104	69-130	
Styrene	ug/L	50	55.3	111	75-125	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Ivy Tower
Pace Project No.: 5059917

LABORATORY CONTROL SAMPLE: 705468

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
tert-Butylbenzene	ug/L	50	44.1	88	49-114	
Tetrachloroethene	ug/L	50	50.7	101	57-125	
Toluene	ug/L	50	47.9	96	72-124	
trans-1,2-Dichloroethene	ug/L	50	48.1	96	71-145	
trans-1,3-Dichloropropene	ug/L	50	40.0	80	58-118	
trans-1,4-Dichloro-2-butene	ug/L	200	178	89	50-121	
Trichloroethene	ug/L	50	54.9	110	77-122	
Trichlorofluoromethane	ug/L	50	51.9	104	56-159	
Vinyl acetate	ug/L	200	176	88	27-119	
Vinyl chloride	ug/L	50	48.2	96	61-146	
Xylene (Total)	ug/L	150	154	102	72-126	
4-Bromofluorobenzene (S)	%.			101	72-125	
Dibromofluoromethane (S)	%.			98	83-123	
Toluene-d8 (S)	%.			95	81-114	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 705469 705470

Parameter	Units	5059713004		MS Spike Conc.		MSD Spike Conc.		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Result	Conc.	Result	Conc.								
1,1,1,2-Tetrachloroethane	ug/L	ND	50	50	46.8	52.0	94	104	30-122	11	20				
1,1,1-Trichloroethane	ug/L	ND	50	50	50.4	52.6	101	105	37-136	4	20				
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	52.4	52.3	105	105	47-132	.3	20				
1,1,2-Trichloroethane	ug/L	ND	50	50	55.2	49.3	110	99	53-131	11	20				
1,1-Dichloroethane	ug/L	ND	50	50	60.0	61.6	120	123	47-138	3	20				
1,1-Dichloroethene	ug/L	ND	50	50	55.1	54.2	110	108	54-152	2	20				
1,1-Dichloropropene	ug/L	ND	50	50	55.2	53.8	110	108	47-136	3	20				
1,2,3-Trichlorobenzene	ug/L	ND	50	50	49.7	55.9	99	112	15-132	12	20				
1,2,3-Trichloropropane	ug/L	ND	50	50	65.0	68.3	130	137	24-108	5	20 M0				
1,2,4-Trichlorobenzene	ug/L	ND	50	50	50.7	58.9	101	118	10-130	15	20				
1,2,4-Trimethylbenzene	ug/L	ND	50	50	44.3	51.1	88	102	10-141	14	20				
1,2-Dibromoethane (EDB)	ug/L	ND	50	50	50.7	49.3	101	99	49-130	3	20				
1,2-Dichlorobenzene	ug/L	ND	50	50	50.8	55.4	102	111	20-137	9	20				
1,2-Dichloroethane	ug/L	ND	50	50	57.9	54.6	116	109	42-139	6	20				
1,2-Dichloropropane	ug/L	ND	50	50	57.3	53.9	115	108	50-131	6	20				
1,3,5-Trimethylbenzene	ug/L	ND	50	50	45.4	50.0	91	100	10-145	10	20				
1,3-Dichlorobenzene	ug/L	ND	50	50	47.8	53.3	96	107	13-143	11	20				
1,3-Dichloropropane	ug/L	ND	50	50	50.5	46.5	101	93	53-130	8	20				
1,4-Dichlorobenzene	ug/L	ND	50	50	46.8	52.8	94	106	13-140	12	20				
2,2-Dichloropropane	ug/L	ND	50	50	46.1	52.4	92	105	13-142	13	20				
2-Butanone (MEK)	ug/L	ND	250	250	293	255	117	102	43-142	14	20				
2-Chlorotoluene	ug/L	ND	50	50	46.3	50.5	93	101	15-145	9	20				
2-Hexanone	ug/L	ND	250	250	261	228	104	91	46-139	13	20				
4-Chlorotoluene	ug/L	ND	50	50	48.2	53.2	96	106	12-143	10	20				
4-Methyl-2-pentanone (MIBK)	ug/L	ND	250	250	258	227	103	91	43-140	13	20				
Acetone	ug/L	ND	250	250	275	268	110	107	38-155	3	20				
Acrolein	ug/L	ND	1000	1000	1230	1190	123	119	11-200	3	20				
Acrylonitrile	ug/L	ND	1000	1000	982	981	98	98	42-150	.1	20				

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Ivy Tower
Pace Project No.: 5059917

Parameter	Units	5059713004		MS Spike		MSD Spike		MS Result		MSD Result		% Rec		Max	
		Result	Conc.	Conc.	Result	Conc.	Result	Result	% Rec	Result	% Rec	Limits	RPD	RPD	Qual
Benzene	ug/L	ND	50	50	53.3	51.6	107	103	52-134	3	20				
Bromobenzene	ug/L	ND	50	50	58.0	53.0	116	106	25-140	9	20				
Bromoform	ug/L	ND	50	50	48.5	49.7	97	99	42-128	2	20				
Bromomethane	ug/L	ND	50	50	37.6	41.0	75	82	34-116	8	20				
Chlorobenzene	ug/L	ND	50	50	61.0	64.6	122	129	10-200	6	20				
Chloroethane	ug/L	ND	50	50	53.8	54.7	108	109	33-136	2	20				
Chloroform	ug/L	ND	50	50	57.3	56.9	115	114	21-200	.7	20				
Dibromochloromethane	ug/L	ND	50	50	53.3	51.8	107	104	32-160	3	20				
Dichlorodifluoromethane	ug/L	ND	50	50	58.2	56.4	116	113	48-145	3	20				
Ethyl methacrylate	ug/L	ND	200	200	185	180	92	90	54-123	3	20				
Ethylbenzene	ug/L	ND	50	50	48.4	50.6	97	101	29-132	4	20				
Hexachloro-1,3-butadiene	ug/L	ND	50	50	40.5	57.6	81	115	10-146	35	20	R1			
Iodomethane	ug/L	ND	100	100	106	112	106	112	10-171	6	20				
Isopropylbenzene (Cumene)	ug/L	ND	50	50	50.9	55.0	102	110	11-146	8	20				
Methyl-tert-butyl ether	ug/L	ND	100	100	106	104	106	104	39-137	2	20				
Methylene Chloride	ug/L	ND	50	50	58.1	57.7	116	115	47-141	.8	20				
n-Butylbenzene	ug/L	ND	50	50	40.5	51.5	81	103	10-156	24	20	R1			
n-Hexane	ug/L	ND	50	50	48.9	48.6	98	97	51-137	.6	20	N2			
n-Propylbenzene	ug/L	ND	50	50	44.2	49.6	88	99	10-148	11	20				
Naphthalene	ug/L	ND	50	50	51.6	55.0	103	110	40-124	6	20				
p-Isopropyltoluene	ug/L	ND	50	50	44.2	52.8	88	106	10-150	18	20				
sec-Butylbenzene	ug/L	ND	50	50	44.5	52.2	89	104	10-150	16	20				
Styrene	ug/L	ND	50	50	54.1	56.3	108	113	20-143	4	20				
tert-Butylbenzene	ug/L	ND	50	50	38.8	44.4	78	89	10-123	13	20				
Tetrachloroethene	ug/L	ND	50	50	49.7	48.9	99	98	30-124	2	20				
Toluene	ug/L	ND	50	50	48.6	47.3	97	95	42-130	3	20				
trans-1,2-Dichloroethene	ug/L	ND	50	50	54.7	54.8	109	110	48-144	.04	20				
trans-1,3-Dichloropropene	ug/L	ND	50	50	40.3	42.3	81	85	24-114	5	20				
trans-1,4-Dichloro-2-butene	ug/L	ND	200	200	178	176	89	88	22-120	1	20				
Trichloroethene	ug/L	ND	50	50	56.3	57.0	113	114	44-130	1	20				
Trichlorofluoromethane	ug/L	ND	50	50	55.6	55.3	111	111	17-200	.6	20				
Vinyl acetate	ug/L	ND	200	200	163	177	82	88	10-115	8	20				
Vinyl chloride	ug/L	ND	50	50	55.8	54.1	112	108	45-159	3	20				
Xylene (Total)	ug/L	ND	150	150	150	157	100	104	29-131	5	20				
4-Bromofluorobenzene (S)	%						102	101	72-125		20				
Dibromofluoromethane (S)	%						103	102	83-123		20				
Toluene-d8 (S)	%						96	92	81-114		20				



Pace Analytical Services, Inc.

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Columbus, OH 43215

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Pace Analytical Services, Inc.

7726 Moller Road

Indianapolis, IN 46268

(317)875-5894

QUALITY CONTROL DATA

Project: Ivy Tower
Pace Project No.: 5059917

QC Batch: OEXT/29044 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3510 Analysis Description: 8270 Water PAH by SIM MSSV
Associated Lab Samples: 5059917001, 5059917002, 5059917003, 5059917004, 5059917005, 5059917006, 5059917007

METHOD BLANK: 703604 Matrix: Water

Associated Lab Samples: 5059917001, 5059917002, 5059917003, 5059917004, 5059917005, 5059917006, 5059917007

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
Benzo(a)anthracene	ug/L	ND	0.10	03/15/12 19:15	
Benzo(a)pyrene	ug/L	ND	0.10	03/15/12 19:15	
Benzo(b)fluoranthene	ug/L	ND	0.10	03/15/12 19:15	
Benzo(k)fluoranthene	ug/L	ND	0.10	03/15/12 19:15	
Chrysene	ug/L	ND	0.50	03/15/12 19:15	
Dibenz(a,h)anthracene	ug/L	ND	0.10	03/15/12 19:15	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.10	03/15/12 19:15	
Naphthalene	ug/L	ND	1.0	03/15/12 19:15	
2-Fluorobiphenyl (S)	%.	60	26-106	03/15/12 19:15	
p-Terphenyl-d14 (S)	%.	84	16-111	03/15/12 19:15	

LABORATORY CONTROL SAMPLE: 703605

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzo(a)anthracene	ug/L	10	8.1	81	51-119	
Benzo(a)pyrene	ug/L	10	8.4	84	52-124	
Benzo(b)fluoranthene	ug/L	10	8.0	80	51-122	
Benzo(k)fluoranthene	ug/L	10	8.6	86	53-123	
Chrysene	ug/L	10	8.9	89	54-118	
Dibenz(a,h)anthracene	ug/L	10	7.3	73	49-114	
Indeno(1,2,3-cd)pyrene	ug/L	10	7.4	74	49-114	
Naphthalene	ug/L	10	6.7	67	27-103	
2-Fluorobiphenyl (S)	%.			70	26-106	
p-Terphenyl-d14 (S)	%.			81	16-111	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 703606 703607

Parameter	Units	Result	MS		MSD		MS		MSD		% Rec	Max	
			Spike Conc.	MS Result	Spike Conc.	MSD Result	% Rec	% Rec	% Rec	% Rec	Limits	RPD	RPD
Benzo(a)anthracene	ug/L	ND	20	20	3.6	8.4	18	42	31-102	80	20	M0,R1	
Benzo(a)pyrene	ug/L	ND	20	20	2.6	5.5	13	28	10-93	73	20	R1	
Benzo(b)fluoranthene	ug/L	ND	20	20	2.5	5.7	12	29	11-93	80	20	R1	
Benzo(k)fluoranthene	ug/L	ND	20	20	3.0	5.9	15	29	12-91	65	20	R1	
Chrysene	ug/L	ND	20	20	4.2	8.4	21	42	34-99	67	20	M0,R1	
Dibenz(a,h)anthracene	ug/L	ND	20	20	1.2	3.1	6	15	10-79	86	20	M0,R1	
Indeno(1,2,3-cd)pyrene	ug/L	ND	20	20	1.4	3.4	7	17	10-79	82	20	M0,R1	
Naphthalene	ug/L	2.9	20	20	5.2	15.6	12	64	23-107	101	20	M0,R1	
2-Fluorobiphenyl (S)	%.						23	68	26-106		20	R1,S0	
p-Terphenyl-d14 (S)	%.						15	33	16-111		20	R1,S0	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Ivy Tower
Pace Project No.: 5059917

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

- L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
- M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
- N2 The lab does not hold TNI accreditation for this parameter.
- R1 RPD value was outside control limits.
- S0 Surrogate recovery outside laboratory control limits.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ivy Tower
Pace Project No.: 5059917

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5059917001	GP-1	EPA 3510	OEXT/29044	EPA 8270 by SIM	MSSV/9769
5059917002	GP-2	EPA 3510	OEXT/29044	EPA 8270 by SIM	MSSV/9769
5059917003	GP-3	EPA 3510	OEXT/29044	EPA 8270 by SIM	MSSV/9769
5059917004	GP-4	EPA 3510	OEXT/29044	EPA 8270 by SIM	MSSV/9769
5059917005	GP-5	EPA 3510	OEXT/29044	EPA 8270 by SIM	MSSV/9769
5059917006	GP-6	EPA 3510	OEXT/29044	EPA 8270 by SIM	MSSV/9769
5059917007	GP-7	EPA 3510	OEXT/29044	EPA 8270 by SIM	MSSV/9769
5059917001	GP-1	EPA 8260	MSV/40490		
5059917002	GP-2	EPA 8260	MSV/40453		
5059917003	GP-3	EPA 8260	MSV/40453		
5059917004	GP-4	EPA 8260	MSV/40453		
5059917005	GP-5	EPA 8260	MSV/40453		
5059917006	GP-6	EPA 8260	MSV/40465		
5059917007	GP-7	EPA 8260	MSV/40465		
5059917008	GP-1/2	EPA 8260	MSV/40465		
5059917009	GP-4/2	EPA 8260	MSV/40465		
5059917010	GP-6/2	EPA 8260	MSV/40465		
5059917011	GP-7/2	EPA 8260	MSV/40465		



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

www.pacelets.com

Section A
Required Client Information:

Company: Wrightman Petrie
Address: 42 S Lafayette
St., Ste. 4600
Email To: Christopher Wrightman Petrie, C.W.
Phone: 514-232-7333
Requested Due Date/TAT:

Section B
Required Project Information:

Report To: C. Petrie
Copy To: A. Soens
Purchase Order No.: Ivy Tower
Project Name:
Project Number:

Page: 1 of 4

1549064

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
 UST RCRA OTHER

Site Location:

STATE:

N

Residual Chlorine (Y/N)

Section C
Invoice Information:

Attention: Kim Bowman
Company Name: --
Address: --

Pace Quote Reference:

Manager:

Pace Profile #:

SOS9917

REGULATORY AGENCY

Site Location:

STATE:

N

Residual Chlorine (Y/N)

Pace Project No./Lab ID:

-001

Pace ID:

-008

Sample ID:

-002

Sample ID:

-003

Sample ID:

-004

Sample ID:

-007

Sample ID:

-005

Sample ID:

-006

Sample ID:

-007

Sample ID:

-011

Sample ID:

-012

Sample ID:

-013

Sample ID:

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Sample ID:

-150

Sample ID:

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Sample ID:

-152

Sample ID:

-153

Sample ID:

-154

Sample ID:

-155

Sample ID:

Sample Condition Upon Receipt

Pace Analytical

Client Name: Wightman Petrie

Project # SOS9917

Courier: Fed Ex UPS USPS Client Commercial Pace Other

Tracking #: Master # 89966612580

Custody Seal on Cooler/Box Present: Yes no Seals intact: yes no

Date/Time 5035A kits placed in freezer

Packing Material: Bubble Wrap Bubble Bags None Other Ziplocks

Thermometer Used 1 2 3 4 ABCDE

Type of Ice: Wet Blue None

Samples on ice, cooling process has begun

Cooler Temperature 25°C, 2.9°C, 4.3°C
(Corrected, if applicable) 2.3°C

Ice Visible in Sample Containers:

yes no

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: Kee 3-13-12

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	5.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	<u>no dates on sample containers.</u>
All containers needing acid/base pres have been checked? exceptions: VOA, coliform, TOC, O&G	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	9. (Circle) HNO3 H2SO4 NaOH HCl
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Headspace in VOA Vials (>6mm)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10. 1 vial & for 6P-4 & 6P-4/2, 2 vials &
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

Project Manager Review

Samples Arrived within Hold Time: Yes No N/A 12.

Field Data Required?

Y / N

Sufficient Volume: Yes No N/A 13.

Correct Containers Used: Yes No N/A 14.

Client Notification/ Resolution:

Person Contacted: _____

Date/Time: _____

Comments/ Resolution:

(10) for 6P-1/2 + 6P-3

Project Manager Review: _____

Date: 3-13-12

CLIENT: Lightman Potrue
COC PAGE 1 of 4
COC ID# 1549064

Sample Container Count

SOSA

Project #

Sample Line

COC PAGE 1 of 2 COC ID# 1549064

Container Codes

DG9H	40mL HCl amber vial	AF	Air Filter	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1 liter unpreserved amber glass	AG1H	1 liter HCl amber glass	BP1S	1 liter H ₂ SO ₄ plastic	DG9S	40mL H ₂ SO ₄ amber vial
WGfu	4oz clear soil jar	AG1S	1 liter H ₂ SO ₄ amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved amber vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic		Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H ₂ SO ₄ amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H ₂ SO ₄ plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	BP3A	250mL NaOH, Asc Acid plastic	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCl clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio, clear vial
BP3S	250mL H ₂ SO ₄ plastic	BG1S	1 liter H ₂ SO ₄ clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved clear vial
AG3S	250mL H ₂ SO ₄ glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H ₂ SO ₄ amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZB1C	Zinloc Baan