

**Pre-design Investigation Report
for the
Former Bright Outdoors Site
Johnson City, New York
Site No. 7-04-023**

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Prepared for:

THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Prepared by:

ECOLOGY AND ENVIRONMENT ENGINEERING, P.C.

368 Pleasant View Drive
Lancaster, New York 14086

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List of Abbreviations and Acronyms

DUSR	Data Usability Summary Report
EEEPCC	Ecology and Environment Engineering, P.C.
EPA	(United States) Environmental Protection Agency
ID	inner diameter
MS/MSD	matrix spike/matrix spike duplicate
µg/L	micrograms per liter
µg/m ³	micrograms per cubic meter
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
NAD 83	North American Datum of 1983
NAVD 88	North American Vertical Datum of 1988
NTU	nephelometric turbidity unit
NYSDEC	New York State Department of Environmental Conservation
PID	photo-ionization detector
RI	remedial investigation
SSDS	sub-slab depressurization system
SVE	soil vapor extraction
TCA	trichloroethane
TCE	trichloroethene
TCL	Target Compound List

List of Abbreviations and Acronyms (cont.)

TCLP Toxicity Characteristic Leaching Procedure

VOC volatile organic compound

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Introduction and Site Description

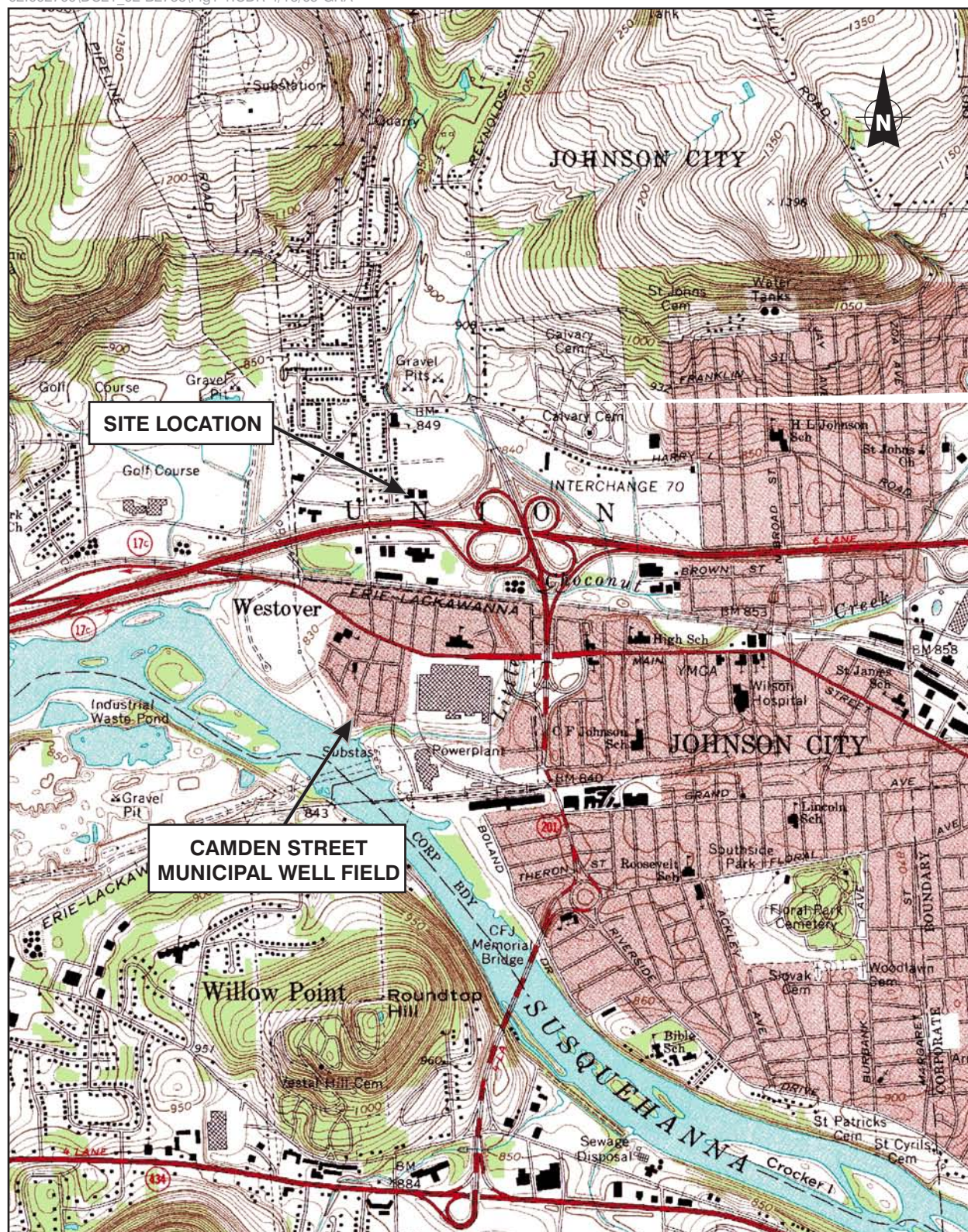
Ecology and Environment Engineering, P.C. (EEEEPC) performed a pre-design investigation at the Former Bright Outdoors Site (Site No. 7-04-023) located at 631 Field Street in Johnson City, New York (see Figure 1-1). This work was performed under Work Assignment No. D004442-21 issued on August 5, 2008 by the New York State Department of Environmental Conservation (NYSDEC).

A light industrial property known as the Former Bright Outdoors site was identified as a source of 1,1,1-trichloroethane (TCA) and trichloroethene (TCE) contamination to the local groundwater. As described in the RI Report (EEEEPC 2005), the 1.8-acre site was first developed in 1966 and was used as a soft drink bottling facility from 1967 until 1984. From 1984 until 2001, the site was owned by American Pipe and Plastics and was operated by Bright Outdoors and then Impact Sports Equipment for the manufacturing of outdoor furniture and sports equipment using PVC pipe and vinyl-coated polyester. In 2001 the property was sold to 631 Field Street LP and operated by Samscreen, Inc., to manufacture wire screens for the mining and aggregate industries. The facility is currently used on a limited basis for material storage and welding. The site is relatively flat lying and is covered mostly by buildings and asphalt, with less than 20% of the ground surface covered by grass.

Historically, TCA and TCE in groundwater have been of concern at this site. Figure 1-4 of the 2005 Remedial Investigation (RI) Report (EEEEPC 2005) shows the groundwater analytical results prior to 2004. In 1994, the highest levels of TCA and TCE were found to the south and southwest of the building (445 micrograms per liter [$\mu\text{g/L}$] and 68 $\mu\text{g/L}$, respectively). In 1995, the focus of sampling was to the north and east sides of the building. The highest concentrations of TCA and TCE (270 $\mu\text{g/L}$ and 170 $\mu\text{g/L}$, respectively) were found on the adjoining property on the east side of the Former Bright Outdoors site. In 1996, samples were taken to the north, south, and east of the site. The highest concentrations were again found to the south across the street from the site (260 $\mu\text{g/L}$ TCA and 18 $\mu\text{g/L}$ TCE). In 2001, the highest concentration of TCA (160 $\mu\text{g/L}$) was on the east-central side of the site and the highest concentration of TCE (91 $\mu\text{g/L}$) was on the west-central side of the site. In 2004, an RI was conducted. Analytical results for groundwater samples collected during the RI are shown in Figure 5-3 of the RI Report (EEEEPC 2005). The highest concentration of TCA detected in groundwater during the RI was 270 $\mu\text{g/L}$ on the east side of the site in monitoring

well MW-05. The highest concentration of TCE detected in groundwater during the RI was 260 µg/L on the west side of the site in groundwater grab sample BH-08. During the RI, groundwater elevations measured in existing wells indicated that regional groundwater flow was to the south-southwest toward the Susquehanna River and Camden Avenue municipal well field. However, on site, local groundwater flow was west-southwest across the site turning in a more southerly direction south of the site. The variability in groundwater flow is likely related to localized variation in soil type within the aquifer.

The RI concluded that the northeast part of the facility (warehouse/former production area) was a likely source of volatile organic compound (VOC) contamination. The most likely conduit for contaminant entry into the subsurface is a floor trench drain running most of the length of the warehouse/former production area with a pipe exiting at the north end of the trench. However, based on historical groundwater results, an additional contaminant source to the east or northeast is likely also present.



SOURCE: USGS 7.5 Minute Series (Topo) Quadrangle: Binghamton West, NY 1976;
USGS 7.5 Minute Series (Topo) Quadrangle: Castle Creek, NY 1976.

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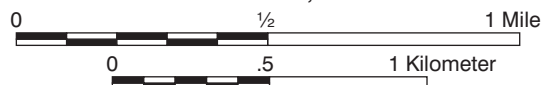


Figure 1-1 Site Location Map
Former Bright Outdoors Site
Johnson City, New York

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Pre-design Investigation Activities

2.1 Monitoring Well Installation and Development

Two monitoring wells (MW-07 and MW-08) were installed on the east and west sides of the property, respectively, during the week of December 1, 2008. Monitoring well drilling and installation was conducted by Aztech Technologies, Inc., under the supervision of an EEEPC field team. MW-07 was installed inside the existing building (warehouse/former production area) due to a lack of available space and access on the east side of the building. MW-08 was installed at the former location of BH-08 on the west-central side of the site.

The monitoring wells were drilled in accordance with the Project Management Work Plan (EEEEPC 2008) using 4¼-inch inside diameter (ID), hollow-stem augers. A continuous soil core was collected prior to augering using direct-push techniques. The soil was screened for organic vapors using a photo-ionization detector (PID) (MiniRAE 2000) and the soil types were described and logged. No organic vapors were detected in any of the soil cores. Well drilling logs for MW-07 and MW-08 are provided in Appendix A. The wells were drilled to depths of approximately 10 feet below the groundwater table.

Each monitoring well was constructed using a 10-foot segment of 2-inch ID Schedule 40 PVC screen followed by 2-inch ID PVC riser to approximately 4 inches below grade. Screen slot size was 0.010 inch based on the presence of fine-grained soil (fine sand, silt, and clay). A sand filter pack was placed around the screen to approximately 2 feet above the top of the screen. The sand filter pack consisted of clean silica sand manufactured specifically for well construction and was sized appropriately for the screen slot size used (no more than 0.5% by weight passing). The filter pack was followed by a 6-foot-thick pelletized bentonite seal. Following hydration of the seal, a 5% bentonite/cement grout mix was installed to approximately 6 inches below grade. Each well was fitted with a locked water tight cap (J-plug) and steel, flush-mount protective casing (8-inch diameter by 12 inches deep).



Photo 1 Drilling monitoring well MW-08, Former Bright Outdoors Site

Approximately 24 hours after well construction, the wells were developed. Water levels and total well depths were measured using an electronic water level indicator graduated to 0.01 foot and the volume of standing water was calculated. The wells were surged and purged using a submersible pump equipped with dedicated polyethylene tubing. The pump was placed within the screened interval of the well and water was pumped from the well at a uniform maximum rate that did not draw the water level down to the pump. Parameter measurements (temperature, pH, conductivity, and turbidity) were recorded on well development forms at the outset of pumping and periodically during development (see Appendix B). Well development was performed until pH, conductivity, and temperature stabilized ($\pm 5\%$) over three consecutive readings and turbidity of the discharge was 50 nephelometric turbidity units (NTUs) or less. Both wells contained fine sand and silt in the surrounding formation causing turbidity to increase when surging was performed. However, reduction of the turbidity level at a consistent pumping rate was demonstrated. A total of 25 and 15 well volumes were pumped from MW-07 and MW-08, respectively, during development.

The two new monitoring wells, in addition to six existing monitoring wells and other site features, were surveyed by Larsen Engineers of Rochester, New York as part of the sitewide property survey and base map development. Monitoring well locations were surveyed relative to New York State Plane Central Zone using the 1983 North American Datum (NAD 83). Elevations were measured relative to the 1988 North American Vertical Datum (NAVD 88). A copy of the 631 Field Street property survey including the surrounding deeded property owners, moni-

toring well locations, and horizontal and vertical coordinates is provided in Appendix C. Well casing and ground elevations are summarized in Table 2-1.

2.2 Groundwater Sampling

Groundwater samples were collected on December 16, 2008 from the two new monitoring wells and six existing monitoring wells at the site. Groundwater samples were submitted to Con-Test Analytical Laboratory in East Longmeadow, Massachusetts, for analysis of Target Compound List (TCL) volatile organic compounds (VOCs) by United States Environmental Protection Agency (EPA) SW-846 Method 8260B. Prior to sampling the monitoring wells, static water levels were measured in each well (see Table 2-1). The volume of water in each well was then calculated, and at least three volumes of water standing in the well casing were removed using a 12-volt Mini-typhoon pump and new, dedicated polyethylene tubing for each well. Water quality field parameters (i.e., temperature, pH, specific conductance, and turbidity) were recorded throughout the well purging process, and immediately prior to sampling. Purging occurred at a sustainable rate that minimized drawdown and stabilized the water level. The rate was slowed to approximately 100 milliliters per minute for sampling. Well purge and sample forms, including water levels and water quality parameters measured during purging, are provided in Appendix B. A summary of well sampling data, including final groundwater quality parameters measured at the time of sampling is provided in Table 2-2.

2.3 Soil Vapor Extraction Point Installation

Six subsurface soil vapor extraction (SVE) points were installed by Aztech Technologies, Inc., under the supervision of an EEEPC field team inside the northeast portion of the building, in the former warehouse/production area. An SVE point (SVE-01) was installed approximately 10 feet south of the south end of a floor drain and five pressure monitoring points (VM-01 through VM-05) were installed at varying distances from the extraction point. These points were installed for the purpose of conducting an SVE pilot test (see Section 2.6) to aid with the design of an SVE system. The vapor points were installed after coring through the concrete floor at each location. The extraction point (SVE-01) was drilled using 4¼-inch ID hollow-stem augers and continuous soil cores were collected to a depth of 10 feet using direct-push techniques. The extraction point was completed with a 2-inch ID, 5-foot section of 0.010-inch slotted PVC screen in a manner similar to that described above for the monitoring wells. The screen was set above the water table between a depth of 4 to 9 feet below grade. Pressure monitoring points VM-01 through VM-05 were constructed similarly but were not augered; instead, continuous soil cores were collected to depths of 10 feet and 1-inch ID PVC screen was set at a depth range of 4 to 9 feet. Borehole logs are provided in Appendix D.

In addition to the subsurface monitoring points, EEEPC installed six sub-slab monitoring points (SS-02 through SS-07) using a ½-inch drill bit to penetrate the concrete slab to the gravel sub-base. Sub-slab monitoring points, SS-02 through SS-05, were collocated with the vapor monitoring points; points SS-06 and SS-07

were installed south of SVE-01 at varying distances to monitor influence to the south. A subslab monitoring point was not installed adjacent to VM-01 as this was the monitoring point closest to the extraction point. Influence from the extraction point was expected to be observed in VM-01 and a subslab point appeared unnecessary.

2.4 Subsurface Soil Sampling

During drilling of the two monitoring wells and six soil vapor test points, continuous soil cores were collected. All soil was screened using a PID. No organic vapors were detected above background at any location. Subsurface soil samples were collected for laboratory analysis of VOCs by EPA Method 8260 for determination of the distribution of VOCs in the subsurface and identifying areas that may require excavation prior to treatment by SVE. In addition, a composite sample was collected for Toxicity Characteristic Leaching Procedure (TCLP) metals and pH analyses. Two geotechnical samples were also collected for grain size distribution analysis. A summary of the subsurface soil samples collected at the site is provided in Table 2-3.

Soil samples for VOC analysis were collected in accordance with EPA Method 5035. Sub-samples of approximately 5 grams were collected from selected intervals using dedicated plastic syringe tubes. TCLP metals and geotechnical samples consisted of composites of aliquots from multiple locations (see Table 2-3) that were collected with dedicated stainless-steel spoons and mixed in stainless-steel bowls.

2.5 Investigation-derived Waste

During monitoring well and soil vapor point drilling, all soil cores and cuttings were screened using a PID. No organic vapors were detected above background at any location. Therefore, the soil was spread on the ground in unpaved areas along the northwest side of the site. Purge water from monitoring well development and sampling was screened with a PID and no readings were observed nor was any sheen or odor observed. Therefore, all purge water was disposed of in an unpaved area on the site.

2.6 Soil Vapor Extraction Pilot Test

An SVE pilot test was conducted to provide information needed for the design of a full-scale SVE system. The data was collected to determine appropriate flow rates and resulting radii of influence in addition to chemical concentrations in the vapor. This information will allow for proper fan/vacuum pump size selection, operational rates, locations and number of extraction points, discharge treatment, etc. As described in Section 2.3, one SVE suction point (SVE-01) was installed to a depth of 9 feet and five pressure monitoring points (VM-01 through VM-05) were distributed throughout the building and each was constructed to a depth of 9 feet. Figure 2-1 shows the layout of the test points. To prevent short circuiting of air flow during the tests, the discharge point of the trench drain located in the center of the room was plugged by sealing the end of the pipe with a wet cloth. After

it was sealed the pipe was smoke tested to see if there was any airflow in or out of the pipe. The smoke test confirmed that no air was entering or escaping.

The pilot test was carried out in several steps at varying pressures and flow rates. Each test step ran for 1.5 to 2 hours at increasing pressures and flow rates. Aztech Technologies, Inc., performed the pilot test, supervised by a field crew from EEEPC. A blower was connected to the 2-inch ID test point (SVE-01) and the maximum pressure at the well head was determined to be 70 inches of water column (in H₂O). Four tests were conducted at increasing vacuum pressures (decreasing gauge pressures), which was controlled with a bleeder valve installed between the SVE test point and blower. Subsurface pressure monitoring points VM-01 through VM-05 were monitored by Aztech using Magnehelic gauges and sub-slab monitoring points SS-02 through SS-07 were monitored by EEEPC using a digital micro-manometer.

The first step test was performed at 5 in H₂O vacuum pressure at the well head for 10 minutes and was then increased to 10 in H₂O for the remainder of the test due to a lack of initial response. The second test ran at a steady 20 in H₂O, the third at 35 in H₂O and the fourth with the valve completely closed. This caused the pump to overheat within 45 minutes, so the fourth step test was terminated. After allowing the pump to cool, the valve was left open slightly and fourth step test was re-started at 60 in H₂O. This test finished successfully.

When monitored pressures became stable during pilot step tests at 20 in H₂O and 60 in H₂O, inline air samples were collected into stainless steel Summa canisters. The air samples were collected from a port in the discharge line near the extraction point upstream of the bleeder valve. The air sample was collected as a grab sample from the air stream that moved through the port. The valve on the Summa canister was fully open and the sample was collected until flow could no longer be heard entering the canister. Airspeed was determined by using a hand-held anemometer. The air samples were submitted to Con-Test Analytical Laboratory for analysis of VOCs by EPA Method TO-15. The sample collection information can be found in Table 2-4.

Vapor and air discharged during the pilot test were run through a 55-gallon drum of vapor-phase activated carbon and discharge outdoors at a height of approximately 10 feet above ground. Periodically during the test, a PID was used to monitor the discharge at the stack and no readings above background were observed.

2.7 Quality Control and Data Review

Field quality control (QC) samples included one field duplicate per matrix for groundwater and soil samples (MW-08/Q and VM-01-Z1/Q, respectively) and one trip blank (TB121608) shipped with the groundwater samples. Duplicate samples provide insight as to the homogeneity of the sample matrix and establish a degree of confidence that the sample represents site conditions. A trip blank was collected to establish that the transport of sample vials to and from the field

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did not result in the contamination of the samples from external sources. The trip blank consisted of unopened laboratory vials containing deionized water. A review of the duplicate sample and trip blank results is provided in the Data Usability Summary Reports (DUSRs) provided in Appendix E.

Laboratory QC sample results are presented in the laboratory reports and are discussed in the DUSRs in Appendix E.

The data were qualified following general guidelines in the *EPA CLP National Functional Guidelines for Organic Data Review*, EPA 540/R-99-008 (EPA 1999). DUSRs were prepared for each laboratory report (based on sample delivery group) as specified in NYSDEC's *Guidance for the Development of Quality Assurance Plans and Data Usability Summary Reports* (July 1999). The data review included an evaluation of holding times; initial and continuing calibration; reporting limits; laboratory blanks; matrix spike/matrix spike duplicate (MS/MSD) samples; laboratory control samples; field duplicates; sample result verification; and method-specific QC samples (e.g., GC/MS).

DUSRs were prepared by EEEPC's project chemist. Any deviations from acceptable QC specifications are discussed in the DUSRs. Qualifiers were added to the data, if appropriate, to indicate potential concerns with data usability and these qualifiers were transferred to the data summary tables in Section 3.



Photo 2 SVE pilot test blower prior to final hookup, Former Bright Outdoors Site

2. Pre-design Investigation Activities



Photo 3 SVE pilot test setup, Former Bright Outdoors Site



Photo 4 Vacuum pressure monitoring during SVE pilot test, Former Bright Outdoors Site

2. Pre-design Investigation Activities



Photo 5 Air sample collection during SVE pilot test, Former Bright Outdoors Site



Photo 6 Vapor-phase activated carbon discharge treatment during SVE pilot test, Former Bright Outdoors Site

**Table 2-1 Monitoring Well and Groundwater Elevations
Former Bright Outdoors Site**

Well ID	Date	Time	Well Elevation TOIC (feet)	Well Elevation Ground (feet)	Depth to Water from TOIC (feet)	Groundwater Elevation (feet)
MW-01	12/16/2009	0815	828.46	828.65	9.30	819.16
MW-02	12/16/2009	0820	828.19	828.34	9.08	819.11
MW-03	12/15/2009	1713	827.71	828.03	9.02	818.69
MW-04	12/15/2009	1703	827.38	827.86	8.55	818.83
MW-05	12/15/2009	1635	828.22	828.47	8.56	819.66
MW-06	12/15/2009	1650	828.10	828.44	8.43	819.67
MW-07	12/15/2009	1617	828.89	829.27	9.20	819.69
MW-08	12/15/2009	1626	828.40	828.82	9.24	819.16

Note: Elevations are relative to North American Vertical Datum of 1988.

Key:

TOIC = Top of inner casing (well).

**Table 2-2 Summary of Well Sampling Data and Groundwater Quality Field Measurements
Former Bright Outdoors Site**

Sample ID	Date Collected	Time Collected	pH (su)	Temp (°C)	Conductivity (µS/cm)	Turbidity (NTU)	Gallons Purged	Well Volumes Purged
MW-01	12/16/2008	1117	6.69	11.3	2030	21.2	20	3.3
MW-02	12/16/2008	1218	6.77	12.8	1550	32.6	20	3.4
MW-03	12/16/2008	1352	6.69	12.0	1500	4.91	20	3.0
MW-04	12/16/2008	1443	6.64	14.0	1650	6.41	18	3.0
MW-05	12/16/2008	1524	6.50	12.9	1680	3.51	10	3.0
MW-06	12/16/2008	1555	6.52	13.6	1660	24.3	10	3.3
MW-07	12/16/2008	0923	6.21	13.2	840	10.8	9.0	4.5
MW-08	12/16/2008	1013	6.41	13.2	1310	31.8	7.5	2.3

Key:

°C = Degress Centigrade.

µS/cm = MicroSiemens per centimeter.

NTU = Nephelometric turbidity units.

su = Standard units.

**Table 2-3 Subsurface Soil Sample Collection Summary
Former Bright Outdoors Site**

Sample ID	Date Collected	Time Collected	Analyses	Depth (feet BGS)	Soil Description	PID Readings (ppm)
MW-07-Z1	12/3/2008	0810	VOCs, moisture content	1.0	mottled gray to light brown silt	0
SVE-01-Z1	12/3/2008	1410	VOCs, moisture content	1.5	gray to brown silty clay	0
SVE-01-Z2	12/3/2008	1415	VOCs, moisture content	2.0	yellowish brown to light brown silt	0
SVE-01-Z3	12/3/2008	1418	VOCs, moisture content	4.0	yellowish brown to light brown silt	0
SVE-01-Z4	12/3/2008	1435	VOCs, moisture content	8.0	brown, very fine sand grading to a medium brown fine sand well sorted	0
VM-01-Z1	12/3/2008	1525	VOCs, moisture content	1.5	mottled gray silt	0
VM-01-Z1/Q	12/3/2008	1525	VOCs, moisture content	1.5	mottled gray silt	0
VM-02-Z1	12/3/2008	1635	VOCs, moisture content	2.5	gray clayey silt	0
VM-03-Z1	12/3/2008	1555	VOCs, moisture content	0.7	black sandy gravel	0
VM-04-Z1	12/3/2008	0920	VOCs, moisture content	2.0	gray clay with silt	0
VM-05-Z1	12/3/2008	1647	VOCs, moisture content	1.5	grayish brown silt	0
TCLP-01	12/3/2008	1540	TCLP metals, pH	Composite of: VM-04 (1 - 3 feet), SVE-01 (1 - 2 feet), VM-01 (0.6 - 1.5 feet)	primarily sandy gravel and silty clay that was stained gray in all locations	0
VM-01-GT	12/3/2008	1540	Particle size (ASTM D422), Atterberg Limits (ASTM D4318), and USCS Classification (ASTM D2487)	8 - 9	medium brown very fine grained sand grading down to fine sand	0
VM-04-GT	12/3/2008	0930	Particle size (ASTM D422), Atterberg Limits (ASTM D4318), and USCS Classification (ASTM D2487)	3 - 4	mottled, light brown silt, very hard	0

Key:

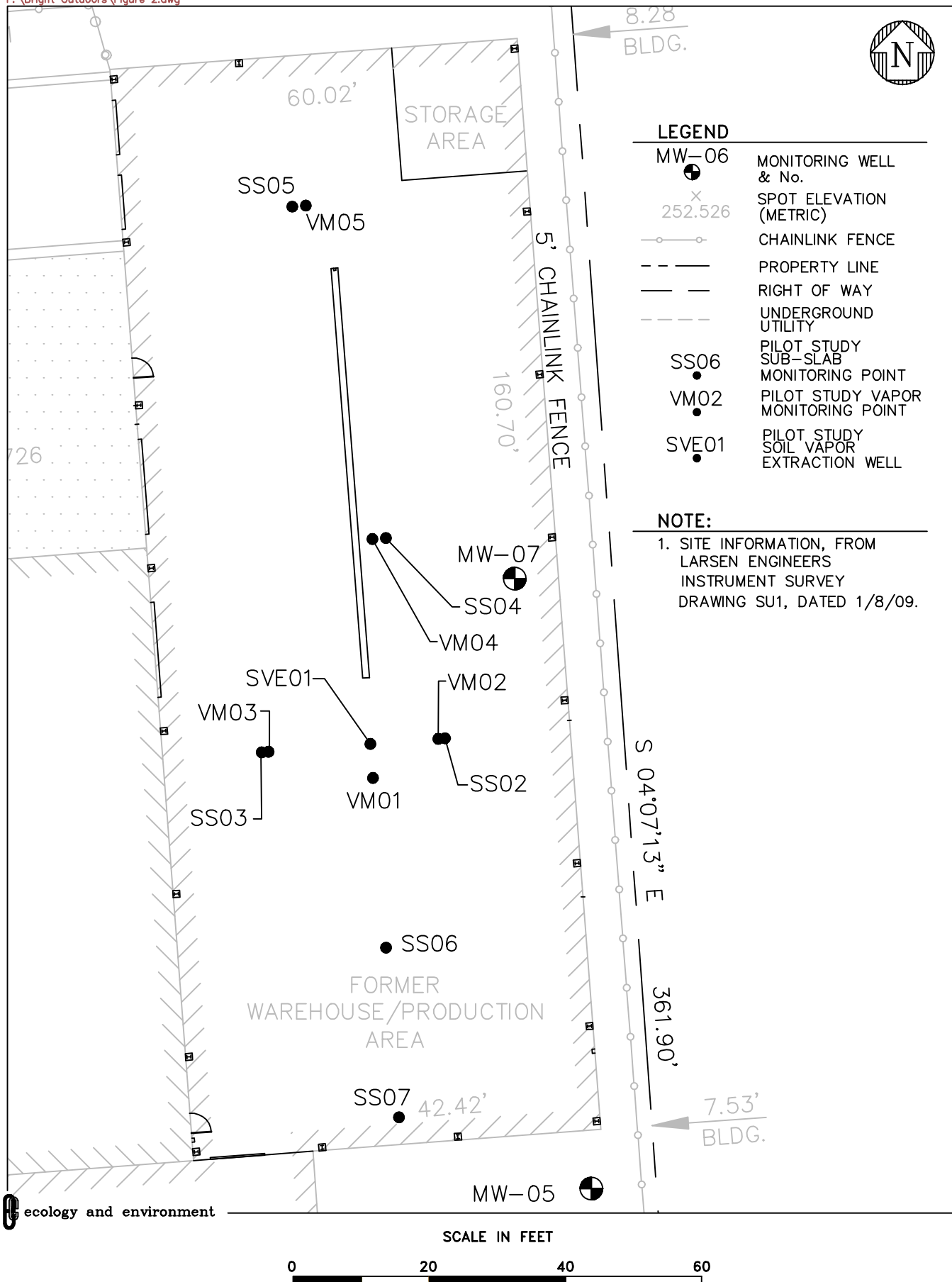
ASTM = American Society for Testing and Materials.
 BGS = Below ground (floor) surface.
 PID = Photo-ionization detector.
 ppm = Parts per million.
 TCLP = Toxicity Characteristic Leaching Procedure.
 USCS = Unified Soil Classification System.
 VOCs = Volatile organic compounds by SW-846 Method 8260.
 /Q = Duplicate sample.

**Table 2-4 Air Sample Summary
Former Bright Outdoors Site**

Sample ID	Date Collected	Time Collected	Test Pressure (inches water column)	Analysis
AS-20	12/16/2008	0835	20	VOCs by EPA Method TO-15
AS-60	12/16/2008	1425	60	VOCs by EPA Method TO-15

Key:

VOCs = Volatile organic compounds.



3

Results and Conclusions

3.1 Site Hydrogeology

Groundwater elevations were measured at MW-01 through MW-08 on December 15 to 16, 2008. Table 2-1 and Figure 3-1 show the groundwater elevations and interpreted elevation contour lines based on these measurements. Groundwater flow has a low horizontal gradient (maximum 0.01 foot/foot) and flow direction is from the east to west and southwest.

3.2 Groundwater Chemistry

A summary of positive analytical results is provided in Table 3-1. Groundwater samples from all eight monitoring wells contained both TCA and TCE. Concentrations of TCA exceeded the NYSDEC Class GA of 5 µg/L in three wells (MW-01, MW-05, and MW-06) with a maximum of 30.9 µg/L detected at MW-05. TCE was detected above its Class GA standard of 5 µg/L in four wells (MW-02, MW-05, MW-06, and MW-08) with a maximum of 13.9 µg/L at MW-05. 1,1-Dichloroethene was only detected at MW-05 (7.4 µg/L) and MW-06 (4.1 µg/L); however, the concentration exceeded the 5 µg/L Class GA standard only at MW-05.

The most recent groundwater sampling prior to this pre-design investigation was conducted as part of the RI in 2004. In general, where higher concentrations of TCA and TCE were detected in 2004, the concentrations decreased for the 2008 sampling event. Where lower levels were present in 2004, they were generally the same 2008. A comparison of groundwater sample concentrations between 2004 and 2008 is provided in Table 3-2. The maximum TCA concentration detected in 2004 was 270 µg/L in MW-05 on the east side of the site. In 2008, the TCA concentration in this well was 30.9 µg/L. The maximum concentration of TCE detected in 2004 was 260 µg/L in a groundwater grab sample collected on the west side of the site (location BH-08). In 2008, the TCE concentration in this area (MW-08) was 13.7 µg/L.

3.3 Subsurface Soil Results

A total of 10 subsurface soil samples were collected from the monitoring well and SVE borings for VOC analysis. A summary of the positive analytical results for these soil samples is presented in Table 3-3. Three different VOCs were detected in the soil samples, including: TCA, TCE, and toluene. Five of the samples did

not contain any of the VOCs; the remaining samples contained at least one VOC. TCA was detected in only two shallow samples (black sandy gravel collected at depth of 0.7 feet from VM-03-Z1 and gray-brown silt collected at 1.5 feet deep in VM-05-Z1) at concentrations of 0.010 and 0.013 milligrams per kilogram (mg/kg). TCE was only detected in one sample (VM-03-Z1) at a concentration of 0.002 mg/kg. Toluene was detected only in samples collected from depths of 1.5 feet in SVE-01-Z1 and VM-01-Z1 at concentrations of 0.002 mg/kg and 0.004 mg/kg, respectively. These samples represented a silt or silty clay that was stained gray. None of the detected concentrations exceeded cleanup objectives found in 6 New York Codes, Rules, and Regulations (NYCRR) 375.6-8. The screening criteria included in Table 3-3 are Restricted-Commercial soil cleanup objectives. Additionally, the concentrations of all three compounds detected in site soil are less than Unrestricted-Residential soil cleanup objectives.

A sandy gravel layer was present beneath the gravel sub-base of the building floor and was stained black at location VM-03 (west side of the building). Beneath this layer was a silty clay unit that was primarily mottled brown and yellowish brown, but was stained gray in locations SVE-01, VM-01, VM-02, and VM-03. The VOC samples were collected from these visibly stained areas because this zone was most likely to contain VOC contamination. However, detected concentrations indicate that very little contamination is present and that source removal by excavation is likely not required.

Soil samples taken during the pre-design investigation showed a general decrease in the concentration of TCA from those collected during the RI in 2004. Because identical locations were not sampled, a direct comparison cannot be made between locations; however, a general decrease in VOC concentrations is evident. For example, as shown in Figure 5-2 of the RI Report (EEPC 2005), TCA was detected in soil from the south end of the floor drain (location SB-01) at 0.019 mg/kg during the RI; whereas, during this sampling event, neither TCA nor TCE were detected in the vicinity (SVE-01 and VM-01).

A single TCLP sample was collected as a composite of soil from around the floor drain in order to determine whether the soil may be considered a characteristic hazardous waste. The only metals detected in the TCLP extract prepared from the soil were barium (0.36 milligrams per liter [mg/L]) and silver (0.023 mg/L). Both of these concentrations are below the regulatory levels considered hazardous waste (6 NYCRR 371). A summary of the analytical TCLP results is presented in Table 3-4. The pH of the composite sample was neutral (6.51 standard units).

Two geotechnical samples of representative subsurface units were collected to determine grain size distribution and classification (Unified Soil Classification System) to aid in design of the full scale SVE system. A sample collected from VM-01 from a depth of 8 to 9 feet that represented a fine-grained sand unit was determined to be approximately 60% sand and 40% silt and was classified as a silty sand (SM). A sample collected from a depth of 3 to 4 feet in VM-04 that represented the hard silt and clayey silt unit was determined to contain approxi-

mately 23% sand and 76% silty and clay and was classified as a lean clay with sand (CL). Appendix F contains the complete geotechnical report.

3.4 Soil Vapor Extraction Pilot Test Results

The SVE pilot test results are presented in a report by Aztech Technologies, Inc. (see Appendix G). As described in Section 2.6, vacuum pressures were measured at monitoring points VM-01 through VM-05 while different vacuum pressures were applied to extraction point SVE-01. In the Aztech report, data from each step test were plotted on a vacuum distribution graph and a best-fit line was plotted to determine the radius of influence for each test pressure. The radius of influence was established as the distance where a vacuum pressure of 0.1 in H₂O (-0.1 in H₂O gauge pressure) can be induced in the subsurface, for a particular vacuum pressure applied at the extraction point. The graphs are presented as Figures 1 through 4 in the Aztech report (see Appendix G). The observed vacuum pressures measured during the pilot tests are presented in Table 3-5. Aztech's determination of the radius of influence for each step test is summarized in Table 3-6.

EEEEPC also prepared contour diagrams of stable vacuum pressure measurements in order to observe the data spatially. The diagrams were prepared using Surfer by Golden Software with interpolation of data by the Kriging method. The contour diagrams were prepared separately for the subsurface monitoring point set (VM-01 through VM-05) and sub-slab monitoring point set (SS-02 through SS-07) and are presented in Figures 3-2a and 3-2b. To generate the vacuum pressure contours for the subsurface monitoring points, stabilized vacuum pressure readings at VM-01 through VM-05 were used along with the corresponding step-test pressure at extraction point SVE-01. The contour figures, generated for each step test, suggest that the radii of influence for the subsurface monitoring points are similar to those determined by Aztech. For the 10 in H₂O step test, only one non-zero vacuum pressure was observed at the closest location, VM-01. The mathematically interpolated contours shown in Figure 3-2a overestimate the extent of the vacuum pressure influence, due to the limited number of data points. Therefore, Aztech's graphical approach is considered more appropriate in this instance.

To generate the vacuum pressure contours for the sub-slab monitoring point set shown in Figures 3-2a and 3-2b, stabilized vacuum pressure readings at SS-02 through SS-07 were used. However, the step-test pressure at extraction point SVE-01 was not used like it was for the deeper subsurface monitoring points. It cannot be assumed that the vacuum pressure induced within the screened interval of SVE-01 extended up to sub-slab area without some attenuation. Therefore, the maximum vacuum pressure observed in the sub-slab monitoring points was also used for contouring purposes at extraction point SVE-01 because the vacuum pressure induced immediately above the extraction zone at SVE-01 was at least that seen in the sub-slab monitoring points. Sub-slab monitoring indicated that good sub-slab communication was achieved for all step tests with the exception of the low pressure (10 in H₂O) test (see Figures 3-2a and 3-2b). Communication (i.e., extension of the vacuum pressure field) horizontally within the sub-slab area was achieved by pumping at a depth of up to 9 feet at extraction point SVE-01.

Therefore, based on the observed vertical vacuum pressure distribution and that the sub-slab gravel layer was observed to have a high porosity, it is anticipated that very good sub-slab communication throughout the former warehouse/production area would result if the immediate sub-slab environment was depressurized.

3.5 Vapor Discharge Results

Two air samples were collected during the SVE pilot test. One at a relatively low discharge flow rate (20 in H₂O well head vacuum pressure) and one at a relatively high discharge flow rate (60 in H₂O well head vacuum pressure). There were numerous VOCs detected (25 VOCs in one or both samples), as presented in Table 3-7; however, the three most notable VOCs detected were TCA, TCE, and toluene -- the only VOCs detected in the subsurface soil samples. All three VOCs were detected in both samples. The concentrations of TCA and TCE dropped with an increase in vacuum pressure (there was a 20-fold drop in TCA from 440 to 23 micrograms per cubic meter [$\mu\text{g}/\text{m}^3$] and four-fold drop in TCE from 830 to 210 $\mu\text{g}/\text{m}^3$ between the 20 and 60 in H₂O tests). However, the toluene concentration increased over 150 times from 11 to 1,700 $\mu\text{g}/\text{m}^3$ between the two tests. No PID readings above background were observed at the discharge stack after treatment of the vapor with activated carbon indicating successful treatment using this methodology.

Table 3-1**Summary of Positive Analytical Results for Groundwater Samples, Former Bright Outdoors Site**

Analyte	Screening Criteria ⁽¹⁾	Sample ID: Date:	MW-01 12/16/08	MW-02 12/16/08	MW-03 12/16/08	MW-04 12/16/08	MW-05 12/16/08
Volatile Organics (µg/L)							
1,1,1-Trichloroethane	5		8.3 J	4.6 J	2.0 J	1.7 J	30.9 J
1,1-Dichloroethene	5		1.0 U	1.0 U	1.0 U	1.0 U	7.4
Trichloroethene	5		1.2	7.4	2.4	3.4	13.9

Key:

J = Estimated value.

U = Not detected at the reported value.

µg/L = Micrograms per liter.

/Q = Designates field duplicate.

Note:

Shaded cells exceed the screening value.

(1) New York State Department of Environmental Conservation, Technical and Operational Guidance Series Memorandum #1.1.1: *Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations*, 1998 (with updates), Class GA Groundwater.

Table 3-1
Summary of Positive Analytical Results for Groundwater Samples, Former Bright Outdoors Site

Analyte	Screening Criteria ⁽¹⁾	Sample ID: Date:	MW-06 12/16/08	MW-07 12/16/08	MW-08 12/16/08	MW-08/Q 12/16/08	TB121608 12/16/08
Volatile Organics (µg/L)							
1,1,1-Trichloroethane	5		15.4 J	3.9 J	3.9 J	3.9 J	1.0 UJ
1,1-Dichloroethene	5		4.1	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5		11.4	1.3	13.7	13.6	1.0 U

Key:

J = Estimated value.

U = Not detected at the reported value.

µg/L = Micrograms per liter.

/Q = Designates field duplicate.

Note:

Shaded cells exceed the screening value.

(1) New York State Department of Environmental Conservation, Technical and Operational Guidance Series Memorandum #1.1.1: *Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations*, 1998 (with updates), Class GA Groundwater.

**Table 3-2 Comparison of Positive Analytical Results for Groundwater Samples
Former Bright Outdoors Site**

Volatile Organics (µg/L):	TCA		TCE		DCE	
	2004	2008	2004	2008	2004	2008
MW-01	9 J	8.3 J	9 J	1.2	ND	ND
MW-02	16	4.6 J	11	7.4	ND	ND
MW-03	ND	2.0 J	1 J	2.4	ND	ND
MW-04	3 J	1.7 J	3 J	3.4	ND	ND
MW-05	270	30.9 J	28	13.9	43	7.4
MW-06	43	15.4 J	11	11.4	6 J	4.1
MW-07 ¹	--	3.9 J	--	1.3	--	ND
BH-08 / MW-08 ¹	3 J	3.9 J	260	13.7	ND	ND

¹ MW-07 and MW-08 were not installed until December 2008; BH-08 was a groundwater grab sample collected from the same location as MW-08.

Note: All results are reported in micrograms per liter (µg/L).

Key:

DCE = 1,1-Dichloroethene.
J = Estimated value.
ND = Not detected .
TCA = 1,1,1-Trichloroethane.
TCE = Trichloroethene.

Table 3-3
Summary of Positive Analytical Results for Soil Samples, Former Bright Outdoors Site

Analyte	Screening Criteria ⁽¹⁾	Sample ID: Date:	MW-07-Z1 12/03/08	SVE-01-Z1 12/03/08	SVE-01-Z2 12/03/08	SVE-01-Z3 12/03/08	SVE-01-Z4 12/03/08
Volatile Organics (mg/kg dry weight)							
1,1,1-Trichloroethane	500		0.002 U	0.002 U	0.002 U	0.002 U	0.003 U
Toluene	500		0.002 U	0.002	0.002 U	0.002 U	0.003 U
Trichloroethene	200		0.002 U	0.002 U	0.002 U	0.002 U	0.003 U
Percent Solids	--		81.9	79.1	84.3	81.9	88.1

Key:

J = Estimated value.

U = Not detected at the reported value.

mg/Kg = Milligrams per kilogram.

/Q = Designates field duplicate.

Note:

Shaded cells exceed the screening value.

(1) New York State Department of Environmental Conservation, 6 NYCRR 375.6-8 Soil Cleanup Objectives, Restricted-Commercial Use.

Table 3-3
Summary of Positive Analytical Results for Soil Samples, Former Bright Outdoors Site

Analyte	Screening Criteria ⁽¹⁾	Sample ID: Date:	VM-01-Z1 12/03/08	VM-01-Z1/Q 12/03/08	VM-03-Z1 12/03/08	VM-04-Z1 12/03/08	VM-05-Z1 12/03/08
Volatile Organics (mg/kg dry weight)							
1,1,1-Trichloroethane	500		0.002 U	0.002 U	0.010	0.002 U	0.013
Toluene	500		0.002	0.004	0.002 U	0.002 U	0.002 U
Trichloroethene	200		0.002 U	0.002 U	0.002	0.002 U	0.002 U
Percent Solids	--		79.4	79.6	87.8	78.8	75.3

Key:

J = Estimated value.

U = Not detected at the reported value.

mg/Kg = Milligrams per kilogram.

/Q = Designates field duplicate.

Note:

Shaded cells exceed the screening value.

(1) New York State Department of Environmental Conservation, 6 NYCRR 375.6-8 Soil Cleanup Objectives, Restricted-Commercial Use.

Table 3-4
Summary of TCLP Analytical Results, Former Bright Outdoors Site

Analyte	Screening Criteria ⁽¹⁾	Sample ID: Date:	TCLP-01 12/03/08
TCLP - Metals (mg/L)			
Arsenic	5		0.01 U
Barium	100		0.36
Cadmium	1		0.005 U
Chromium	5		0.01 U
Lead	5		0.015 U
Mercury	0.2		0.0001 U
Selenium	1		0.05 U
Silver	5		0.023
pH (SU)			
pH	NA		6.51

Key:

J = Estimated value.

U = Not detected at the reported value.

mg/L = Milligrams per liter.

SU = Standard units.

TCLP = Toxicity Characteristic Leaching Procedure.

Note: Shaded cells exceed the screening value.

(1) 6 NYCRR 371.3, Table 1—Maximum Concentration of Contaminants for Toxicity Characteristic.

**Table 3-5 Observed Vacuum
Former Bright Outdoors Site**

Date	Distance from SVE-01 (Location): Time	Vapor Monitoring Point (VM)							Sub-Slab Point (SS)							Comments
		5' (VM-01)	10' (VM-02)	15' (VM-03)	30' (VM-04)	80' (VM-05)	10' (SS-02)	15' (SS-03)	30' (SS-04)	80' (SS-05)	40' (SS-06)	65' (SS-07)				
12/15/2008	Step Test @ 10 in wc															
	15:45 - 16:00	15:45	-0.21	0	0	0	0	-0.001						Ambient Indoor Temp: 46°F; Outdoor Temp: 49°F. Barometric pressure: 29.94 inHg. Exhaust concentration: 0 ppm. Airspeed: 501 cfm.		
	16:01 - 16:15	16:01	-0.04	0	0	0	0	0						Smoke test @ the SVE point. Smoke was observed to dissipate to ambient air.		
	16:16 - 16:30	16:16	0.04	0.025	0.015	0	0		0							
	16:31 - 16:45	16:31							0			0	0	Exhaust concentration: 0 ppm.		
	16:46 - 17:00	16:46	0.05	0.04	0.015	0.01	0		0					Smoke test @ the discharge of the trench drain. Smoke was observed to dissipate to ambient air.		
	17:01 - 17:15	17:01	0.02	0	0	0	0			0		0.002	0	Ambient Indoor Temp: 47.8°F. Outdoor Temp: 50.8°F. Barometric pressure: 29.95 inHg. Humidity: 81%. Exhaust concentration: 0 ppm. Airspeed: 656 cfm.		
12/16/2008	Step Test @ 20 in wc															
	8:00 - 8:15	8:00	0.85	0.58	0.43	0.09	0.02							Ambient Indoor Temp: 38.3°F. Outdoor Temp: 29.1°F. Barometric pressure: 30.40 inHg. Humidity: 64%. Airspeed: 921 cfm. Smoke test @ the SVE point. Smoke was observed to dissipate to ambient air.		
	8:16 - 8:30	8:16	1.4	0.9	0.7	0.11	0.02	0.006	0.008	0		0.065	0.001			
	8:31 - 8:45	8:31	2	1.25	1	0.17	0.035				0.008			Air sample taken (35 minutes into test).		
	8:46 - 9:00	8:46	2	1.24	0.95	0.17	0.04	0.003	0.016			0.09	0.003			
	9:01 - 9:15	9:01	1.8	1.1	0.9	0.16	0.03			0.001	0.008			Smoke test @ the trench drain discharge. Smoke was observed sitting on it.		
	9:16 - 9:30	9:16	1.8	1.1	0.9	0.16	0.03	0.001	0.012	0.001	0.009	0.071	0.001	Ambient Indoor Temp: 36.3°F. Outdoor Temp: 28.4°F. Barometric pressure: 30.44 inHg. Humidity: 60%. Airspeed 1061 cfm.		
	Step Test @ 35 in wc															
	9:35 - 9:50	9:35	4.4	2.6	2.2	0.37	0.08							Airspeed: 1365 cfm.		
	9:51 - 10:10	9:51	4.2	2.6	2.2	0.37	0.08	0.005	0.032	0.002	0.02	0.189	0.005			

**Table 3-5 Observed Vacuum
Former Bright Outdoors Site**

Date	Distance from SVE-01 (Location): Time	Vapor Monitoring Point (VM)							Sub-Slab Point (SS)							Comments
		5' (VM-01)	10' (VM-02)	15' (VM-03)	30' (VM-04)	80' (VM-05)	10' (SS-02)	15' (SS-03)	30' (SS-04)	80' (SS-05)	40' (SS-06)	65' (SS-07)				
3-12	10:11 - 10:25	10:11	4.2	2.6	2	0.36	0.075	0.004	0.031							
	10:26 - 10:40	10:26	4.2	2.6	2	0.36	0.08			0.003	0.019	0.19	0.004	Exhaust concentration: 0 ppm.		
	10:41 - 10:55	10:41	4.2	2.4	2	0.36	0.07	0.005	0.03	0.003	0.017	0.182	0.004			
	10:56 - 11:15	10:56	4.2	2.4	2	0.36	0.07	0.006	0.031	0.002	0.017	0.191	0.003	Ambient Indoor Temp: 35.9°F. Outdoor Temp: 28.9°F. Barometric pressure: 30.44 inHg. Humidity: 57%. Airspeed: 1657 cfm.		
	Step Test @ 60 in wc															
	13:10 - 13: 25	13:10	8.8	5.2	4.4	0.9	0.14	0.007	0.062	0.004	0.014	0.386	0.007	Ambient Indoor Temp: 35.4°F. Outdoor Temp: 29.8°F. Barometric pressure: 30.39 inHg. Humidity: 54%. Airspeed: 5922 cfm.		
	13:26 - 13:40	13:26	8.2	4.8	4	0.85	0.13	0.008	0.061	0.004	0.032	0.354	0.007			
	13:41 - 13:55	13:41	7.8	4.4	3.8	0.8	0.13	0.009	0.056	0.004	0.032	0.337	0.007			
	13:56 - 14:10	13:56	7.7	4.2	3.6	0.75	0.115	0.009	0.052	0.003	0.026	0.309				
	14:11 - 14:25	14:11	6.8	4	3.4	0.7	0.115	0.006	0.047	0.001	0.025		0.005	Air sample taken (1hr 15min into the test).		
	14:26 - 14:40	14:26	6.6	3.8	3.2	0.65	0.105					0.29	0.004	Ambient Indoor Temp: 35.7°F. Outdoor Temp: 29.6°F. Pressure: 30.38 inHg. Humidity: 53%.		

Key:

cfm = Cubic feet per minute.
inHg = Inches Mercury.
in wc = Inches water column.
ppm = Parts per million.
SVE = Soil vapor extraction.
temp = Temperature.

Note: All exhaust concentrations were measured with a photo ionization detector (PID).

Table 3-6 Calculated Radii of Influence for SVE Pilot Test

Test No.	Wellhead Pressure (inches water column)	Calculated Radius of Influence (feet)
1	10	< 5
2	20	38
3	35	45
4	60	54

Table 3-7
Summary of Positive Analytical Results for Air Samples
Former Bright Outdoors Site

Analyte	Sample ID: Date:	AS-20 12/16/08	AS-60 12/16/08
Method TO-15 Volatile Organics ($\mu\text{g}/\text{m}^3$)			
1,1,1-Trichloroethane		440	23
1,1-Dichloroethane		1.3	0.40 U
1,1-Dichloroethene		0.84	0.40 U
1,2,4-Trimethylbenzene		0.50 U	0.66 J
2-Butanone		0.60 U	2.7
Acetone		4.4 U	22
Benzene		0.57	0.77
Carbon Disulfide		0.47	0.32 U
Chloroform		14	1.6
Chloromethane		0.61	1.5
Dichlorodifluoromethane (CFC-12)		2.2	1.6
Ethanol		4.1	7.2
Ethylbenzene		0.44 U	1.4
Hexane		0.97	2.6
Isopropyl Alcohol		1.5	5.8
Methylene Chloride		5.1	13
O-xylene		0.44 U	0.83
Propylene (Propene)		0.18 U	1.8
Toluene		11	1700
Tetrachloroethene		34	1.9
Tetrahydrofuran		0.34	0.30 U
Trichloroethene		830	210
Trichlorofluoromethane (CFC-11)		2.4	1.2
Trichlorotrifluoroethane		1.2	0.76 U
Xylenes, M-P		0.86 U	2.1

Key:

J = Estimated value.

U = Not detected at the reported value.

$\mu\text{g}/\text{m}^3$ = Micrograms per cubic meter.

/Q = Designates field duplicate.

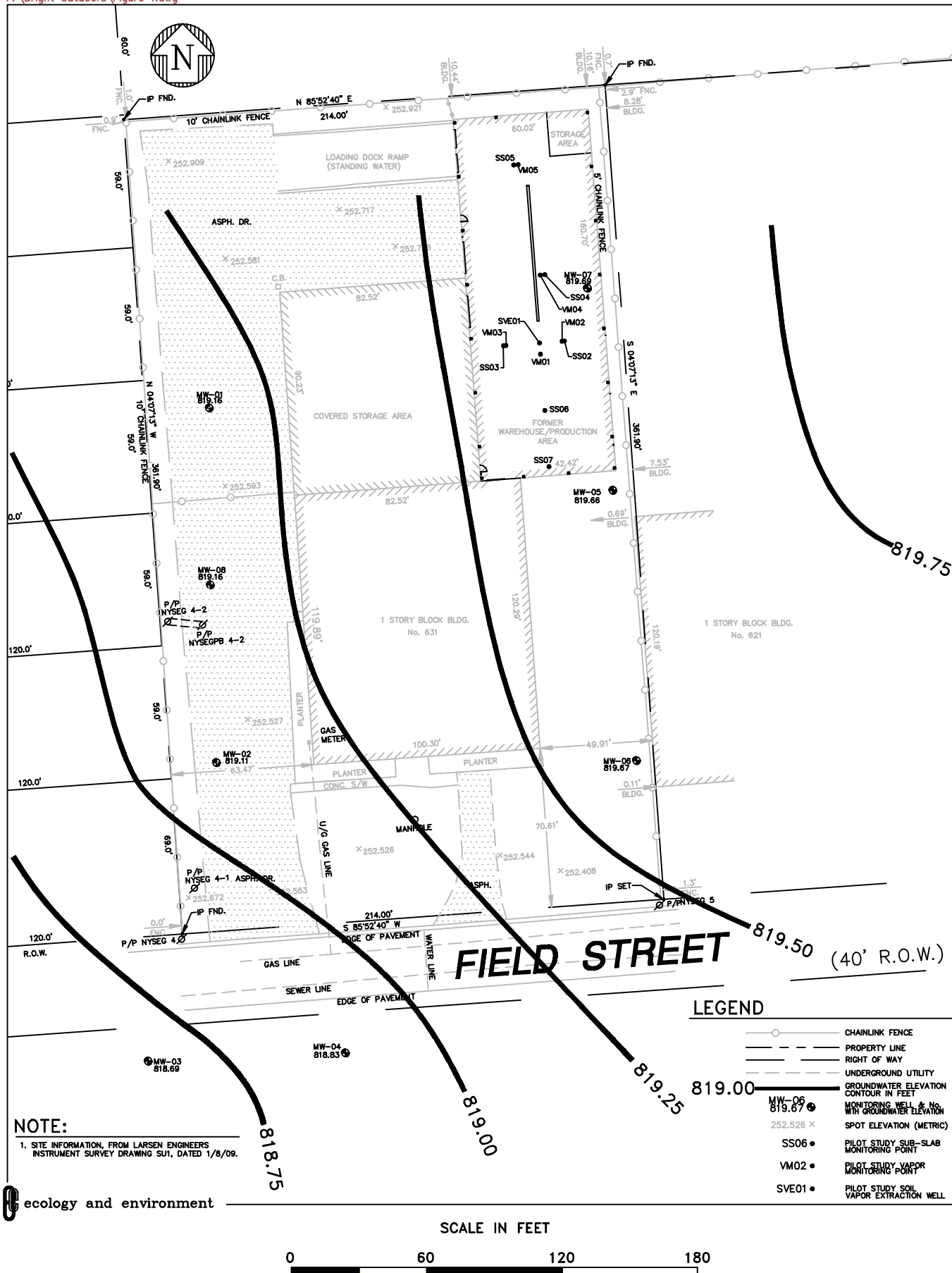
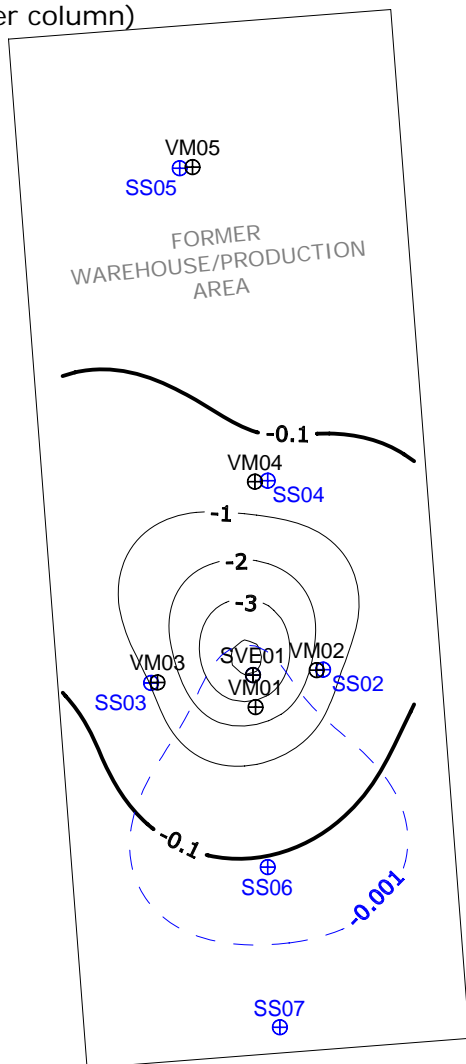
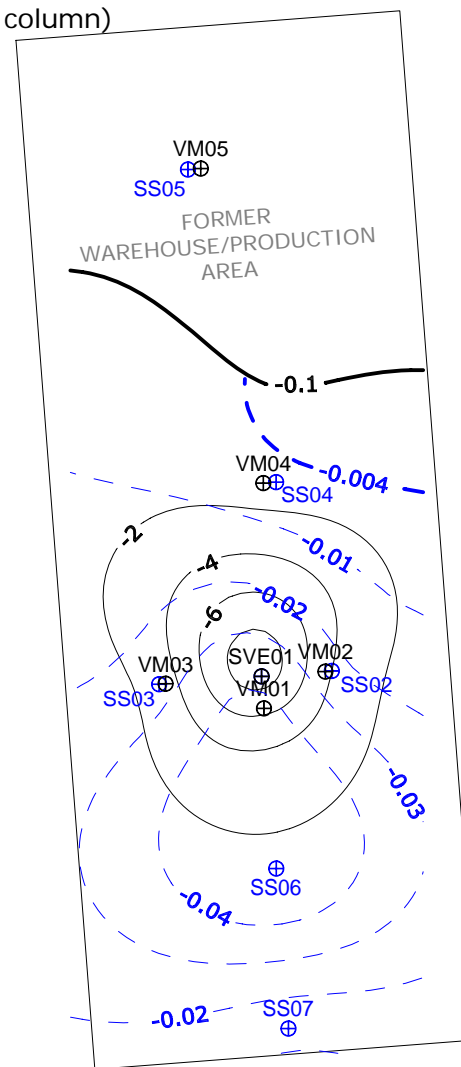


FIGURE 3-1
GROUND WATER ELEVATION CONTOURS
FORMER BRIGHT OUTDOORS SITE
BROOME COUNTY, NEW YORK

SVE Test 1
(Test Pressure
10 inches water column)



SVE Test 2
(Test Pressure
20 inches water column)



Note:
Contour lines shown are approximate; especially
the sub-slab pressure contours south of SVE-01
where there are no east/west observation
points to constrain the data interpolation.

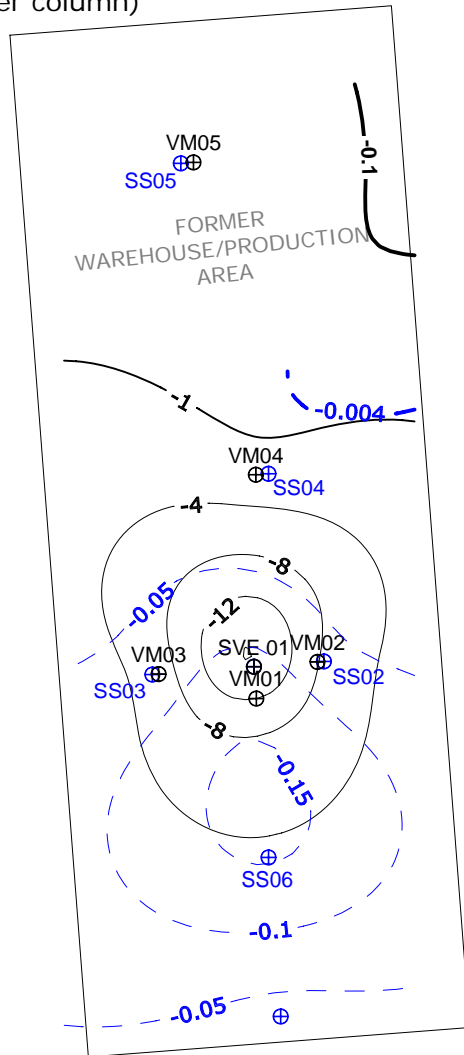
— Vacuum Pressure Contour for Subsurface (VM) Points

- - - Vacuum Pressure Contour for Sub-slab (SS) Points

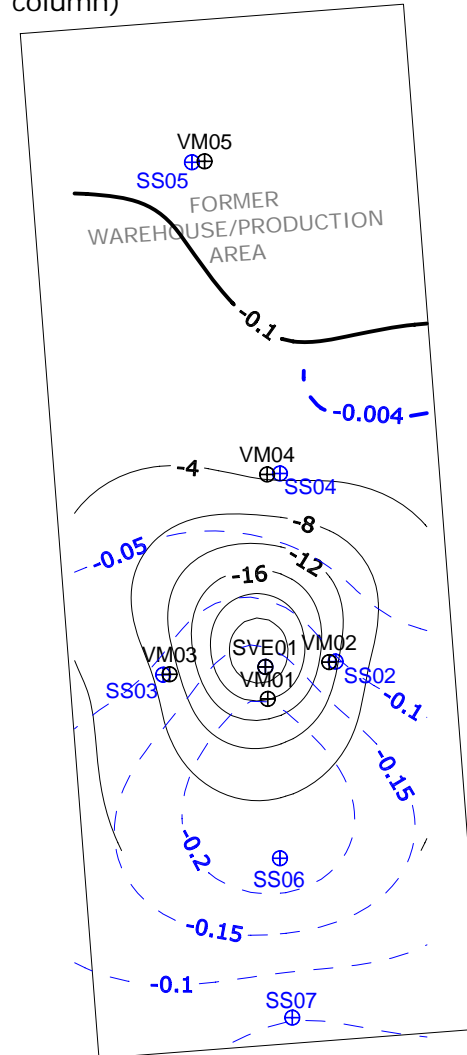
All measurements in inches of water column.

Figure 3-2a
SVE Pilot Test Vacuum Pressure Readings
Former Bright Outdoors Site
December 2008

SVE Test 3
(Test Pressure
35 inches water column)



SVE Test 4
(Test Pressure
60 inches water column)



Note:
Contour lines shown are approximate; especially
the sub-slab pressure contours south of SVE-01
where there are no east/west observation
points to constrain the data interpolation.

- Vacuum Pressure Contour for Subsurface (VM) Points
 - - - Vacuum Pressure Contour for Sub-slab (SS) Points
- All measurements in inches of water column.

Figure 3-2b
SVE Pilot Test Vacuum Pressure Readings
Former Bright Outdoors Site
December 2008

4

Conclusions

Based on the results of the pre-design investigation, the following conclusions were made:

- The groundwater flow direction was observed to be from east to west and continued presence of VOCs in groundwater on the eastern property boundary continues to suggest an off-site source of groundwater contamination.
- Contaminants of concern in groundwater significantly decreased in concentration between 2004 and 2008. The maximum concentration of TCA detected during the RI in 2004 decreased by nearly 90%. The maximum concentration of TCE detected during the RI in 2004 decreased by nearly 95%. Where no change or slight increases were observed, the concentrations were generally below the Class GA groundwater standard of 5 µg/L.
- VOCs have not been detected in subsurface soil samples at concentrations exceeding recommended 6 NYCRR Part 375 soil cleanup objectives. Therefore, excavation of soil from beneath and around the floor drain in the former warehouse/production area does not appear to be warranted.
- SVE implementation at the site is feasible. Vacuum pressures were created laterally throughout the subsurface during the pilot test. An extraction vacuum pressure of 20 in H₂O or more appears to be sufficient to create capture under the full east-west width of the former warehouse/production area; however, two to three extraction points oriented along the north-south axis of this room would be required to cover the north-south length of the room.
- Sub-slab communication is very good and full sub-slab depressurization could likely be achieved with two to three extraction points along the north-south length of the room.

Based on the data collected during the pre-design investigation, a review of the remedial goals should be considered prior to implementing design of an SVE system as stated in the Record of Decision. Based on the observation that soil vapor contaminant concentrations appear to have decreased with time and decrease with depth below the slab of the former warehouse/production area, consideration should be given to altering the design from a subsurface SVE system to a low-

impact, low-energy-consumption, sub-slab depressurization system (SSDS). An SSDS would require a longer operating period but is less intrusive and more passive in its operation. Based on the soil sample results, source-area soil removal does not appear to be warranted. However, long-term groundwater monitoring should still be implemented due to the continued presence of chlorinated VOCs in groundwater. Indoor air and sub-slab vapor testing at the nearest residences has not revealed any vapor intrusion concerns except at one residence that was previously mitigated.

5

References

Ecology and Environment Engineering, P.C. (EEEEPC), 2008, personal communication, letter from Thomas Heins, P.E. of Ecology and Environment Engineering, P.C., to Ms. Karen Quinn, New York State Department of Environmental Conservation, dated September 24, 2008 regarding Project Management Work Plan – Remedial Design, Former Bright Outdoors, NYSDEC Site No. 7-04-023, .

_____, 2005, *Remedial Investigation Report for the Former Bright Outdoors Site, Johnson City, New York*, prepared for New York State Department of Environmental Conservation by Ecology and Environment Engineering, P.C.

New York State Department of Environmental Conservation (NYSDEC), 1999, *Guidance for the Development of Quality Assurance Plans and Data Usability Summary Reports*.

United States Environmental Protection Agency (EPA), 1999, *EPA CLP National Functional Guidelines for Organic Data Review*, EPA 540/R-99-008.



Well Logs and Well Development Forms

Borehole Record for MW-07

- Drilling Log
- Narrative Lithologic Description
- Well Development Record
- Well Development -- Parameter Measurements
- Investigation - Derived Waste Inventory Sheet



DRILLING LOG FOR MW-07

Project Name FORMER BRIGHT OUTDOORS

Site Location JOHNSON CITY, NY

Date Started/Finished 12/3/08

Drilling Company AZTECH TECHNOLOGY

Driller's Name MARTY HARRINGTON

Geologist's Name MEGAN FRONCKOWIAK

Geologist's Signature *M. Fronckowiak*

Rig Type (s) MOBILE B3500

Drilling Method (s) HSA & MACROCORE

Bit Size (s) 9" Auger Size (s) 4 1/4" ID

Auger/Split Spoon Refusal N/A

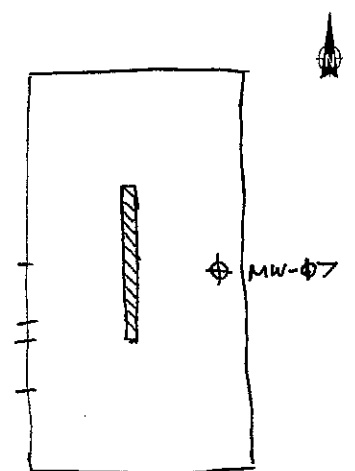
Total Depth of Borehole Is 22'

Total Depth of Corehole Is N/A

Water Level (TOIC)

Date	Time	Level (Feet)
12/3/08	08:40	10.5' (open hole)

Well Location Sketch



NTS

Depth (Feet)	Sample Number	Blows on Sampler	Soil Components Rock Profile CL SL S GR	Penetration Times	Run Number	Core Recovery	RQD	Fracture Sketch	PID HNUOVA (ppm)	Comments
1			SL	08:05	1	1'	-	-	0	Collect MW-07-21 Soil sample from 1' @ 08:10
2										
3										
4										
5			SL/S	08:15	2	3.3'	-	-	0	
6										
7										
8										
9										
10			S	08:25	3	4'	-	-	0	
11										
12										
13										
14										
15										

<p>SCREENED WELL</p> <p>Stick-up _____ ft</p> <p>Top of Grout <u>0</u> ft</p> <p>Top of Seal at <u>2</u> ft</p> <p>Top of Sand Pack <u>10</u> ft</p> <p>Top of Screen at <u>12</u> ft</p> <p>Bottom of Screen at <u>22</u> ft</p> <p>Bottom of Hole at <u>22</u> ft</p> <p>Bottom of Sandpack at <u>22</u> ft</p>	<p>Lock Number _____</p> <p>Inner Casing Material <u>PVC</u></p> <p>Inner Casing Inside Diameter <u>2</u> inches</p> <p>GROUND SURFACE</p> <p>Quantity of Material Used:</p> <p>Bentonite Pellets _____</p> <p>Cement _____</p> <p>Borehole <u>9</u> inches Diameter</p> <p>Cement/Bentonite _____</p> <p>Grout _____</p> <p>Screen Slot Size <u>0.010</u>"</p> <p>Screen Type _____</p> <p><input checked="" type="checkbox"/> PVC _____</p> <p><input type="checkbox"/> Stainless Steel _____</p> <p>Pack Type/Size:</p> <p><input checked="" type="checkbox"/> Sand <u>#0 W. Sika</u></p> <p><input type="checkbox"/> Gravel _____</p> <p><input type="checkbox"/> Natural _____</p>	<p>OPEN-HOLE WELL</p> <p>Stick-up _____ ft</p> <p>Inner Casing Material _____</p> <p>Inner Casing Inside Diameter _____ inches</p> <p>Outer Casing Diameter _____ inches</p> <p>Borehole Diameter _____ ft</p> <p>Bedrock _____ ft</p> <p>Bottom of Rock Socket/Outer Casing _____ ft</p> <p>Bottom of Inner Casing _____ ft</p> <p>Corehole Diameter _____</p> <p>Bottom of Corehole _____ ft</p>
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NOTE: See pages 136 and 137 for well construction diagrams

Depth-ft.	NARRATIVE LITHOLOGIC DESCRIPTION	Moisture Content		
		Dry	Moist	Wet
1	0-0.5' concrete	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
2	0.5-0.8' gravel subbase	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
3	0.8-1.7' mottled little gray to light brown silt	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
4		<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
5		<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
6	5-5.7' silt with little clay, brown to med. brown throughout	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
7	5.7-6.8' sandy silt w/ trace clay, sand fine-coarse	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
8	6.8-7.4' sandy silt, wet	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
9	7.4-8.3' very fine sand	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
10		<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
11	10-15' very fine to fine sand, med. brown to brown	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
12		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
13		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
14		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
15		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Depth(feet)	Sample Number	Blows on Sampler	Soil Components CL SL S GR	Rock Profile	Penetration Times	Run Number	Core Recovery	RQD	Fracture Sketch	PID H ₂ O/A (ppm)	Comments
16			S		08:40	4	.6'	-	-	0	little recovery gravel stuck in shoe
17											
18											
19											
20						5	0				no recovery likely due to gravel
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
45											

end of hole

Depth(feet).	NARRATIVE LITHOLOGIC DESCRIPTION	Moisture Content		
		Dry	Moist	Wet
16	15-15.6' wet, sandy gravel	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
17		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
18		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
19		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
20		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
21	20-25' no recovery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
45		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

WELL DEVELOPMENT RECORD

SITE FORMER BRIGHT OUTDOORS

DATE 12/4/08

LOCATION JOHNSON CITY, NY

WELL NO. MW-07

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2 (0.163)$$

Where:

V = Static volume of well in gallons;

T = Depth of water in the well, measured in feet;

r = Inside radius of well casing in inches; and 0.163 = A constant conversion factor which compensates for r²h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).

1 well volume (v) = 1.9 gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509 x10 ⁻³
1 1/2	0.092	0.0123	1.142	1.142 x10 ⁻³
2	0.163	0.0218	2.024	2.024 x10 ⁻³
2 1/2	0.255	0.0341	3.167	3.167 x10 ⁻³
3	0.367	0.0491	4.558	4.558 x10 ⁻³
3 1/2	0.500	0.0668	6.209	6.209 x10 ⁻³
4	0.653	0.0873	8.110	8.110 x10 ⁻³
4 1/2	0.826	0.1104	10.260	10.260 x10 ⁻³
5	1.020	0.1364	12.670	12.670 x10 ⁻³
5 1/2	1.234	0.1650	15.330	15.330 x10 ⁻³
6	1.469	0.1963	18.240	18.240 x10 ⁻³
7	2.000	0.2673	24.840	24.840 x10 ⁻³
8	2.611	0.3491	32.430	32.430 x10 ⁻³
9	3.305	0.4418	41.040	41.040 x10 ⁻³
10	4.080	0.5454	50.670	50.670 x10 ⁻³
11	4.937	0.6600	61.310	61.310 x10 ⁻³
12	5.875	0.7854	72.960	72.960 x10 ⁻³
14	8.000	1.0690	99.350	99.350 x10 ⁻³
16	10.440	1.3960	129.650	129.650 x10 ⁻³
18	13.220	1.7670	164.180	164.180 x10 ⁻³
20	16.320	2.1820	202.680	202.680 x10 ⁻³
22	19.750	2.6400	245.280	245.280 x10 ⁻³
24	23.500	3.1420	291.850	291.850 x10 ⁻³
26	27.580	3.6870	342.520	342.520 x10 ⁻³
28	32.000	4.2760	397.410	397.410 x10 ⁻³
30	36.720	4.9090	456.020	456.020 x10 ⁻³
32	41.780	5.5850	518.870	518.870 x10 ⁻³
34	47.160	6.3050	585.680	585.680 x10 ⁻³
36	52.880	7.0690	656.720	656.720 x10 ⁻³

1 Gallon = 3.785 liters

1 Meter = 3.281 feet

1 Gallon water weighs 8.33 lbs. = 3.779 kilograms

1 Liter water weighs 1 kilogram = 2.205 pounds

1 Gallon per foot of depth = 12.419 liters per foot of depth

1 Gallon per meter of depth = 12.419 x 10⁻³ cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 9.92'

WELL DEPTH (TD) 21.93' firm bottom

COLOR brown

ODOR none

CLARITY poor

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 10.02' @1242

WELL DEPTH (TD) 21.93'

COLOR clear

ODOR none

CLARITY good

DESCRIPTION OF DEVELOPMENT TECHNIQUE surge and purge with 12V pump.

MW-07

DEVELOPED BY: Megan Fronkowiak/Rick Watt

DATE 12/4/08

Borehole Record for MW-08

- Drilling Log
- Narrative Lithologic Description
- Well Development Record
- Well Development -- Parameter Measurements
- Investigation - Derived Waste Inventory Sheet



DRILLING LOG FOR MW-08

Project Name Former Bright Outdoors

Site Location Johnson City, NY

Date Started/Finished 12/2/2008

Drilling Company Aztech Technology

Driller's Name Marty Harrington

Geologist's Name Rick Watt

Geologist's Signature R. Watt

Rig Type (s) Mobile B3500

Drilling Method (s) HSA + Macrocore

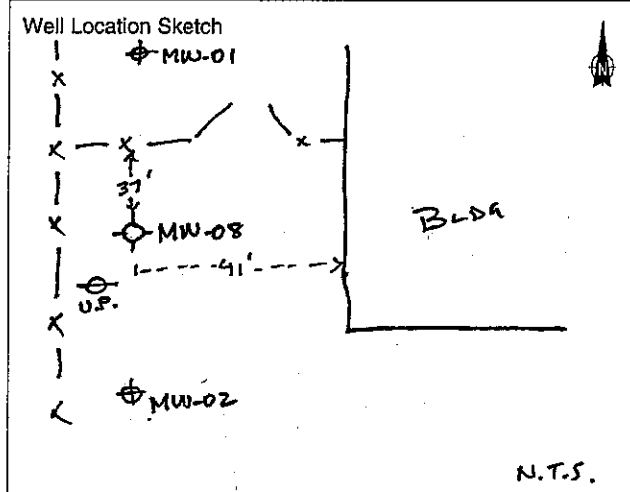
Bit Size (s) 9" Auger Size (s) 4 1/4" ID

Auger/Split Spoon Refusal N/A

Total Depth of Borehole Is 23

Total Depth of Corehole Is -

Water Level (TOIC)		
Date	Time	Level (Feet)
12/2/08	11:00	10.5' (open hole)



Depth (Feet)	Sample Number	Blows on Sampler	Soil Components Rock Profile CL SL S GR	Penetration Times	Run Number	Core Recovery	RQD	Fracture Sketch	Pd HNUOVA (ppm)	Comments
1			NSM	10:15	1	3.8'	-	-	0	
2										
3										
4										
5										
6			NSM	10:30	2	4.5'	-	-	0	
7										
8										
9										
10										
11			S/GR	10:35	3	2.6'	-	-	0	
12										
13										
14										
15										

SCREENED WELL		OPEN-HOLE WELL	
Stick-up <u>-0.45</u> ft	Lock Number _____	Stick-up _____ ft	Lock Number _____
Top of Grout <u>0</u> ft	Inner Casing Material <u>PVC</u>	Inner Casing Material _____	Inner Casing Material _____
Top of Seal at <u>2</u> ft	Inner Casing Inside Diameter <u>2</u> inches	Inner Casing Inside Diameter _____ inches	Inner Casing Inside Diameter _____ inches
Top of Sand Pack <u>10</u> ft	GROUND SURFACE	Outer Casing Diameter _____ inches	Outer Casing Diameter _____ inches
Top of Screen at <u>13</u> ft	Quantity of Material Used:	Borehole Diameter _____ ft	Borehole Diameter _____ ft
Bottom of Screen at <u>23</u> ft	Bentonite Pellets _____	Bedrock _____ ft	Bedrock _____ ft
Bottom of Hole at <u>23</u> ft	Cement _____	Bottom of Rock Socket/Outer Casing _____ ft	Bottom of Rock Socket/Outer Casing _____ ft
Bottom of Sandpack at <u>23</u> ft	Borehole Diameter <u>9</u> inches	Bottom of Inner Casing _____ ft	Bottom of Inner Casing _____ ft
	Cement/Bentonite _____	Corehole Diameter _____	Corehole Diameter _____
	Grout _____	Bottom of Corehole _____ ft	Bottom of Corehole _____ ft
	Screen Slot Size <u>0.010"</u>		
	Screen Type		
	<input checked="" type="checkbox"/> PVC <u>2" ID</u>		
	<input type="checkbox"/> Stainless Steel _____		
	Pack Type/Size:		
	<input checked="" type="checkbox"/> Sand <u>#0 U.S. Silica</u>		
	<input type="checkbox"/> Gravel _____		
	<input type="checkbox"/> Natural _____		

NOTE: See pages 136 and 137 for well construction diagrams

Depth-ft.	NARRATIVE LITHOLOGIC DESCRIPTION	Moisture Content		
		Dry	Moist	Wet
1	0-0.5' Asphalt, gravel sub-base	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	0.5-5.0' Mod Mottled light gray / yellow-brown silt with little clay and trace very fine sand, dry to moist.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	5-10' Same as above but less mottling more light brown;	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	softer and moister below 8'. Sand content increases	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	at base of core.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	10-10.2 Same as above	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	10.2-12 Brown fine-grained sand, wet.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13	12-12.5' Brown gravel with little sand	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

MW-08

79364

Depth(feet)	Sample Number	Blows on Sampler	Soil Components				Rock Profile	Penetration Times	Run Number	Core Recovery	RQD	Fracture Sketch	PID	Comments
			CL	SL	S	GR							HN/OVA (ppm)	
16			S/GR				-	10:50	4	4.5'	-	-	0	
17														
18														
19														
20														
21			GR				-	11:00	5	4.5'	-	-	0	
22														
23														
24														
25			END OF HOLE											
26														
27														
28														
29														
30														
31														
32														
33														
34														
35														
36														
37														
38														
39														
40														
41														
42														
43														
44														
45														

Depth(feet).	NARRATIVE LITHOLOGIC DESCRIPTION	Moisture Content		
		Dry	Moist	Wet
16	15- 16.7' Brown Fine to medium-grained sand, Gravel @ ~16.7' to fine then coarse gravel, very wet.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
17		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
18		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
19		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
20		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
21	20-25' Brown gravel, medium to coarse, angular to rounded, very wet.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
22		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
23		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
24		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
25		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
26		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
45		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

WELL DEVELOPMENT RECORD

SITE Former Bright Outdoor

DATE 12/4/2008

LOCATION Johnson City, NY

WELL NO. MW-08

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:

V = Static volume of well in gallons;

T = Depth of water in the well, measured in feet;

r = Inside radius of well casing in inches; and 0.163 = A constant conversion factor which compensates for r²h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).

1 well volume (v) = 2 gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509 x10 ⁻³
1 1/2	0.092	0.0123	1.142	1.142 x10 ⁻³
2	0.163	0.0218	2.024	2.024 x10 ⁻³
2 1/2	0.255	0.0341	3.167	3.167 x10 ⁻³
3	0.367	0.0491	4.558	4.558 x10 ⁻³
3 1/2	0.500	0.0668	6.209	6.209 x10 ⁻³
4	0.653	0.0873	8.110	8.110 x10 ⁻³
4 1/2	0.826	0.1104	10.260	10.260 x10 ⁻³
5	1.020	0.1364	12.670	12.670 x10 ⁻³
5 1/2	1.234	0.1650	15.330	15.330 x10 ⁻³
6	1.469	0.1963	18.240	18.240 x10 ⁻³
7	2.000	0.2673	24.840	24.840 x10 ⁻³
8	2.611	0.3491	32.430	32.430 x10 ⁻³
9	3.305	0.4418	41.040	41.040 x10 ⁻³
10	4.080	0.5454	50.670	50.670 x10 ⁻³
11	4.937	0.6600	61.310	61.310 x10 ⁻³
12	5.875	0.7854	72.960	72.960 x10 ⁻³
14	8.000	1.0690	99.350	99.350 x10 ⁻³
16	10.440	1.3960	129.650	129.650 x10 ⁻³
18	13.228	1.7670	164.180	164.180 x10 ⁻³
20	16.320	2.1820	202.680	202.680 x10 ⁻³
22	19.750	2.6400	245.280	245.280 x10 ⁻³
24	23.500	3.1420	291.850	291.850 x10 ⁻³
26	27.580	3.6870	342.520	342.520 x10 ⁻³
28	32.000	4.2760	397.410	397.410 x10 ⁻³
30	36.720	4.9090	456.020	456.020 x10 ⁻³
32	41.780	5.5850	518.870	518.870 x10 ⁻³
34	47.160	6.3050	585.680	585.680 x10 ⁻³
36	52.880	7.0690	656.720	656.720 x10 ⁻³

1 Gallon = 3.785 liters

1 Meter = 3.281 feet

1 Gallon water weighs 8.33 lbs. = 3.779 kilograms

1 Liter water weighs 1 kilogram = 2.205 pounds

1 Gallon per foot of depth = 12.419 liters per foot of depth

1 Gallon per meter of depth = 12.419 x 10⁻³ cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 10.05'

WELL DEPTH (TD) 22.72'

COLOR Brown

ODOR no

CLARITY Poor

* bottom is soft (sediment)

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 10.2' and rising @ 1030

WELL DEPTH (TD) 22.72'

COLOR clear

ODOR no

CLARITY good

DESCRIPTION OF DEVELOPMENT TECHNIQUE

Surge w/ bailer then pump w/ 12-V submersible, surging periodically w/ pump.

MW-08

DEVELOPED BY: R Watt, M. Fronchowiak

DATE 12/4/08

B

Well Purge and Sample Records

WELL PURGE & SAMPLE RECORD

Site Name/Location: Bright Outdoors

Well ID: MW-01

EEPC Project No.: 2700. DC21.01

Date: 12/16/08

Initial Depth to Water: 9.30 feet TOIC

Start Time: 1047

Total Well Depth: 47.62 feet TOIC

End Time: 1118

Depth to Pump: 4 feet TOIC

☐ Bailer ☒ Pump

Initial Pump Rate: 0.5 ~~lpm~~ / gpm

Pump Type: 12-V Typhoon

adjusted to: 1.0 at 1105 minutes

Well Diameter: 2 inches

adjusted to: Slow at Sampling minutes

1x Well Volume: 6 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
1050	2	6.19	9.5	-	1970	-	853	9.43
1056	5	6.53	11.1	-	2030	-	444	9.43
1105	10	6.62	10.7	-	2010	-	39.7	-
1114	15	6.68	11.1	-	2020	-	33.2	9.38
1115	20	6.69	11.3	-	2030	-	21.2	9.38
Final Sample Data:		6.69	11.3	-	2030	-	21.2	9.38

Sample ID: MW-01

Duplicate? ☐

Dupe Samp ID: N/A

Sample Time: 1117

MS/MSD? ☐

Analyses:

Methods:

Comments:

☒ VOCs☐ CLP

☐ SVOCs

☒ SW846

☐ PCBs

☐ Drink, Wtr.☐ Metals

9

4

Sampler(s): R Watt

WELL PURGE & SAMPLE RECORD

Site Name/Location: Bright outdoors

Well ID: MW-02

EEPC Project No.: 2700 - DC21.01

Date: 12/16/68

Initial Depth to Water: 7.08 feet TOIC

Start Time: 1157

Total Well Depth: 45.67 feet TOIC

End Time: 1219

Depth to Pump: 40 feet TOIC

☐ Bailer ☒ Pump

Initial Pump Rate: 1.0 ~~Lpm~~ / gpm

Pump Type: 12-V Typhoon

adjusted to: $\leq 14W$ at sampling minutes

Well Diameter: 2 inches

adjusted to: _____ at _____ minutes

1x Well Volume: 5.9 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
1158	1	6.65	10.1	-	1400	-	711	9.3
1203	5	6.68	12.0	-	1540	-	208	9.3
1207	10	6.69	13.2	-	1550	-	83.6	9.3
1212	15	6.75	13.2	-	1550	-	44.1	9.3
1217	20	6.77	12.8	-	1550	-	32.6	9.3
Final Sample Data:		6.77	12.8	-	1550	-	32.6	9.3

Sample ID: MW-02

Duplicate? ☐

Dupe Samp ID: N/A

Sample Time: 1218

MS/MSD? ☐

Analyses: Methods: Comments: _____

☒ VOCs

- CLP

- SVOCs

☒ SW846

☐ PCBs

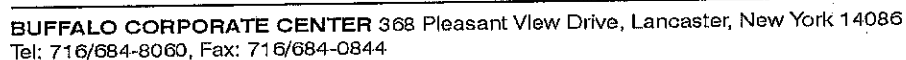
☐ Drink. Wtr.☐ Metals

□

□

□

Sampler(s): R. Watt



WELL PURGE & SAMPLE RECORD

Site Name/Location: Bright Outdoors

Well ID: MW-04

EEPC Project No.: 2700.DC21.01

Date: 12/16/68

Initial Depth to Water: 8.55 feet TOIC

Start Time: 1422

Total Well Depth: 45.78 feet TOIC

End Time: 1443

Depth to Pump: 40 feet TOIC

☐ Bailer ☒ Pump

Initial Pump Rate: 1.0 ~~Lpm~~ / gpm

Pump Type: 12-V Typhoon

adjusted to: slow at sampling minutes

Well Diameter: 2 inches

adjusted to: _____ at _____ minutes

1x Well Volume: 6.0 gallons

Time	Purge Volume (gallons/minute)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
1423	2	6.60	12.0	-	1710	-	>1000	8.78
1424	5	6.65	13.5	-	1690	-	111	8.76
1432	10	6.67	13.9	-	1640	-	14.3	8.74
1438	15	6.74	13.9	-	1660	-	7.88	8.76
1441	18	6.64	14.0	-	1650	-	6.41	
Final Sample Data:		6.64	14.0	-	1650	-	6.41	8.76

Sample ID: MW-04

Duplicate? ☐

Dupe Samp ID: N/A

Sample Time: 1443

MS/MSD? ☐

Analyses: Methods: Comments: _____

☒ VOCs ☐ CLP

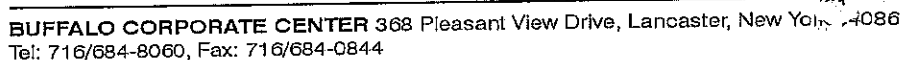
☐ SVOCs ☒ SW846

☐ PCBs ☐ Drink. Wtr.☐ Metals ☐ _____

100 101

Comments: _____

Sampler(s): 2 Watt



WELL PURGE & SAMPLE RECORD

Site Name/Location: Bright Outdoors

EEPC Project No.: 2700.DC21.01

Well ID: MW-06

Date: 12/14/08

Initial Depth to Water: 8.43 feet TOIC

Total Well Depth: 27.15 feet TOIC

Depth to Pump: 22 feet TOIC

Initial Pump Rate: 1 ~~gpm~~ / gpm

adjusted to: slow at sampling minutes

adjusted to: _____ at _____ minutes.

Start Time: 1543

End Time: 1555

☐ Bailer ☒ Pump

Pump Type: 12-V Typhoon

Well Diameter: 2 inches

1x Well Volume: 3.0 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
1545	2	6.52	11.9	-	1660	-	824	9.56
1548	5	6.54	13.5	-	1670	-	73.3	9.88
1551	8	6.53	13.5	-	1670	-	44.8	9.92
1553	10	6.52	13.6	-	1660	-	24.3	9.93
Final Sample Data:		6.52	13.6	-	1660	-	24.3	9.93

Sample ID: MW-06

Sample Time: 1555

Duplicate? ☐

MS/MSD? ☐

Dupe Samp ID: N/A

Analyses: Methods: Comments:

☒ VOCs ☐ CLP

☐ SVOCs ☒ SW846

☐ PCBs ☐ Drink. Wtr.☐ Metals ☐ _____

110 111

Comments: _____

Sampler(s): R. Watt, K. Powell

WELL PURGE & SAMPLE RECORD

Site Name/Location: Bright outdoors

Well ID: MW-07

EEEPC Project No.: 2700 - DC21-01

Date: 12/14/08

Initial Depth to Water: 9.20 feet TOIC

Start Time: 0903

Total Well Depth: 21.99 feet TOIC

End Time: 0923

Depth to Pump: 18 feet TOIC

☐ Bailer ☒ Pump

Initial Pump Rate: 0.57 ~~lpm~~ / gpm

Pump Type: 12-V Typhoon

adjusted to: 0.44 gpm at 0.910 minutes

Well Diameter: 2 inches

adjusted to: Slow at 0922 minutes

1x Well Volume: 2 gallons

Time	Purge Volume (gallons/minute)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
0906	1	5.75	10.5	-	880	-	>1000	
0911	4	5.99	12.5	-	817	-	242	9.60
0917	7	6.18	12.5	-	830	-	260.8	9.65
0921	9	6.21	13.2	-	840	-	10.8	
Final Sample Data:		6.21	13.2	-	840	-	10.8	9.62

Sample ID: MW-07

Duplicate? ☐

Dupe Samp ID: N/A

Sample Time: 0923

MS/MSD? ☐

Analyses: Methods: Comments: _____

☒ VOCs

☐ CLP

☐ SVOCs

☒ SW846

□ PCBs

☐ Drink, Wtr.☐ Metals

□

1

10

Sampler(s): R. Watt K. Powell

WELL PURGE & SAMPLE RECORD

Site Name/Location: Bright Outdoors

Well ID: MW-08

EEPC Project No.: 2700-DC21.01

Date: 12/16/2008

Initial Depth to Water: 9.24 feet TOIC

Start Time: 0948

Total Well Depth: 22.77 feet TOIC

End Time: 1014

Depth to Pump: 18 feet TOIC

☐ Bailer ☒ PumpInitial Pump Rate: 0.3 ~~lpm~~ / gpm

Pump Type: 12-V Typhoon

adjusted to: slow at Sampling minutes

Well Diameter: 2 inches

adjusted to: at minutes

1x Well Volume: 3.2 gallons

Time	Purge Volume (gallons, liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm, mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
0950	0.5	6.12	11.8	-	1210	-	300	9.93
0955	2	6.22	13.1	-	1270	-	312	9.90
1000	3.5	6.31	13.4	-	1290	-	200	9.88
1005	5	6.38	13.6	-	1290	-	69.9	9.91
1010	7.5	6.41	13.2	-	1310	-	31.8	9.92
Final Sample Data:		6.41	13.2	-	1310	-	31.8	9.92

Sample ID: MW-08

Duplicate? ☒

Dupe Samp ID: MW-08/Q

Sample Time: 10 13

MS/MSD? ☐

Analyses:

Methods:

Comments:

☒ VOCs

□ CLP

☐ SVOCs

☒ SW846

□ PCBs

☐ Drink. Wtr.

☐ Metals

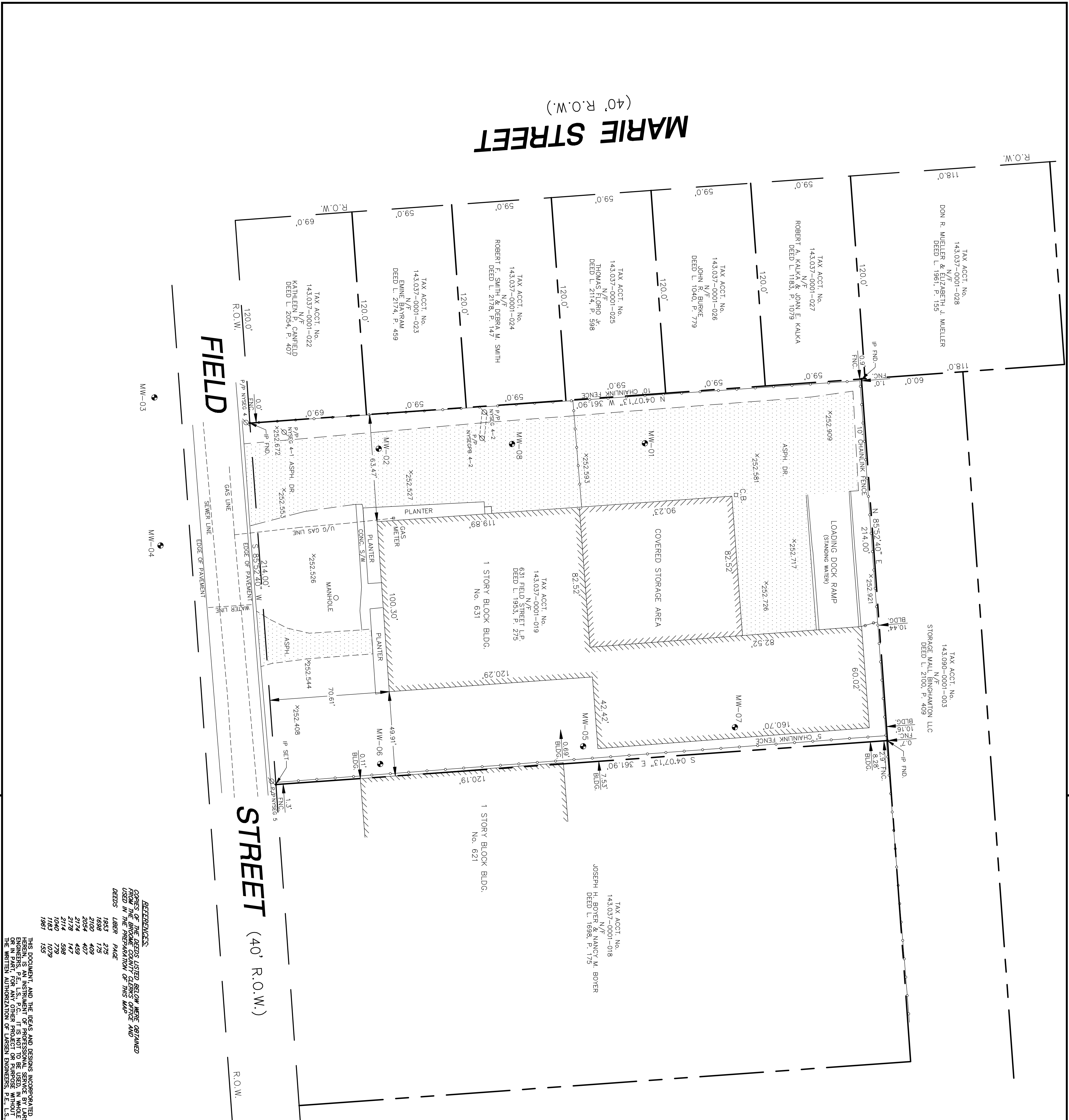
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□

Sampler(s): Z. Watt, K. Powell

C

631 Field Street Property Survey



REFERENCES:

DEEDS	LIBER	PAGE
1963	275	
1966	275	
1968	275	
1970	407	
2004	407	
2174	459	
2178	147	
2178	147	
2178	147	
2178	147	
2178	147	
1961	155	

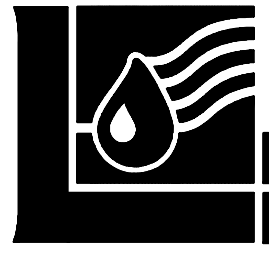
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Plot Date: Jan 06, 2009
Xref: The Bright Outdoors INST SURVEY FL.dwg
2D Dwg:

SHEET NO.
1 OF **1**
DRAWING NO.
SU 1

PROJECT:
**FORMER BRIGHT OUTDOORS SITE
NYSDEC SITE No. 7-04-023**
TOWN OF UNION, COUNTY OF BROOME, STATE OF NEW YORK

TITLE:
**INSTRUMENT SURVEY
631 FIELD STREET
VILLAGE OF JOHNSON CITY**



**LARSEN
ENGINEERS**
700 WEST METRO PARK, ROCHESTER, NEW YORK 14623-2878
(585)272-7310 FAX (585)272-0159
www.larsen-engineers.com

PROJECT ENGINEER:
R.S.B.

DRAFTED BY:
R.S.B.

CHECKED BY:
R.J.P.


SCALE:
1"= 30'

DATE:
DECEMBER, 2008

FIRM PRINCIPAL

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NO.	REVISIONS	BY	DATE



PROJECT MANAGER

MONITORING WELL LOCATION & ELEVATION			
HORIZONTAL VALUES ARE NAD 83 CENTRAL ZONE (METRIC)			
VERTICAL VALUES ARE NAVD 88 (METRIC)			
SAMPLE	NORTH	EAST	DESCRIPTION
MW-01	235787.612	300262.233	COVER (FLUSH)
MW-02	235739.720	300263.208	PVC RISER
MW-03	235699.376	300263.984	COVER (FLUSH)
MW-04	235700.468	300280.636	PVC RISER
MW-05	235776.499	300316.764	COVER (FLUSH)
MW-06	235739.994	300319.952	PVC RISER
MW-07	235803.812	300313.328	COVER (FLUSH)
MW-08	235763.718	300262.370	PVC RISER
EXTRACTION POINT			
252.758			

MONITORING WELL LOCATION & ELEVATION			
HORIZONTAL VALUES ARE NAD 83 CENTRAL ZONE (U.S. SURVEY FEET)			
VERTICAL VALUES ARE NAVD 88 (U.S. SURVEY FEET)			
SAMPLE	NORTH	EAST	DESCRIPTION
MW-01	773579.86	985110.32	COVER (FLUSH)
MW-02	773422.73	985113.54	COVER (FLUSH)
MW-03	773290.37	985083.28	COVER (FLUSH)
MW-04	773293.95	985170.72	PVC RISER
MW-05	773543.40	985289.25	COVER (FLUSH)
MW-06	773423.63	985299.71	PVC RISER
MW-07	773633.01	985277.98	COVER (FLUSH)
MW-08	773501.46	985110.79	COVER (FLUSH)
EXTRACTION POINT			
829.26			

LEGEND

- MW-06 ● MONITORING WELL & No.
- x252.526 SPOT ELEVATION (METRIC)
- CHAINLINK FENCE
- PROPERTY LINE
- RIGHT OF WAY
- UNDERGROUND UTILITY

SURVEY NOTES:

HORIZONTAL INFORMATION SHOWN HEREON IS REFERENCED TO THE NAD83 NEW YORK CENTRAL ZONE. VERTICAL INFORMATION SHOWN HEREON IS REFERENCED TO THE NAVD88.

LARSEN ENGINEERS HEREBY CERTIFY:
THAT THIS SURVEY WAS CONDUCTED IN ACCORDANCE WITH THE NYS DECISION NO. 7-04-023
AND IN CONFORMANCE WITH THE NOTES AND REFERENCES LISTED HEREON.

Robert Scott Bannerman L.S. No. 056907 Date:

D

Borehole Records

Borehole Record for SVE-Ø1

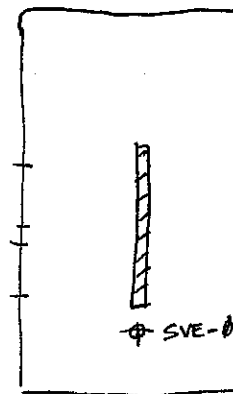
- Drilling Log
- Narrative Lithologic Description
- Well Development Record
- Well Development -- Parameter Measurements
- Investigation - Derived Waste Inventory Sheet

DRILLING LOG FOR SVE-01Project Name FORMER BRIGHT OUTDOORSSite Location JOHNSON CITY, NYDate Started/Finished 12/3/08Drilling Company AZTECH & TECHNOLOGYDriller's Name MARTY HARRINGTONGeologist's Name MEGAN FRONCKOWIAKGeologist's Signature [Signature]Rig Type (s) MOBILE B3500Drilling Method (s) HSA & MACROCOREBit Size (s) 9" Auger Size (s) 4 1/4" IDAuger/Split Spoon Refusal NATotal Depth of Borehole Is 9Total Depth of Corehole Is NA

Water Level (TOIC)

Date	Time	Level (Feet)

Well Location Sketch



NTS

Depth (Feet)	Sample Number	Blows on Sampler	Soil Components Rock Profile CL SL S GR	Penetration Times	Run Number	Core Recovery	RQD	Fracture Sketch	PID HRA/OVA (ppm)	Comments
1			CL/SL	13:50	1	3.6'	-	-	0	Collect sample SVE-01-Z1 @ depth of 1.5' @ 14:10
2										
3										
4										
5										
6			SL/S	14:00	2	4.5'	-	-	0	sample SVE-01-Z2 depth = 2.5' @ 14:15
7										
8										
9										
10										
11										sample SVE-01-Z3 depth = 4' @ 14:18
12										
13										
14										sample SVE-01-Z4 depth = 8' @ 14:35 MS/MSD
15										

Lock Number _____

SCREENED WELL

Inner Casing Material PVC

Inner Casing Inside Diameter 2 inches

Stick-up _____ ft

Top of Grout 0 ft

Top of Seal at 0.7 ft

Top of Sand Pack 2 ft

Top of Screen at 4 ft

Bottom of Screen at 5 ft

Bottom of Hole at 9 ft

Bottom of Sandpack at 9'

OPEN-HOLE WELL

Stick-up _____ ft

Inner Casing Material _____

Inner Casing Inside Diameter _____ inches

Outer Casing Diameter _____ inches

Borehole Diameter _____ ft

Bedrock _____ ft

Bottom of Rock Socket/Outer Casing _____ ft

Bottom of Inner Casing _____ ft

Corehole Diameter _____

Bottom of Corehole _____ ft

GROUND SURFACE

Quantity of Material Used:

Bentonite Pellets _____

Cement _____

Borehole Diameter 9 inches

Cement/Bentonite _____

Grout _____

Screen Slot Size 0.010"

Screen Type _____

☒ PVC

☐ Stainless Steel _____

Pack Type/Size:

☒ Sand #0 U.S. SILICA

☐ Gravel _____

☐ Natural _____

NOTE: See pages 136 and 137 for well construction diagrams

Depth-ft.	NARRATIVE LITHOLOGIC DESCRIPTION	Moisture Content		
		Dry	Moist	Wet
1	.7-1.2' sandy gravel	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	1.2-1.9' gray to brown silty clay	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	1.9-5' yellowish brown to light brown silt	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	5-6.8' yellowish brown to light brown silt	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	6.8-10' brown, very fine sand grading down	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	to a med. brown & fine sand, well	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	sorted, few	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Borehole Record for VM-01

- Drilling Log
- Narrative Lithologic Description
- Well Development Record
- Well Development -- Parameter Measurements
- Investigation - Derived Waste Inventory Sheet



DRILLING LOG FOR VM-01

Project Name FORMER BRIGHT OUTDOORS

Site Location JOHNSON CITY, NY

Date Started/Finished 12/3/08

Drilling Company AZTECH TECHNOLOGY

Driller's Name MARTY HARRINGTON

Geologist's Name MEGAN FRONKOWIAK

Geologist's Signature [Signature]

Rig Type (s) MOBILE 83500

Drilling Method (s) HSA MACROCORE

Bit Size (s) 2.25" Auger Size (s) NA

Auger/Split Spoon Refusal NA

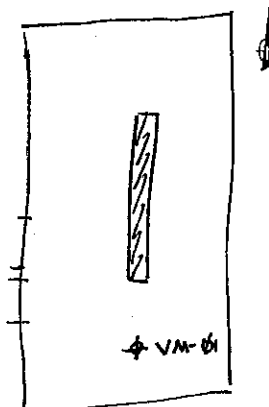
Total Depth of Borehole Is 10'

Total Depth of Corehole Is NA

Water Level (TOIC)

Date	Time	Level(Feet)

Well Location Sketch



NTS

Depth(Feet)	Sample Number	Blows on Sampler	Soil Components Rock Profile CL SL S GR	Penetration Times	Run Number	Core Recovery	RQD	Fracture Sketch	PD H ₂ O/O ₂ A (ppm)	Comments
1			SL	15:20	1	4.0'	-	-	0	sample VM-01-Z1 depth=1.5' @ 15:25
2										
3										
4										sample VM-01-Z1/Q depth=1.5' @ 15:25
5										
6			SL/S	15:35	2	4.8'	-	-	0	
7										
8										
9										
10										
11										
12										
13										
14										
15										

Lock Number _____

SCREENED WELL

Inner Casing Material PVC

Inner Casing Inside Diameter 1 inches

Stick-up _____ ft

Top of Grout 0 ft

Top of Seal at 1 ft

Top of Sand Pack 2 ft

Top of Screen at 4 ft

Bottom of Screen at 9 ft

Bottom of Hole at 10 ft

Bottom of Sandpack at 10'

OPEN-HOLE WELL

Stick-up _____ ft

Inner Casing Material _____

Inner Casing Inside Diameter _____ inches

Outer Casing Diameter _____ inches

Borehole Diameter _____ ft

Bedrock _____ ft

Bottom of Rock Socket/Outer Casing _____ ft

Bottom of Inner Casing _____ ft

Corehole Diameter _____

Bottom of Corehole _____ ft

GROUND SURFACE

Quantity of Material Used:

Bentonite Pellets _____

Cement _____

Borehole 2.25 inches Diameter

Cement/Bentonite _____

Grout _____

Screen Slot Size 0.00"

Screen Type _____

☒ PVC _____

☐ Stainless Steel _____

Pack Type/Size:

☒ Sand #10 US SILICA

☐ Gravel _____

☐ Natural _____

NOTE: See pages 136 and 137 for well construction diagrams

Depth-ft.	NARRATIVE LITHOLOGIC DESCRIPTION	Moisture Content		
		Dry	Moist	Wet
1	0 0-.6' concrete floor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	0.6-1' sandy gravel	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
3	1-5' mottled silt gray from 1.5-1.7'	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
4	yellowish brown to brown silt, gets	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
5	somewhat darker as more down	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
6		<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
7	5-7.5' brown silt	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
8	7.5-10' very fine sand grading down to fine sand	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
9	med. brown	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
10		<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
11		<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
12		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Borehole Record for VM-02

- Drilling Log
- Narrative Lithologic Description
- Well Development Record
- Well Development -- Parameter Measurements
- Investigation - Derived Waste Inventory Sheet



DRILLING LOG FOR VM-02

Project Name FORMER BRIGHT OUTDOORS

Site Location JOHNSON CITY, NY

Date Started/Finished 12/3/08

Drilling Company AZTECH TECHNOLOGY

Driller's Name MARTY HARRINGTON

Geologist's Name MEGAN FRONKOWIAK

Geologist's Signature [Signature]

Rig Type (s) MOBILE B350B

Drilling Method (s) ~~ST~~ MACROCORE

Bit Size (s) 2.25" Auger Size (s) N/A

Auger/Split Spoon Refusal N/A

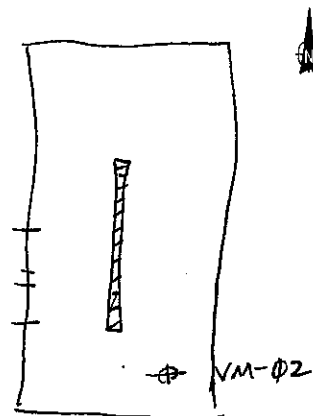
Total Depth of Borehole Is 10'

Total Depth of Corehole Is MA

Water Level (TOIC)

Date	Time	Level (Feet)

Well Location Sketch



NTS

Depth (Feet)	Sample Number	Blows on Sampler	Soil Components Rock Profile CL SL S GR	Penetration Times	Run Number	Core Recovery	RQD	Fracture Sketch	PID HNU/OVA (ppm)	Comments
1			SL	16:30	1	4.1'	-	-	0	sample VM-02-Z1 depth = 2.5' @ 16:35
2										
3										
4										
5			SL/S	16:35	2	3.7'	-	-	0	
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										

Lock Number _____

SCREENED WELL

Stick-up _____ ft

Inner Casing Material PVC

Inner Casing Inside Diameter 2 inches

Top of Grout 0 ft

Top of Seal at 0.7 ft

Top of Sand Pack 2 ft

Top of Screen at 4 ft

Bottom of Screen at 9 ft

Bottom of Hole at 10 ft

Bottom of Sandpack at 10'

OPEN-HOLE WELL

Stick-up _____ ft

Inner Casing Material _____

Inner Casing Inside Diameter _____ inches

Outer Casing Diameter _____ inches

Borehole Diameter _____ ft

Bedrock _____ ft

Bottom of Rock Socket/Outer Casing _____ ft

Bottom of Inner Casing _____ ft

Corehole Diameter _____

Bottom of Corehole _____ ft

GROUND SURFACE

Quantity of Material Used:

Bentonite Pellets _____

Cement _____

Borehole Diameter 2 1/4 inches

Cement/Bentonite _____

Grout _____

Screen Slot Size 0.010"

Screen Type _____

☒ PVC _____

☐ Stainless Steel _____

Pack Type/Size:

☒ Sand #10 US SILICA

☐ Gravel _____

☐ Natural _____

NOTE: See pages 136 and 137 for well construction diagrams

Depth-ft.	NARRATIVE LITHOLOGIC DESCRIPTION	Moisture Content		
		Dry	Moist	Wet
1	0-0.6' concrete floor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	0.6-1.2' sandy gravel subbase	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	1.2-2.6' gray clayey silt	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	2.6-5' mottled gray to light brown silt	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	5-6.7' mottled brown silt, slightly mottled at top	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	6.7-10' med. brown very fine sand grading down	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	to dk. brown fine sand	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Borehole Record for VM-03

- Drilling Log
- Narrative Lithologic Description
- Well Development Record
- Well Development -- Parameter Measurements
- Investigation - Derived Waste Inventory Sheet



DRILLING LOG FOR VM-Φ3

Project Name FORMER BRIGHT OUTDOORS

Site Location JOHNSON CITY, NY

Date Started/Finished 12/3/08

Drilling Company AZTECH TECHNOLOGY

Driller's Name MARTY HARRINGTON

Geologist's Name MEGAN FRONKOWIAK

Geologist's Signature M. Fronkowiak

Rig Type (s) MOBILE B3500

Drilling Method (s) ~~ST~~ MACROCORE

Bit Size (s) 2.25" Auger Size (s) NA

Auger/Split Spoon Refusal N/A

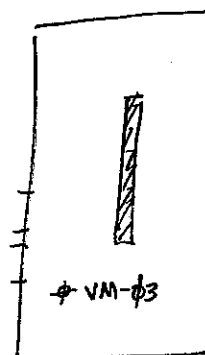
Total Depth of Borehole Is 10'

Total Depth of Corehole Is NA

Water Level (TOIC)

Date	Time	Level(Feet)

Well Location Sketch



NTS

Depth(Feet)	Sample Number	Blows on Sampler	Soil Components Rock Profile CL SL S GR	Penetration Times	Run Number	Core Recovery	RQD	Fracture Sketch	PID HNA/OVA (ppm)	Comments
1			S/SL	15:50	1	4.2'	-	-	0	sample VM-1(Φ3-Z1) depth = 0.7' @ 15:55
2										
3										
4										
5										
6			SL/S	15:55	2	4.1'	-	-	0	
7						MC				
8										
9										
10										
11										
12										
13										
14										
15										

SCREENED WELL

Stick-up _____ ft

Top of Grout _____ ft

Top of Seal at 0.7 ft

Top of Sand Pack 2 ft

Top of Screen at 4 ft

Bottom of Screen at 9 ft

Bottom of Hole at 10 ft

Bottom of Sandpack at 10'

Lock Number _____

Inner Casing Material PVC

Inner Casing Inside Diameter 2 inches

GROUND SURFACE

Quantity of Material Used:

Bentonite _____

Pellets _____

Cement _____

Borehole 2 1/4 inches Diameter

Cement/Bentonite _____

Grout _____

Screen Slot Size 0.010"

Screen Type _____

☒ PVC

☐ Stainless Steel _____

Pack Type/Size:

☒ Sand #10 US SILICA

☐ Gravel _____

☐ Natural _____

OPEN-HOLE WELL

Stick-up _____ ft

Inner Casing Material _____

Inner Casing Inside Diameter _____ inches

Outer Casing Diameter _____ inches

Borehole Diameter _____ ft

Bedrock _____ ft

Bottom of Rock Socket/Outer Casing _____ ft

Bottom of Inner Casing _____ ft

Corehole Diameter _____

Bottom of Corehole _____ ft

NOTE: See pages 136 and 137 for well construction diagrams

Depth-ft.	NARRATIVE LITHOLOGIC DESCRIPTION	Moisture Content		
		Dry	Moist	Wet
1	0-0.6' concrete floor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	0.6-0.8' black sandy gravel	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	0.8-1' brown sandy silt	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	1-1.4' gray silty clay	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	1.4-5' mottled gray to light brown silt	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	5-6.6' brown silt	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	6.6-10' very fine sand grading down to fine sand	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	med. brown	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Borehole Record for VM-CP4

- Drilling Log
- Narrative Lithologic Description
- Well Development Record
- Well Development -- Parameter Measurements
- Investigation - Derived Waste Inventory Sheet



DRILLING LOG FOR VM-04

Project Name FORMER BRIGHT OUTDOORS

Site Location JOHNSON CTY, NY

Date Started/Finished 12/3/08

Drilling Company AZTECH TECHNOLOGY

Driller's Name MARTY HARRINGTON

Geologist's Name NEEDAN FRONCKOWIAK

Geologist's Signature [Signature]

Rig Type (s) MOBILE B3500

Drilling Method (s) MF HSA & MACROCORE

Bit Size (s) MF 2.25" Auger Size (s) NA

Auger/Split Spoon Refusal N/A

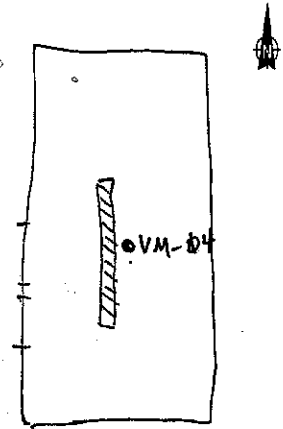
Total Depth of Borehole Is 9.7'

Total Depth of Corehole Is N/A

Water Level (TOIC)

Date	Time	Level (Feet)
12/3/08	09:30	—

Well Location Sketch



NTS

Depth (Feet)	Sample Number	Blows on Sampler	Soil Components Rock Profile CL SL S GR	Penetration Times	Run Number	Core Recovery	RQD	Fracture Sketch	PID Mn/Cu/As (ppm)	Comments
1			CL/SL	09:15	1	3.6'	—	—	0	Collect VM-04-Z1 soil sample from 2' @ 09:20
2										
3										
4										
5										
6			SL/S	09:30	2	4.9'	—	—	0	
7										
8										
9										
10										
11										
12										
13										
14										
15										

SCREENED WELL

Lock Number _____

Inner Casing Material PVC

Inner Casing Inside Diameter 2.1 inches

Stick-up _____ ft

Top of Grout _____ ft

Top of Seal at 0.7 ft

Top of Sand Pack 2.0 ft

Top of Screen at 4.0 ft

Bottom of Screen at 9.0 ft

Bottom of Hole at 9.7 ft

Bottom of Sandpack at 9.7 ft

OPEN-HOLE WELL

Stick-up _____ ft

Inner Casing Material _____

Inner Casing Inside Diameter _____ inches

Outer Casing Diameter _____ inches

Borehole Diameter _____ ft

Bedrock _____ ft

Bottom of Rock Socket/Outer Casing _____ ft

Bottom of Inner Casing _____ ft

Corehole Diameter _____

Bottom of Corehole _____ ft

GROUND SURFACE

Quantity of Material Used:

Bentonite _____

Pellets _____

Cement _____

Borehole 2.1 inches Diameter

Cement/Bentonite _____

Grout _____

Screen Slot Size 0.010"

Screen Type _____

☒ PVC _____

☐ Stainless Steel _____

Pack Type/Size:

☒ Sand #0 U.S. Silica

☐ Gravel _____

☐ Natural _____

NOTE: See pages 136 and 137 for well construction diagrams

Depth-ft.	NARRATIVE LITHOLOGIC DESCRIPTION	Moisture Content		
		Dry	Moist	Wet
1	0-1.1' concrete floor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	1.1-1.5' gravel	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	1.5'-2.5' gray clay w/ silt	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	2.5-5' mottled silt, very hard, light brown	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	5.8-6.2' silty gravel zone, light brown	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	6.2-8' same silt w/ some sand and trace clay	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	8-10' darker brown, fine sand	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Borehole Record for VM- ϕ 5

- Drilling Log
- Narrative Lithologic Description
- Well Development Record
- Well Development -- Parameter Measurements
- Investigation - Derived Waste Inventory Sheet



DRILLING LOG FOR VM-05

Project Name FORMER BRIGHT OUTDOORS

Site Location JOHNSON CITY, NY

Date Started/Finished 12/3/08

Drilling Company AZTECH TECHNOLOGY

Driller's Name MARTY HARRINGTON

Geologist's Name NEGAN FRONCKOWIAK

Geologist's Signature [Signature]

Rig Type (s) MOBILE B3500

Drilling Method (s) ~~HS~~ MACROCORE

Bit Size (s) 2.25" Auger Size (s) NA

Auger/Split Spoon Refusal NA

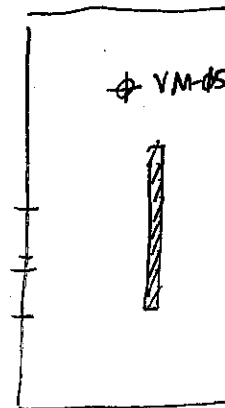
Total Depth of Borehole Is 10'

Total Depth of Corehole Is NPT

Water Level (TOIC)

Date	Time	Level (Feet)

Well Location Sketch



NTS

Depth (Feet)	Sample Number	Blows on Sampler	Soil Components Rock Profile CL SL S GR	Penetration Times	Run Number	Core Recovery	RQD	Fracture Sketch	PID HNU/GVA (ppm)	Comments
1			SL	16:45	1	3.4'	-	-	0	sample VM-05-21 depth = 1.5' @ 16:47
2										
3										
4										
5			SL/S	16:50	2	4.1'	-	-	0	
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										

SCREENED WELL

Stick-up _____ ft

Top of Grout _____ ft

Top of Seal at 1.1 ft

Top of Sand Pack 2 ft

Top of Screen at 4 ft

Bottom of Screen at 9 ft

Bottom of Hole at 10 ft

Bottom of Sandpack at 10'

Lock Number _____

Inner Casing Material PVC

Inner Casing Inside Diameter 2 inches

GROUND SURFACE

Quantity of Material Used:

Bentonite _____

Pellets _____

Cement _____

Borehole 2 1/4 inches Diameter

Cement/Bentonite _____

Grout _____

Screen Slot Size 0.010"

Screen Type _____

☒ PVC

☐ Stainless Steel

Pack Type/Size:

☒ Sand #10 US SILICA

☐ Gravel _____

☐ Natural _____

OPEN-HOLE WELL

Stick-up _____ ft

Inner Casing Material _____

Inner Casing Inside Diameter _____ inches

Outer Casing Diameter _____ inches

Borehole Diameter _____ ft

Bedrock _____ ft

Bottom of Rock Socket/Outer Casing _____ ft

Bottom of Inner Casing _____ ft

Corehole Diameter _____

Bottom of Corehole _____ ft

NOTE: See pages 136 and 137 for well construction diagrams

Depth-ft.	NARRATIVE LITHOLOGIC DESCRIPTION	Moisture Content		
		Dry	Moist	Wet
1	0-1' concrete floor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	1-1.5' grayish brown silt	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	1.5-5' mottled tan-brown silt	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	5-7' light brown silt	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	7-7.8' sand-fine to coarse	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	7.8-8.2' med. brown fine sand	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	8.2-10' med. brown sandy gravel	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Data Usability Summary Reports (DUSRs) and Laboratory Data

Data Usability Summary Report	Project: Former Bright Outdoors
Date Completed: January 15, 2009	Completed by: BKrajewski

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness per NYSDEC Division of Environmental Remediation Guidance for the Development of DUSRs (June 1999). Specific criteria for QC limits were obtained from the project QAPP. Compliance with the project QA program is indicated on the in the checklist and tables. Any major or minor concerns affected data usability are summarized listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

ProjectID	Lab Work Order
Former Bright Outdoors	LIMT-21835

Table 1 Sample Summary Tables from Electronic Data Deliverable

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/MSD	ID Corrections
LIMT-21835	Soil	MW-07-Z1	08B48557	12/03/2008			None
LIMT-21835	Soil	VM-04-Z1	08B48558	12/3/2008			None
LIMT-21835	Soil	SVE-01-Z1	08B48559	12/3/2008			None
LIMT-21835	Soil	SVE-01-Z2	08B48560	12/3/2008			None
LIMT-21835	Soil	SVE-01-Z3	08B48561	12/3/2008			None
LIMT-21835	Soil	SVE-01-Z4 QC	08B48562	12/3/2008		MS/MSD	SVE-01-Z4
LIMT-21835	Soil	VM-01-Z1	08B48563	12/3/2008			None
LIMT-21835	Soil	VM-01-Z1/Q	08B48564	12/3/2008			None
LIMT-21835	Soil	VM-03-Z1	08B48565	12/3/2008			None
LIMT-21835	Soil	VM-02-Z1	08B48566	12/3/2008			None
LIMT-21835	Soil	VM-05-Z1	08B48567	12/3/2008			None
LIMT-21835	Soil	TCLP-01	08B48568	12/3/2008			None

Work Orders, Tests and Number of Samples included in this DUSR

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
LIMT-21835	Soil	SM2540G	Percent Moisture	13	SAMP
LIMT-21835	Soil	SW8260	Volatile Organic Compounds	13	SAMP
LIMT-21835	Soil	1311/6010	TCLP Metals	1	SAMP
LIMT-21835	Soil	1311/7470	TCLP Mercury	1	SAMP
LIMT-21835	Soil	SW9045	pH	1	SAMP

General Sample Information

Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	Yes – Field duplicate included (VM-01-Z1/Q); trip/equipment blank not

Data Usability Summary Report	Project: Former Bright Outdoors
Date Completed: January 15, 2009	Completed by: BKrajewski

Trip Blank - Every cooler with VOCs waters only Equipment Blank - 1/ set of samples per day?	required.
All ASP Forms complete?	Not included – information included on lab forms
Case narrative present and complete?	Yes
Any holding time violations?	No - All samples were prepared and analyzed within holding times.

The following tables are presented at the end of this DUSR and provided summaries of results outside QC criteria.

- Method Blanks Results (Table 2)
- Surrogates Outside Limits (Table 3)
- MS/MSD Outside Limits (Table 4)
- LCS Outside Limits (Table 5)
- Re-analysis Results (Table 6)
- Field Duplicate Results (Table 7)

Go to [Tables](#) List

Volatile Organics by GCMS	
Description	Notes and Qualifiers
Any compounds present in method, trip and field blanks (see Table 2)?	No
For samples, if results are <5 times the blank or < 10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs.	Not Applicable
Surrogate for method blanks and LCS within limits?	Yes
Surrogate for samples and MS/MSD within limits? (See Table 3). All samples should be re-analyzed for VOCs. Matrix effects should be established.	Yes
Laboratory QC frequency one blank and LCS with each batch and one set of MS/MSD per 20 samples?	Yes
MS/MSD within QC criteria (see Table 4)? If out and LCS is compliant, then J flag positive data in original sample due to matrix?	No – Bromomethane recovery low for MS/MSD and chloromethane for MSD.. RPD values high for acetone and 2-butanone. Lab designates RPD for 1,2,4-trichlorobenzene high at 30.4% (limit 30%) – considered within limits based on rounding.
LCS within QC criteria (see Table 5)? If out, and the recovery high with no positive values, then no data qualification is required.	Yes
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 6)?	Yes
Is initial calibration for target compounds <15 %RSD or curve fit?	Yes
Is continuing calibration for target compounds < 20.5%D.	Yes - RF <0.05 for acetone, 2-butanone, tetrahydrofuran, 1,4-dioxane and t-butyl alcohol. Response sufficient for detection; compound not detected in samples.

Data Usability Summary Report	Project: Former Bright Outdoors
Date Completed: January 15, 2009	Completed by: BKrajewski

Volatile Organics by GCMS	
Description	Notes and Qualifiers
Were any samples re-analyzed or diluted (see Table 6)? For any sample re-analysis and dilutions is only one reportable result by flagged?	No
For TICs are there any system related compounds that should not be reported?	Not Applicable
Do field duplicate results show good precision for all compounds except TICs (see Table 7)?	Yes – Absolute difference <2xPQL.

Metals by ICP and Mercury by CVAA	
Description	Notes and Qualifiers
Any compounds present in method and field blanks as noted on Table 2?	No.
For samples, if results are <5 times the blank then "U" flag data.	Not Applicable
Laboratory QC frequency one blank and LCS with each batch and one set of MS/MSD per 20 samples?	Yes
MS/MSD within QC criteria (see Table 4)? QC limits are not applicable to sample results greater than 4 times spike amount. All N flagged data for MS are flagged J as estimated.	Not Applicable
Were elements recovered $\leq 30\%$? If so, "R" flag associated NDs on Form 1's.	Not Applicable
LCS within QC criteria (see Table 5)? If out, and the recovery high with no positive values, then no data qualification is required.	Yes
Is there one serial dilution per 20 samples? Flag all data reported with an "E" as "J".	No
Spot check ICS recoveries 80-120%. Contact lab.	Data not provided; no outlier noted in case narrative
Spot check ICV 95-105%. Contact lab.	Data not provided; no outlier noted in case narrative
Spot check CCV 90-110% or 80-120% for Hg. Contact lab.	Data not provided; no outlier noted in case narrative
Do field duplicate results show good precision for all compounds (see Table 7)?	Not Applicable

Summary of Potential Impacts on Data Usability
Major Concerns
None
Minor Concerns
Acetone, 2-butanone, bromomethane and chloromethane results for SVE-01-Z4 qualified as estimated "J" based on matrix spike/spike duplicate recoveries and RPD values.

Data Usability Summary Report	Project: Former Bright Outdoors
Date Completed: January 15, 2009	Completed by: BKrajewski

Table 2 - List of Positive Results for Blank Samples

None

Table 2A - List of Samples Qualified for Method Blank Contamination

None

Table 2B - List of Samples Qualified for Field Blank Contamination

None

Table 3 - List of Samples with Surrogates outside Control Limits

None

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.
SW8260	SVE-01-Z4	MS	Bromomethane	<0.014	0.017	68	1	70	130	J Flag
SW8260	SVE-01-Z4	MSD	Bromomethane	<0.014	0.013	68	1	70	130	J Flag
SW8260	SVE-01-Z4	MSD	Chloromethane	<0.014	0.013	68	1	70	130	J Flag

Method	Sample ID	Sample Type	Analyte	RPD	RPD Limit	Sample Qual.
SW8260	SVE-01-Z4	MSD	Acetone	42	30	J Flag
SW8260	SVE-01-Z4	MSD	2-Butanone	32	30	J Flag

Table 5 - List LCS Recoveries outside Control Limits

None

Table 6 –Samples that were Reanalyzed

None

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	Anal Type	PQL	VM-01-Z1	VM-01-Z1/Q	Absolute Difference	Rating	Samp Qual
SW8260	Toluene	mg/Kg	A	0.002	0.002	0.004	0.002	Good	None

Data Usability Summary Report	Project: Former Bright Outdoors
Date Completed: January 15, 2009	Completed by: BKrajewski

Key:

A = Analyte

NC = Not Calculated

ND = Not Detected

PQL = Practical Quantitation Limit

RPD = Relative Percent Difference

T = Tentatively Identified Compound

Data Usability Summary Report	Project: Former Bright Outdoors
Date Completed: January 15, 2009	Completed by: BKrajewski

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness per NYSDEC Division of Environmental Remediation Guidance for the Development of DUSRs (June 1999). Specific criteria for QC limits were obtained from the project QAPP. Compliance with the project QA program is indicated on the in the checklist and tables. Any major or minor concerns affected data usability are summarized listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

ProjectID	Lab Work Order
Former Bright Outdoors	LIMT-22130

Table 1 Sample Summary Tables from Electronic Data Deliverable

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/MSD	ID Corrections
LIMT-22130	Water	MW-01	08B50004	12/16/2008			None
LIMT-22130	Water	MW-02	08B50005	12/16/2008			None
LIMT-22130	Water	MW-03Q	08B50006	12/16/2008		MS/MSD	MW-03
LIMT-22130	Water	MW-04	08B50007	12/16/2008			None
LIMT-22130	Water	MW-05	08B50008	12/16/2008			None
LIMT-22130	Water	MW-06	08B50009	12/16/2008			None
LIMT-22130	Water	MW-07	08B50010	12/16/2008			None
LIMT-22130	Water	MW-08	08B50011	12/16/2008			None
LIMT-22130	Water	MW-08/Q	08B50012	12/16/2008			None
LIMT-22130	Water	TB121608	08B50013	12/16/2008			None

Work Orders, Tests and Number of Samples included in this DUSR

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
LIMT-22130	Water	SW8260	Volatile Organic Compounds	10	SAMP

General Sample Information

Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples Trip Blank - Every cooler with VOCs waters only Equipment Blank - 1/ set of samples per day?	Yes – Field duplicate (MW-08/Q) and trip blank included; equipment blank not required.
All ASP Forms complete?	Not included – information included on lab forms
Case narrative present and complete?	Yes
Any holding time violations?	No - All samples were prepared and analyzed within holding times.

Data Usability Summary Report	Project: Former Bright Outdoors
Date Completed: January 15, 2009	Completed by: BKrajewski

The following tables are presented at the end of this DUSR and provided summaries of results outside QC criteria.

- Method Blanks Results (Table 2)
- Surrogates Outside Limits (Table 3)
- MS/MSD Outside Limits (Table 4)
- LCS Outside Limits (Table 5)
- Re-analysis Results (Table 6)
- Field Duplicate Results (Table 7)

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Volatile Organics by GCMS	
Description	Notes and Qualifiers
Any compounds present in method, trip and field blanks (see Table 2)?	Yes – chloroform detected in method blank
For samples, if results are <5 times the blank or < 10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs.	Not Applicable – chloroform not detected in samples
Surrogate for method blanks and LCS within limits?	Yes
Surrogate for samples and MS/MSD within limits? (See Table 3). All samples should be re-analyzed for VOCs. Matrix effects should be established.	Yes
Laboratory QC frequency one blank and LCS with each batch and one set of MS/MSD per 20 samples?	Yes
MS/MSD within QC criteria (see Table 4)? If out and LCS is compliant, then J flag positive data in original sample due to matrix?	No – Multiple low recoveries. MW-03 results for affected compounds qualified "J".
LCS within QC criteria (see Table 5)? If out, and the recovery high with no positive values, then no data qualification is required.	No - Multiple low recoveries. All associated sample results qualified "J"; All sample tert-Butyl alcohol results rejected since LCS recovery <10%.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 6)?	Yes
Is initial calibration for target compounds <15 %RSD or curve fit?	Yes – Curve fit used for several compounds.
Is continuing calibration for target compounds < 20.5%D.	No – CCV indicates low bias for acetone, tert-butyl alcohol, MTBE, carbon tetrachloride, tert-butyl ethyl ether, 2,2-dichloropropane, tetrahydrofuran, 1,1,1-trichloroethane, tert-amylmethyl ether, 1,4-dioxane, cis-1,3-dichloropropene, 2-hexanone, trans-1,3-dichloropropene, 1,2-dibromoethane, 1,1,1,2-tetrachloroethane, 1,2,4-trichlorobenzene, trans-1,4-dichloro-2-butene, and 1,2-dibromo-3-chloropropane. RRF for tert-butyl alcohol, 1,4-dioxane and 1,2-dibromo-3-chloropropane <0.5.

Data Usability Summary Report	Project: Former Bright Outdoors
Date Completed: January 15, 2009	Completed by: BKrajewski

Volatile Organics by GCMS	
Description	Notes and Qualifiers
Were any samples re-analyzed or diluted (see Table 6)? For any sample re-analysis and dilutions is only one reportable result by flagged?	No
For TICs are there any system related compounds that should not be reported?	Not Applicable
Do field duplicate results show good precision for all compounds except TICs (see Table 7)?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
CCV and LCS indicate low bias in quantitation of several compounds. Sample tert-Butyl alcohol results rejected based on LCS recovery <10%.
Minor Concerns
Several results qualified as estimated based on low MS/MSD/LCS recoveries.

Data Usability Summary Report	Project: Former Bright Outdoors
Date Completed: January 15, 2009	Completed by: BKrajewski

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	PQL
SW8260	BLANK-127963	MBLK	Chloroform	2.3		A	ug/L	2.0

Table 2A - List of Samples Qualified for Method Blank Contamination

None

Table 2B - List of Samples Qualified for Field Blank Contamination

None

Table 3 - List of Samples with Surrogates outside Control Limits

None

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.
SW8260	MW-03	MS	Carbon Tetrachloride	<1.0	10.0	66	1	70	130	J Flag
SW8260	MW-03	MSD	trans-1,2-Dichloroethene	<1.0	10.0	131	1	70	130	J Flag
SW8260	MW-03	MS	cis-1,3-Dichloropropene	<1.0	10.0	66	1	70	130	J Flag
SW8260	MW-03	MS	trans-1,3-Dichloropropene	<0.5	10.0	47	1	70	130	J Flag
SW8260	MW-03	MSD	trans-1,3-Dichloropropene	<0.5	10.0	52	1	70	130	J Flag
SW8260	MW-03	MS	2,2-Dichloropropane	<1.0	10.0	28	1	70	130	J Flag
SW8260	MW-03	MSD	2,2-Dichloropropane	<1.0	10.0	30	1	70	130	J Flag
SW8260	MW-03	MS	trans-1,4-dichloro-2-butene	<2.0	10.0	63	1	70	130	J Flag
SW8260	MW-03	MSD	trans-1,4-dichloro-2-butene	<2.0	10.0	60	1	70	130	J Flag
SW8260	MW-03	MS	1,2-Dibromo-3-chloropropane	<5.0	10.0	65	1	70	130	J Flag
SW8260	MW-03	MS	tert-Butyl alcohol	<20.0	10.0	27	1	70	130	J Flag
SW8260	MW-03	MSD	tert-Butyl alcohol	<20.0	10.0	28	1	70	130	J Flag
SW8260	MW-03	MS	tert-Butyl ethyl ether	<0.5	10.0	52	1	70	130	J Flag
SW8260	MW-03	MSD	tert-Butyl ethyl ether	<0.5	10.0	58	1	70	130	J Flag
SW8260	MW-03	MS	tert-Amyl methyl ether	<0.5	10.0	55	1	70	130	J Flag
SW8260	MW-03	MSD	tert-Amyl methyl ether	<0.5	10.0	60	1	70	130	J Flag

Data Usability Summary Report	Project: Former Bright Outdoors
Date Completed: January 15, 2009	Completed by: BKrajewski

Table 5 - List LCS Recoveries outside Control Limits

Method	Sample ID	Analyte	Rec.	Low Limit	High Limit	No. of Affected Samples	Samp Qual
SW8260	LFBLANK-89963	Acetone	66	70	160	9	J Flag
SW8260	LFBLANK-89963	Carbon tetrachloride	64	70	130	9	J Flag
SW8260	LFBLANK-89963	1,1,1-Trichloroethane	65	70	130	9	J Flag
SW8260	LFBLANK-89963	1,4-Dioxane	23	40	130	9	J Flag
SW8260	LFBLANK-89963	cis-1,3-Dichloropropene	65	70	130	9	J Flag
SW8260	LFBLANK-89963	trans-1,3-Dichloropropene	48	70	130	9	J Flag
SW8260	LFBLANK-89963	2,2-Dichloropropane	29	40	130	9	J Flag
SW8260	LFBLANK-89963	trans-1,4-dichloro-2-butene	58	70	130	9	J Flag
SW8260	LFBLANK-89963	1,2-Dibromo-3-chloropropane	62	70	130	9	J Flag
SW8260	LFBLANK-89963	tert-Butyl alcohol	9	40	160	9	R Flag
SW8260	LFBLANK-89963	tert-Butyl ethyl ether	55	70	160	9	J Flag
SW8260	LFBLANK-89963	tert-Amyl methyl ether	60	70	130	9	J Flag

Table 6 –Samples that were Reanalyzed
None

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	Anal Type	PQL	MW-08	MW-08/Q	RPD	RPD Rating	Samp Qual
SW8260	1,1,1-Trichloroethane	ug/L	A	1.0	3.9	3.9	0.0%	Good	None
SW8260	Trichloroethene	ug/L	A	1.0	13.7	13.6	0.7%	Good	None

Key:

A = Analyte

NC = Not Calculated

ND = Not Detected

PQL = Practical Quantitation Limit

RPD = Relative Percent Difference

T = Tentatively Identified Compound

Data Usability Summary Report	Project: Former Bright Outdoors
Date Completed: January 15, 2009	Completed by: BKrajewski

Data Usability Summary Report	Project: Former Bright Outdoors
Date Completed: January 16, 2009	Completed by: BKrajewski

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness per NYSDEC Division of Environmental Remediation Guidance for the Development of DUSRs (June 1999). Specific criteria for QC limits were obtained from the project QAPP. Compliance with the project QA program is indicated on the in the checklist and tables. Any major or minor concerns affected data usability are summarized listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project	Lab Work Order
Former Bright Outdoors	LIMT-22131

Table 1 Sample Summary Tables

Sample ID	Matrix	Sample Date	Lab ID	Lab QC	MS/MSD	ID Corrections
AS-20	Air	12/16/2008	08B50014			None
AS-60	Air	12/16/2008	08B50015			None

Work Orders, Tests and Number of Samples included in this DUSR

Matrix	Test Method	Method Name	Number of Samples
Air	EPATO15	VOCs in Air by GCMS Method TO-15	2

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes – Canisters received in good condition. Temperature requirement not applicable to air samples. Canister pressure at -11 and -18 Hg
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples Trip Blank - Every cooler with VOCs waters only Equipment Blank - 1/ set of samples per day?	Yes – Field Duplicate not included in SDG. Trip and Equipment Blank not required.
All ASP Forms complete?	Not present – information available in equivalent forms.
Case narrative present and complete?	Yes
Any holding time violations?	No - All samples were prepared and analyzed within holding times (30 days from collection).

The following tables are presented at the end of this DUSR and provided summaries of results outside QC criteria.

- Method Blanks Results (Table 2)
- Surrogates Outside Limits (Table 3)
- MS/MSD Outside Limits (Table 4)
- LCS Outside Limits (Table 5)
- Re-analysis Results (Table 6)
- Field Duplicate Results (Table 7)

Data Usability Summary Report	Project: Former Bright Outdoors
Date Completed: January 16, 2009	Completed by: BKrajewski

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Volatile Organic by GCMS	
Description	Notes and Qualifiers
Any compounds present in method, trip and field blanks (see Table 2)?	Yes – Acetone at 0.15 ug/m3 detected at canister certification. No additional qualifier applied.
For samples, if results are <5 times the blank or < 10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs.	Yes – Acetone and 2-butanone results for sample AS-20 are qualified "U" at the concentration detected
Surrogate for method blanks and LCS within limits?	Yes
Surrogate for samples within limits? (See Table 3). All samples should be re-analyzed for VOCs? Matrix effects should be established.	Yes
Laboratory QC frequency one blank and LCS with each batch and one set of MS/MSD per 20 samples?	Yes – MS/MSD not required for Method.
MS/MSD within QC criteria (see Table 4)? If out and LCS is compliant, then J flag positive data in original sample due to matrix?	Not Applicable.
LCS within QC criteria (see Table 5)? If out, and the recovery high with no positive values, then no data qualification is required.	No – Recovery high for benzyl chloride and 1,2,4-trimethylbenzene. 1,2,4-trimethylbenzene result for sample AS-60 qualified "J" as estimated
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 6)?	Yes
Is initial calibration for target compounds <30%RSD or curve fit?	Yes
Is continuing calibration for target compounds < 30%D.	Yes - Second source standard low for benzyl chloride, 1,2,4-trimethylbenzene and 4-ethyltoluene. No qualifier applied.
Were any samples re-analyzed or diluted (see Table 6)? For any sample re-analysis and dilutions is only one reportable result by flagged?	Yes – Samples required dilution (2x) based on level of target compounds detected. Additional 20x dilution performed for select compounds.
For TICs are there any system related compounds that should not be reported?	Not Applicable.
Do field duplicate results show good precision for all compounds except TICs (see Table 7)?	Not Applicable.

Summary of Potential Impacts on Data Usability
Major Concerns
None
Minor Concerns
Results qualified based on method blank and LCS results.

Data Usability Summary Report	Project: Former Bright Outdoors
Date Completed: January 16, 2009	Completed by: BKrajewski

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	PQL
TO-15	BLANK-127841	MBLK	Isopropyl alcohol	0.9		A	ug/m3	0.06
TO-15	BLANK-127841	MBLK	Acetone	1.3		A	ug/m3	0.06
TO-15	BLANK-127841	MBLK	Hexachlorobutadiene	0.28		A	ug/m3	0.27
TO-15	BLANK-127841	MBLK	Methylene Chloride	0.21		A	ug/m3	0.09
TO-15	BLANK-127841	MBLK	1,2,4-Trichlorobenzene	0.34		A	ug/m3	0.19
TO-15	BLANK-127841	MBLK	2-Butanone	0.19		A	ug/m3	0.08

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
TO	BLANK-127841	Air	Acetone	1.3	4.4		0.24	AS-20	U Qualified
TO	BLANK-127841	Air	2-Butanone	0.19	0.60		0.30	AS-20	U Qualified

Table 2B - List of Samples Qualified for Field Blank Contamination

None

Table 3 - List of Samples with Surrogates outside Control Limits

None

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Not Applicable

Table 5 - List LCS Recoveries outside Control Limits

Method	Sample ID	Analyte	Rec.	Low Limit	High Limit	Affected Samples	Samp Qual
TO-15	LFBLANK-89832	Benzyl chloride	137	70	130	None – Not Detected	None
TO-15	LFBLANK-89832	1,2,4-Trimethylbenzene	131	70	130	AS-60	J Flag

Data Usability Summary Report	Project: Former Bright Outdoors
Date Completed: January 16, 2009	Completed by: BKrajewski

Table 6 –Samples that were Reanalyzed

Sample ID	Lab ID	Method	Sample Type	Action
AS-20	08B50014	TO-15	Dilution	111-TCA;TCE reported at 20X
AS-60	08B50015	TO-15	Dilution	Toluene reported at 20X

Table 7 – Summary of Field Duplicate Results

Not Applicable

Key:

A = Analyte

NC = Not Calculated

ND = Not Detected

PQL = Practical Quantitation Limit

RPD = Relative Percent Difference

T = Tentatively Identified Compound

ECOLOGY & ENVIRONMENT

368 PLEASANT VIEW

LANCASTER, NY 14086

ATTN: RICK WATT

CONTRACT NUMBER:

PURCHASE ORDER NUMBER: 2700.DC21.01

PROJECT NUMBER:

ANALYTICAL SUMMARY

LIMS BAT #: LIMIT-21835

JOB NUMBER: 2700.DC21.01

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report. Results are based on samples as submitted to the laboratory and relate only to the items collected and tested.

PROJECT LOCATION: FORMER BRIGHT OUTDOORS

FIELD SAMPLE #	LAB ID	MATRIX	SAMPLE DESCRIPTION	TEST	Subcontract Lab (if any) Cert. Nos.
MW-07-Z1	08B48557	SOIL	Not Specified	8260 dry weight	
MW-07-Z1	08B48557	SOIL	Not Specified	solids (percent)	
SVE-01-Z1	08B48559	SOIL	Not Specified	8260 dry weight	
SVE-01-Z1	08B48559	SOIL	Not Specified	solids (percent)	
SVE-01-Z2	08B48560	SOIL	Not Specified	8260 dry weight	
SVE-01-Z2	08B48560	SOIL	Not Specified	solids (percent)	
SVE-01-Z3	08B48561	SOIL	Not Specified	8260 dry weight	
SVE-01-Z3	08B48561	SOIL	Not Specified	solids (percent)	
SVE-01-Z4 QC	08B48562	SOIL	Not Specified	8260 dry weight	
SVE-01-Z4 QC	08B48562	SOIL	Not Specified	solids (percent)	
TCLP-01	08B48568	SOIL	Not Specified	ph solids	
TCLP-01	08B48568	SOIL	Not Specified	tcip - metals	
VM-01-Z1	08B48563	SOIL	Not Specified	8260 dry weight	
VM-01-Z1	08B48563	SOIL	Not Specified	solids (percent)	
VM-01-Z1/Q	08B48564	SOIL	Not Specified	8260 dry weight	
VM-01-Z1/Q	08B48564	SOIL	Not Specified	solids (percent)	
VM-02-Z1	08B48566	SOIL	Not Specified	8260 dry weight	
VM-02-Z1	08B48566	SOIL	Not Specified	solids (percent)	
VM-03-Z1	08B48565	SOIL	Not Specified	8260 dry weight	
VM-03-Z1	08B48565	SOIL	Not Specified	solids (percent)	
VM-04-Z1	08B48558	SOIL	Not Specified	8260 dry weight	
VM-04-Z1	08B48558	SOIL	Not Specified	solids (percent)	
VM-05-Z1	08B48567	SOIL	Not Specified	8260 dry weight	
VM-05-Z1	08B48567	SOIL	Not Specified	solids (percent)	

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368 PLEASANT VIEW

LANCASTER, NY 14086

ATTN: RICK WATT

CONTRACT NUMBER:

PURCHASE ORDER NUMBER: 2700.DC21.01

PROJECT NUMBER:

ANALYTICAL SUMMARY

LIMS BAT #: LIMIT-21835

JOB NUMBER: 2700.DC21.01

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report. Results are based on samples as submitted to the laboratory and relate only to the items collected and tested.

Comments :

LIMS BATCH NO. : LIMIT-21835

CASE NARRATIVE SUMMARY

Recommended sample holding times were not exceeded for all samples unless listed below:
None Exceeded

All samples for the method(s) listed were received preserved properly in the proper containers at 4°C +/- 2 degrees as specified on the chain-of-custody form unless listed below:
All properly preserved

In method 8260, the initial and/or continuing calibration did not meet method specifications. For samples 08B48557 - 48567, tert-Butyl Alcohol, Acetone, 2-Butanone, Tetrahydrofuran, and 1,4-Dioxane were calibrated with a relative response factor <0.05.

In method 8260 for sample 08B48562, the matrix spike and matrix spike duplicate recoveries for Bromomethane are biased on the low side. Analysis is in control based on laboratory control sample. Possibility of sample matrix effects that lead to low bias for reported results cannot be eliminated.

In method 8260 for sample 08B48562, the matrix spike duplicate RPD for Acetone, 2-Butanone, and 1,2,4-Trichlorobenzene is outside of control limits. Reduced precision is anticipated for any reported results for these compounds in this sample.

There are no other analytical issues which affect the usability of the data.

DETAILED CASE NARRATIVE**METHOD SW846-6010 - ADDITIONAL DETAILS**

Only RCRA 8 metals results were requested and reported.

METHOD 7471A - ADDITIONAL DETAILS

A matrix spike was performed on TCLP sample 08B48568.

METHOD SW846 8260 - ADDITIONAL DETAILS

In method 8260 for Bromomethane in samples 08B48557 - 48567, data is not affected by continuing calibration non-conformance since bias is on the high side and all results are "not detected".

Laboratory control sample recoveries for required MCP Data Enhancement 8260 compounds were all within limits specified by the method except for "difficult analytes" where recovery control limits somewhere between 40-160% are used and/or unless otherwise listed in this narrative.

Difficult analytes: MIBK, MEK, tetrachloroethylene, tert-butyl alcohol, acetone, 1,4-dioxane, vinyl chloride, chloromethane, dichlorodifluoromethane, 2-hexanone, naphthalene, and bromomethane
Additional difficult analytes in water only: 2,2-dichloropropane, and tert-butylethyl ether



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

REPORT DATE 12/10/2008

ECOLOGY & ENVIRONMENT

368 PLEASANT VIEW

LANCASTER, NY 14086

ATTN: RICK WATT

CONTRACT NUMBER:

PURCHASE ORDER NUMBER: 2700.DC21.01

PROJECT NUMBER:

ANALYTICAL SUMMARY

LIMS BAT #: LIMT-21835

JOB NUMBER: 2700.DC21.01

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report. Results are based on samples as submitted to the laboratory and relate only to the items collected and tested.

Additional difficult analytes in soil only: acrylonitrile, chloroethane, 1,2,3-trichloropropane, 1,2,4-trichlorobenzene, methylene chloride, n-butylbenzene, and tert-butylbenzene. Duplicate laboratory fortified blank RPDs were all within control limits specified by the method except for "difficult analytes" where RPDs of 50% are used and/or unless otherwise listed in this narrative.

Difficult analyte: 1,4-dioxane

Additional difficult analytes for soil only: acetone, MEK, and 2-hexanone

All 8260 matrix spike and matrix spike duplicate recoveries, sample duplicate RPDs and MSDRPDs, if requested in this batch were within control limits specified by the method unless listed below:

In method 8260 for sample 08B48562, either matrix spike or matrix spike duplicate recovery for Chloromethane is outside of control limits, but the other is within limits. Outlier should be viewed as a one-time anomaly.

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations. AIHA accreditations only apply to NIOSH methods and Environmental Lead Analyses.

AIHA 100033	AIHA ELLAP (LEAD) 100033	NORTH CAROLINA CERT. # 652
MASSACHUSETTS MA0100	NEW HAMPSHIRE NELAP 2516	NEW JERSEY NELAP NJ MA007 (AIR)
CONNECTICUT PH-0567	VERMONT DOH (LEAD) No. LL015036	FLORIDA DOH E871027 (AIR)
NEW YORK ELAP/NELAP 10899	RHODE ISLAND (LIC. No. 112)	

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Edward Denson 12/11/08

SIGNATURE

DATE

Tod Kopyscinski
Air Laboratory Manager

Michael Erickson
Assistant Laboratory Director

Edward Denson
Technical Director

Daren Damboragian
Organics Department Supervisor

* See end of data tabulation for notes and comments pertaining to this sample

RICK WATT
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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: MW-07-Z1

Sample ID: 08B48557

‡Sampled: 12/3/2008
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	mg/kg dry wt	ND	12/05/08	MFF	0.077		
Acrylonitrile	mg/kg dry wt	ND	12/05/08	MFF	0.005		
tert-Amylmethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Benzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromochloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromodichloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromoform	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.008		
2-Butanone (MEK)	mg/kg dry wt	ND	12/05/08	MFF	0.031		
tert-Butyl Alcohol	mg/kg dry wt	ND	12/05/08	MFF	0.031		
n-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
sec-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
tert-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
tert-Butylethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Carbon Disulfide	mg/kg dry wt	ND	12/05/08	MFF	0.005		
Carbon Tetrachloride	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Chlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Chlorodibromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Chloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.016		
Chloroform	mg/kg dry wt	ND	12/05/08	MFF	0.004		
Chloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.008		
2-Chlorotoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
4-Chlorotoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dibromo-3-Chloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dibromoethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Dibromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: MW-07-Z1

Sample ID: 08B48557

‡Sampled: 12/3/2008
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,4-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
trans-1,4-Dichloro-2-Butene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
Dichlorodifluoromethane	mg/kg dry wt	ND	12/05/08	MFF	0.016		
1,1-Dichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
cis-1,2-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
trans-1,2-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
2,2-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
cis-1,3-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.001		
trans-1,3-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Diethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.016		
Diisopropyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
1,4-Dioxane	mg/kg dry wt	ND	12/05/08	MFF	0.077		
Ethyl Benzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Hexachlorobutadiene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
2-Hexanone	mg/kg dry wt	ND	12/05/08	MFF	0.016		
Isopropylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
p-Isopropyltoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
MTBE	mg/kg dry wt	ND	12/05/08	MFF	0.004		
Methylene Chloride	mg/kg dry wt	ND	12/05/08	MFF	0.016		
MIBK	mg/kg dry wt	ND	12/05/08	MFF	0.016		
Naphthalene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
n-Propylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Styrene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,1,2-Tetrachloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS
 Date Received: 12/4/2008

LIMS-BAT #: LIMIT-21835
 Job Number: 2700.DC21.01

Field Sample #: MW-07-Z1

Sample ID: 08B48557 ‡Sampled: 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,1,2,2-Tetrachloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Tetrachloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Tetrahydrofuran	mg/kg dry wt	ND	12/05/08	MFF	0.008		
Toluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2,3-Trichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2,4-Trichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,1-Trichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,2-Trichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Trichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Trichlorofluoromethane	mg/kg dry wt	ND	12/05/08	MFF	0.008		
1,2,3-Trichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,2-Trichloro-1,2,2-Trifluoroethane	mg/kg dry wt	ND	12/05/08	MFF	0.008		
1,2,4-Trimethylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3,5-Trimethylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Vinyl Chloride	mg/kg dry wt	ND	12/05/08	MFF	0.008		
m + p Xylene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
o-Xylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		

Analytical Method:

SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS. REPORTED RESULTS AND REPORTING LIMITS FOR 1,4-DIOXANE AND TERT-BUTYLALCOHOL ARE ESTIMATED SINCE RESPONSE FACTORS FOR THESE COMPOUNDS ARE BELOW METHOD SPECIFICATIONS.

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: SVE-01-Z1

Sample ID: 08B48559

‡Sampled: 12/3/2008
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	mg/kg dry wt	ND	12/05/08	MFF	0.073		
Acrylonitrile	mg/kg dry wt	ND	12/05/08	MFF	0.005		
tert-Amylmethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Benzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromochloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromodichloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromoform	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.008		
2-Butanone (MEK)	mg/kg dry wt	ND	12/05/08	MFF	0.030		
tert-Butyl Alcohol	mg/kg dry wt	ND	12/05/08	MFF	0.030		
n-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
sec-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
tert-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
tert-Butylethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Carbon Disulfide	mg/kg dry wt	ND	12/05/08	MFF	0.005		
Carbon Tetrachloride	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Chlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Chlorodibromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Chloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.015		
Chloroform	mg/kg dry wt	ND	12/05/08	MFF	0.003		
Chloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.008		
2-Chlorotoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
4-Chlorotoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dibromo-3-Chloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dibromoethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Dibromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: SVE-01-Z1

Sample ID: 08B48559

‡Sampled: 12/3/2008
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,4-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
trans-1,4-Dichloro-2-Butene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
Dichlorodifluoromethane	mg/kg dry wt	ND	12/05/08	MFF	0.015		
1,1-Dichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
cis-1,2-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
trans-1,2-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
2,2-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
cis-1,3-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.001		
trans-1,3-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Diethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.015		
Diisopropyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
1,4-Dioxane	mg/kg dry wt	ND	12/05/08	MFF	0.073		
Ethyl Benzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Hexachlorobutadiene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
2-Hexanone	mg/kg dry wt	ND	12/05/08	MFF	0.015		
Isopropylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
p-Isopropyltoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
MTBE	mg/kg dry wt	ND	12/05/08	MFF	0.003		
Methylene Chloride	mg/kg dry wt	ND	12/05/08	MFF	0.015		
MIBK	mg/kg dry wt	ND	12/05/08	MFF	0.015		
Naphthalene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
n-Propylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Styrene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,1,2-Tetrachloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS
 Date Received: 12/4/2008

LIMS-BAT #: LIMIT-21835
 Job Number: 2700.DC21.01

Field Sample #: SVE-01-Z1

Sample ID: 08B48559 ‡Sampled: 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,1,2,2-Tetrachloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Tetrachloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Tetrahydrofuran	mg/kg dry wt	ND	12/05/08	MFF	0.008		
Toluene	mg/kg dry wt	0.002	12/05/08	MFF	0.002		
1,2,3-Trichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2,4-Trichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,1-Trichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,2-Trichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Trichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Trichlorofluoromethane	mg/kg dry wt	ND	12/05/08	MFF	0.008		
1,2,3-Trichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,2-Trichloro-1,2,2-Trifluoroethane	mg/kg dry wt	ND	12/05/08	MFF	0.008		
1,2,4-Trimethylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3,5-Trimethylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Vinyl Chloride	mg/kg dry wt	ND	12/05/08	MFF	0.008		
m + p Xylene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
o-Xylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		

Analytical Method:

SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS. REPORTED RESULTS AND REPORTING LIMITS FOR 1,4-DIOXANE AND TERT-BUTYLALCOHOL ARE ESTIMATED SINCE RESPONSE FACTORS FOR THESE COMPOUNDS ARE BELOW METHOD SPECIFICATIONS.

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: SVE-01-Z2

Sample ID: 08B48560

‡Sampled: 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	mg/kg dry wt	ND	12/05/08	MFF	0.069		
Acrylonitrile	mg/kg dry wt	ND	12/05/08	MFF	0.005		
tert-Amylmethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Benzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromochloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromodichloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromoform	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.007		
2-Butanone (MEK)	mg/kg dry wt	ND	12/05/08	MFF	0.028		
tert-Butyl Alcohol	mg/kg dry wt	ND	12/05/08	MFF	0.028		
n-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
sec-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
tert-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
tert-Butylethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Carbon Disulfide	mg/kg dry wt	ND	12/05/08	MFF	0.005		
Carbon Tetrachloride	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Chlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Chlorodibromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Chloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.014		
Chloroform	mg/kg dry wt	ND	12/05/08	MFF	0.003		
Chloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.007		
2-Chlorotoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
4-Chlorotoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dibromo-3-Chloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dibromoethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Dibromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: SVE-01-Z2

Sample ID: 08B48560

‡Sampled: 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,4-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
trans-1,4-Dichloro-2-Butene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
Dichlorodifluoromethane	mg/kg dry wt	ND	12/05/08	MFF	0.014		
1,1-Dichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
cis-1,2-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
trans-1,2-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
2,2-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
cis-1,3-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.001		
trans-1,3-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Diethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.014		
Diisopropyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
1,4-Dioxane	mg/kg dry wt	ND	12/05/08	MFF	0.069		
Ethyl Benzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Hexachlorobutadiene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
2-Hexanone	mg/kg dry wt	ND	12/05/08	MFF	0.014		
Isopropylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
p-Isopropyltoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
MTBE	mg/kg dry wt	ND	12/05/08	MFF	0.003		
Methylene Chloride	mg/kg dry wt	ND	12/05/08	MFF	0.014		
MIBK	mg/kg dry wt	ND	12/05/08	MFF	0.014		
Naphthalene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
n-Propylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Styrene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,1,2-Tetrachloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS
 Date Received: 12/4/2008

LIMS-BAT #: LIMIT-21835
 Job Number: 2700.DC21.01

Field Sample #: SVE-01-Z2

Sample ID: 08B48560 ‡Sampled: 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,1,2,2-Tetrachloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Tetrachloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Tetrahydrofuran	mg/kg dry wt	ND	12/05/08	MFF	0.007		
Toluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2,3-Trichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2,4-Trichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,1-Trichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,2-Trichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Trichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Trichlorofluoromethane	mg/kg dry wt	ND	12/05/08	MFF	0.007		
1,2,3-Trichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,2-Trichloro-1,2,2-Trifluoroethane	mg/kg dry wt	ND	12/05/08	MFF	0.007		
1,2,4-Trimethylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3,5-Trimethylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Vinyl Chloride	mg/kg dry wt	ND	12/05/08	MFF	0.007		
m + p Xylene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
o-Xylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		

Analytical Method:

SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS. REPORTED RESULTS AND REPORTING LIMITS FOR 1,4-DIOXANE AND TERT-BUTYLALCOHOL ARE ESTIMATED SINCE RESPONSE FACTORS FOR THESE COMPOUNDS ARE BELOW METHOD SPECIFICATIONS.

RL = Reporting Limit

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SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: SVE-01-Z3

Sample ID: 08B48561

‡Sampled: 12/3/2008
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	mg/kg dry wt	ND	12/05/08	MFF	0.075		
Acrylonitrile	mg/kg dry wt	ND	12/05/08	MFF	0.005		
tert-Amylmethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Benzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromochloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromodichloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromoform	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.008		
2-Butanone (MEK)	mg/kg dry wt	ND	12/05/08	MFF	0.030		
tert-Butyl Alcohol	mg/kg dry wt	ND	12/05/08	MFF	0.030		
n-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
sec-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
tert-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
tert-Butylethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Carbon Disulfide	mg/kg dry wt	ND	12/05/08	MFF	0.005		
Carbon Tetrachloride	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Chlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Chlorodibromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Chloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.015		
Chloroform	mg/kg dry wt	ND	12/05/08	MFF	0.003		
Chloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.008		
2-Chlorotoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
4-Chlorotoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dibromo-3-Chloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dibromoethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Dibromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS
Date Received: 12/4/2008

LIMS-BAT #: LIMIT-21835
Job Number: 2700.DC21.01

Field Sample #: SVE-01-Z3

Sample ID: 08B48561 ‡Sampled: 12/3/2008
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,4-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
trans-1,4-Dichloro-2-Butene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
Dichlorodifluoromethane	mg/kg dry wt	ND	12/05/08	MFF	0.015		
1,1-Dichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
cis-1,2-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
trans-1,2-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
2,2-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
cis-1,3-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.001		
trans-1,3-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Diethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.015		
Diisopropyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
1,4-Dioxane	mg/kg dry wt	ND	12/05/08	MFF	0.075		
Ethyl Benzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Hexachlorobutadiene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
2-Hexanone	mg/kg dry wt	ND	12/05/08	MFF	0.015		
Isopropylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
p-Isopropyltoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
MTBE	mg/kg dry wt	ND	12/05/08	MFF	0.003		
Methylene Chloride	mg/kg dry wt	ND	12/05/08	MFF	0.015		
MIBK	mg/kg dry wt	ND	12/05/08	MFF	0.015		
Naphthalene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
n-Propylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Styrene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,1,2-Tetrachloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS
 Date Received: 12/4/2008

LIMS-BAT #: LIMIT-21835
 Job Number: 2700.DC21.01

Field Sample #: SVE-01-Z3

Sample ID: 08B48561 ‡Sampled: 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,1,2,2-Tetrachloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Tetrachloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Tetrahydrofuran	mg/kg dry wt	ND	12/05/08	MFF	0.008		
Toluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2,3-Trichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2,4-Trichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,1-Trichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,2-Trichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Trichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Trichlorofluoromethane	mg/kg dry wt	ND	12/05/08	MFF	0.008		
1,2,3-Trichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,2-Trichloro-1,2,2-Trifluoroethane	mg/kg dry wt	ND	12/05/08	MFF	0.008		
1,2,4-Trimethylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3,5-Trimethylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Vinyl Chloride	mg/kg dry wt	ND	12/05/08	MFF	0.008		
m + p Xylene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
o-Xylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		

Analytical Method:

SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS. REPORTED RESULTS AND REPORTING LIMITS FOR 1,4-DIOXANE AND TERT-BUTYLALCOHOL ARE ESTIMATED SINCE RESPONSE FACTORS FOR THESE COMPOUNDS ARE BELOW METHOD SPECIFICATIONS.

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS
 Date Received: 12/4/2008

LIMS-BAT #: LIMIT-21835
 Job Number: 2700.DC21.01

Field Sample #: SVE-01-Z4 QC

Sample ID: 08B48562 ‡Sampled: 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	mg/kg dry wt	ND	12/05/08	MFF	0.14		
Acrylonitrile	mg/kg dry wt	ND	12/05/08	MFF	0.009		
tert-Amylmethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Benzene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
Bromobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
Bromochloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.003		
Bromodichloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.003		
Bromoform	mg/kg dry wt	ND	12/05/08	MFF	0.003		
Bromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.014		
2-Butanone (MEK)	mg/kg dry wt	ND	12/05/08	MFF	0.054		
tert-Butyl Alcohol	mg/kg dry wt	ND	12/05/08	MFF	0.054		
n-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
sec-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
tert-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
tert-Butylethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Carbon Disulfide	mg/kg dry wt	ND	12/05/08	MFF	0.009		
Carbon Tetrachloride	mg/kg dry wt	ND	12/05/08	MFF	0.003		
Chlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
Chlorodibromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Chloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.027		
Chloroform	mg/kg dry wt	ND	12/05/08	MFF	0.006		
Chloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.014		
2-Chlorotoluene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
4-Chlorotoluene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
1,2-Dibromo-3-Chloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.003		
1,2-Dibromoethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Dibromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.003		
1,2-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
1,3-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.003		

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS
Date Received: 12/4/2008

LIMS-BAT #: LIMIT-21835
Job Number: 2700.DC21.01

Field Sample #: SVE-01-Z4 QC

Sample ID: 08B48562 ‡Sampled: 12/3/2008
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,4-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
trans-1,4-Dichloro-2-Butene	mg/kg dry wt	ND	12/05/08	MFF	0.006		
Dichlorodifluoromethane	mg/kg dry wt	ND	12/05/08	MFF	0.027		
1,1-Dichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.003		
1,2-Dichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.003		
1,1-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.006		
cis-1,2-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
trans-1,2-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
1,2-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.003		
1,3-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
2,2-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.003		
1,1-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
cis-1,3-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
trans-1,3-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Diethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.027		
Diisopropyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,4-Dioxane	mg/kg dry wt	ND	12/05/08	MFF	0.14		
Ethyl Benzene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
Hexachlorobutadiene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
2-Hexanone	mg/kg dry wt	ND	12/05/08	MFF	0.027		
Isopropylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
p-Isopropyltoluene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
MTBE	mg/kg dry wt	ND	12/05/08	MFF	0.006		
Methylene Chloride	mg/kg dry wt	ND	12/05/08	MFF	0.027		
MIBK	mg/kg dry wt	ND	12/05/08	MFF	0.027		
Naphthalene	mg/kg dry wt	ND	12/05/08	MFF	0.006		
n-Propylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
Styrene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
1,1,1,2-Tetrachloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.003		

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS
Date Received: 12/4/2008

LIMS-BAT #: LIMIT-21835
Job Number: 2700.DC21.01

Field Sample #: SVE-01-Z4 QC

Sample ID: 08B48562 ‡Sampled: 12/3/2008
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,1,2,2-Tetrachloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Tetrachloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
Tetrahydrofuran	mg/kg dry wt	ND	12/05/08	MFF	0.014		
Toluene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
1,2,3-Trichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
1,2,4-Trichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
1,1,1-Trichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.003		
1,1,2-Trichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.003		
Trichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
Trichlorofluoromethane	mg/kg dry wt	ND	12/05/08	MFF	0.014		
1,2,3-Trichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.003		
1,1,2-Trichloro-1,2,2-Trifluoroethane	mg/kg dry wt	ND	12/05/08	MFF	0.014		
1,2,4-Trimethylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
1,3,5-Trimethylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.003		
Vinyl Chloride	mg/kg dry wt	ND	12/05/08	MFF	0.014		
m + p Xylene	mg/kg dry wt	ND	12/05/08	MFF	0.006		
o-Xylene	mg/kg dry wt	ND	12/05/08	MFF	0.003		

Analytical Method:

SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS. REPORTED RESULTS AND REPORTING LIMITS FOR 1,4-DIOXANE AND TERT-BUTYLALCOHOL ARE ESTIMATED SINCE RESPONSE FACTORS FOR THESE COMPOUNDS ARE BELOW METHOD SPECIFICATIONS.

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: VM-01-Z1

Sample ID: 08B48563

‡Sampled: 12/3/2008
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	mg/kg dry wt	ND	12/05/08	MFF	0.085		
Acrylonitrile	mg/kg dry wt	ND	12/05/08	MFF	0.006		
tert-Amylmethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Benzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromochloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromodichloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromoform	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.009		
2-Butanone (MEK)	mg/kg dry wt	ND	12/05/08	MFF	0.034		
tert-Butyl Alcohol	mg/kg dry wt	ND	12/05/08	MFF	0.034		
n-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
sec-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
tert-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
tert-Butylethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Carbon Disulfide	mg/kg dry wt	ND	12/05/08	MFF	0.006		
Carbon Tetrachloride	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Chlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Chlorodibromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Chloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.017		
Chloroform	mg/kg dry wt	ND	12/05/08	MFF	0.004		
Chloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.009		
2-Chlorotoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
4-Chlorotoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dibromo-3-Chloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dibromoethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Dibromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: VM-01-Z1

Sample ID: 08B48563

‡Sampled: 12/3/2008
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,4-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
trans-1,4-Dichloro-2-Butene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
Dichlorodifluoromethane	mg/kg dry wt	ND	12/05/08	MFF	0.017		
1,1-Dichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
cis-1,2-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
trans-1,2-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
2,2-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
cis-1,3-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.001		
trans-1,3-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Diethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.017		
Diisopropyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
1,4-Dioxane	mg/kg dry wt	ND	12/05/08	MFF	0.085		
Ethyl Benzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Hexachlorobutadiene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
2-Hexanone	mg/kg dry wt	ND	12/05/08	MFF	0.017		
Isopropylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
p-Isopropyltoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
MTBE	mg/kg dry wt	ND	12/05/08	MFF	0.004		
Methylene Chloride	mg/kg dry wt	ND	12/05/08	MFF	0.017		
MIBK	mg/kg dry wt	ND	12/05/08	MFF	0.017		
Naphthalene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
n-Propylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Styrene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,1,2-Tetrachloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: VM-01-Z1

Sample ID: 08B48563

‡Sampled: 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,1,2,2-Tetrachloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Tetrachloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Tetrahydrofuran	mg/kg dry wt	ND	12/05/08	MFF	0.009		
Toluene	mg/kg dry wt	0.002	12/05/08	MFF	0.002		
1,2,3-Trichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2,4-Trichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,1-Trichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,2-Trichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Trichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Trichlorofluoromethane	mg/kg dry wt	ND	12/05/08	MFF	0.009		
1,2,3-Trichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,2-Trichloro-1,2,2-Trifluoroethane	mg/kg dry wt	ND	12/05/08	MFF	0.009		
1,2,4-Trimethylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3,5-Trimethylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Vinyl Chloride	mg/kg dry wt	ND	12/05/08	MFF	0.009		
m + p Xylene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
o-Xylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		

Analytical Method:

SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS. REPORTED RESULTS AND REPORTING LIMITS FOR 1,4-DIOXANE AND TERT-BUTYLALCOHOL ARE ESTIMATED SINCE RESPONSE FACTORS FOR THESE COMPOUNDS ARE BELOW METHOD SPECIFICATIONS.

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: VM-01-Z1/Q

Sample ID: 08B48564

‡Sampled: 12/3/2008
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	mg/kg dry wt	ND	12/05/08	MFF	0.098		
Acrylonitrile	mg/kg dry wt	ND	12/05/08	MFF	0.006		
tert-Amylmethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Benzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromochloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromodichloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromoform	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.010		
2-Butanone (MEK)	mg/kg dry wt	ND	12/05/08	MFF	0.039		
tert-Butyl Alcohol	mg/kg dry wt	ND	12/05/08	MFF	0.039		
n-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
sec-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
tert-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
tert-Butylethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Carbon Disulfide	mg/kg dry wt	ND	12/05/08	MFF	0.006		
Carbon Tetrachloride	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Chlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Chlorodibromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Chloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.020		
Chloroform	mg/kg dry wt	ND	12/05/08	MFF	0.004		
Chloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.010		
2-Chlorotoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
4-Chlorotoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dibromo-3-Chloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dibromoethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Dibromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: VM-01-Z1/Q

Sample ID: 08B48564

‡Sampled: 12/3/2008
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,4-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
trans-1,4-Dichloro-2-Butene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
Dichlorodifluoromethane	mg/kg dry wt	ND	12/05/08	MFF	0.020		
1,1-Dichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
cis-1,2-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
trans-1,2-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
2,2-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
cis-1,3-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.001		
trans-1,3-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Diethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.020		
Diisopropyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
1,4-Dioxane	mg/kg dry wt	ND	12/05/08	MFF	0.098		
Ethyl Benzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Hexachlorobutadiene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
2-Hexanone	mg/kg dry wt	ND	12/05/08	MFF	0.020		
Isopropylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
p-Isopropyltoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
MTBE	mg/kg dry wt	ND	12/05/08	MFF	0.004		
Methylene Chloride	mg/kg dry wt	ND	12/05/08	MFF	0.020		
MIBK	mg/kg dry wt	ND	12/05/08	MFF	0.020		
Naphthalene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
n-Propylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Styrene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,1,2-Tetrachloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: VM-01-Z1/Q

Sample ID: 08B48564

‡Sampled: 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,1,2,2-Tetrachloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Tetrachloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Tetrahydrofuran	mg/kg dry wt	ND	12/05/08	MFF	0.010		
Toluene	mg/kg dry wt	0.004	12/05/08	MFF	0.002		
1,2,3-Trichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2,4-Trichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,1-Trichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,2-Trichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Trichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Trichlorofluoromethane	mg/kg dry wt	ND	12/05/08	MFF	0.010		
1,2,3-Trichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,2-Trichloro-1,2,2-Trifluoroethane	mg/kg dry wt	ND	12/05/08	MFF	0.010		
1,2,4-Trimethylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3,5-Trimethylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Vinyl Chloride	mg/kg dry wt	ND	12/05/08	MFF	0.010		
m + p Xylene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
o-Xylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		

Analytical Method:

SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS. REPORTED RESULTS AND REPORTING LIMITS FOR 1,4-DIOXANE AND TERT-BUTYLALCOHOL ARE ESTIMATED SINCE RESPONSE FACTORS FOR THESE COMPOUNDS ARE BELOW METHOD SPECIFICATIONS.

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: VM-02-Z1

Sample ID: 08B48566

‡Sampled: 12/3/2008
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	mg/kg dry wt	ND	12/05/08	MFF	0.077		
Acrylonitrile	mg/kg dry wt	ND	12/05/08	MFF	0.005		
tert-Amylmethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Benzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromochloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromodichloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromoform	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.008		
2-Butanone (MEK)	mg/kg dry wt	ND	12/05/08	MFF	0.031		
tert-Butyl Alcohol	mg/kg dry wt	ND	12/05/08	MFF	0.031		
n-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
sec-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
tert-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
tert-Butylethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Carbon Disulfide	mg/kg dry wt	ND	12/05/08	MFF	0.005		
Carbon Tetrachloride	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Chlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Chlorodibromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Chloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.016		
Chloroform	mg/kg dry wt	ND	12/05/08	MFF	0.004		
Chloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.008		
2-Chlorotoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
4-Chlorotoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dibromo-3-Chloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dibromoethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Dibromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: VM-02-Z1

Sample ID: 08B48566

‡Sampled: 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,4-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
trans-1,4-Dichloro-2-Butene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
Dichlorodifluoromethane	mg/kg dry wt	ND	12/05/08	MFF	0.016		
1,1-Dichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
cis-1,2-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
trans-1,2-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
2,2-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
cis-1,3-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.001		
trans-1,3-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Diethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.016		
Diisopropyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
1,4-Dioxane	mg/kg dry wt	ND	12/05/08	MFF	0.077		
Ethyl Benzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Hexachlorobutadiene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
2-Hexanone	mg/kg dry wt	ND	12/05/08	MFF	0.016		
Isopropylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
p-Isopropyltoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
MTBE	mg/kg dry wt	ND	12/05/08	MFF	0.004		
Methylene Chloride	mg/kg dry wt	ND	12/05/08	MFF	0.016		
MIBK	mg/kg dry wt	ND	12/05/08	MFF	0.016		
Naphthalene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
n-Propylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Styrene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,1,2-Tetrachloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS
 Date Received: 12/4/2008

LIMS-BAT #: LIMIT-21835
 Job Number: 2700.DC21.01

Field Sample #: VM-02-Z1

Sample ID: 08B48566 ‡Sampled: 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,1,2,2-Tetrachloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Tetrachloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Tetrahydrofuran	mg/kg dry wt	ND	12/05/08	MFF	0.008		
Toluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2,3-Trichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2,4-Trichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,1-Trichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,2-Trichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Trichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Trichlorofluoromethane	mg/kg dry wt	ND	12/05/08	MFF	0.008		
1,2,3-Trichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,2-Trichloro-1,2,2-Trifluoroethane	mg/kg dry wt	ND	12/05/08	MFF	0.008		
1,2,4-Trimethylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3,5-Trimethylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Vinyl Chloride	mg/kg dry wt	ND	12/05/08	MFF	0.008		
m + p Xylene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
o-Xylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		

Analytical Method:

SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS. REPORTED RESULTS AND REPORTING LIMITS FOR 1,4-DIOXANE AND TERT-BUTYLALCOHOL ARE ESTIMATED SINCE RESPONSE FACTORS FOR THESE COMPOUNDS ARE BELOW METHOD SPECIFICATIONS.

RL = Reporting Limit

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SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: VM-03-Z1

Sample ID: 08B48565

‡Sampled: 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	mg/kg dry wt	ND	12/05/08	MFF	0.083		
Acrylonitrile	mg/kg dry wt	ND	12/05/08	MFF	0.005		
tert-Amylmethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Benzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromochloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromodichloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromoform	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.009		
2-Butanone (MEK)	mg/kg dry wt	ND	12/05/08	MFF	0.034		
tert-Butyl Alcohol	mg/kg dry wt	ND	12/05/08	MFF	0.034		
n-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
sec-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
tert-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
tert-Butylethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Carbon Disulfide	mg/kg dry wt	ND	12/05/08	MFF	0.005		
Carbon Tetrachloride	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Chlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Chlorodibromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Chloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.017		
Chloroform	mg/kg dry wt	ND	12/05/08	MFF	0.004		
Chloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.009		
2-Chlorotoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
4-Chlorotoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dibromo-3-Chloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dibromoethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Dibromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: VM-03-Z1

Sample ID: 08B48565

‡Sampled: 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,4-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
trans-1,4-Dichloro-2-Butene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
Dichlorodifluoromethane	mg/kg dry wt	ND	12/05/08	MFF	0.017		
1,1-Dichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
cis-1,2-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
trans-1,2-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
2,2-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
cis-1,3-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.001		
trans-1,3-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Diethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.017		
Diisopropyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
1,4-Dioxane	mg/kg dry wt	ND	12/05/08	MFF	0.083		
Ethyl Benzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Hexachlorobutadiene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
2-Hexanone	mg/kg dry wt	ND	12/05/08	MFF	0.017		
Isopropylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
p-Isopropyltoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
MTBE	mg/kg dry wt	ND	12/05/08	MFF	0.004		
Methylene Chloride	mg/kg dry wt	ND	12/05/08	MFF	0.017		
MIBK	mg/kg dry wt	ND	12/05/08	MFF	0.017		
Naphthalene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
n-Propylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Styrene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,1,2-Tetrachloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: VM-03-Z1

Sample ID: 08B48565

‡Sampled: 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,1,2,2-Tetrachloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Tetrachloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Tetrahydrofuran	mg/kg dry wt	ND	12/05/08	MFF	0.009		
Toluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2,3-Trichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2,4-Trichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,1-Trichloroethane	mg/kg dry wt	0.010	12/05/08	MFF	0.002		
1,1,2-Trichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Trichloroethylene	mg/kg dry wt	0.002	12/05/08	MFF	0.002		
Trichlorofluoromethane	mg/kg dry wt	ND	12/05/08	MFF	0.009		
1,2,3-Trichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,2-Trichloro-1,2,2-Trifluoroethane	mg/kg dry wt	ND	12/05/08	MFF	0.009		
1,2,4-Trimethylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3,5-Trimethylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Vinyl Chloride	mg/kg dry wt	ND	12/05/08	MFF	0.009		
m + p Xylene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
o-Xylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		

Analytical Method:

SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS. REPORTED RESULTS AND REPORTING LIMITS FOR 1,4-DIOXANE AND TERT-BUTYLALCOHOL ARE ESTIMATED SINCE RESPONSE FACTORS FOR THESE COMPOUNDS ARE BELOW METHOD SPECIFICATIONS.

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: VM-04-Z1

Sample ID: 08B48558

‡Sampled: 12/3/2008
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	mg/kg dry wt	ND	12/05/08	MFF	0.090		
Acrylonitrile	mg/kg dry wt	ND	12/05/08	MFF	0.006		
tert-Amylmethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Benzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromochloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromodichloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromoform	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.009		
2-Butanone (MEK)	mg/kg dry wt	ND	12/05/08	MFF	0.036		
tert-Butyl Alcohol	mg/kg dry wt	ND	12/05/08	MFF	0.036		
n-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
sec-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
tert-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
tert-Butylethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Carbon Disulfide	mg/kg dry wt	ND	12/05/08	MFF	0.006		
Carbon Tetrachloride	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Chlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Chlorodibromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Chloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.018		
Chloroform	mg/kg dry wt	ND	12/05/08	MFF	0.004		
Chloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.009		
2-Chlorotoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
4-Chlorotoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dibromo-3-Chloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dibromoethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Dibromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: VM-04-Z1

Sample ID: 08B48558

‡Sampled: 12/3/2008
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,4-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
trans-1,4-Dichloro-2-Butene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
Dichlorodifluoromethane	mg/kg dry wt	ND	12/05/08	MFF	0.018		
1,1-Dichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
cis-1,2-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
trans-1,2-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
2,2-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
cis-1,3-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.001		
trans-1,3-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Diethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.018		
Diisopropyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
1,4-Dioxane	mg/kg dry wt	ND	12/05/08	MFF	0.090		
Ethyl Benzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Hexachlorobutadiene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
2-Hexanone	mg/kg dry wt	ND	12/05/08	MFF	0.018		
Isopropylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
p-Isopropyltoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
MTBE	mg/kg dry wt	ND	12/05/08	MFF	0.004		
Methylene Chloride	mg/kg dry wt	ND	12/05/08	MFF	0.018		
MIBK	mg/kg dry wt	ND	12/05/08	MFF	0.018		
Naphthalene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
n-Propylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Styrene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,1,2-Tetrachloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: VM-04-Z1

Sample ID: 08B48558

‡Sampled: 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,1,2,2-Tetrachloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Tetrachloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Tetrahydrofuran	mg/kg dry wt	ND	12/05/08	MFF	0.009		
Toluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2,3-Trichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2,4-Trichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,1-Trichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,2-Trichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Trichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Trichlorofluoromethane	mg/kg dry wt	ND	12/05/08	MFF	0.009		
1,2,3-Trichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,2-Trichloro-1,2,2-Trifluoroethane	mg/kg dry wt	ND	12/05/08	MFF	0.009		
1,2,4-Trimethylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3,5-Trimethylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Vinyl Chloride	mg/kg dry wt	ND	12/05/08	MFF	0.009		
m + p Xylene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
o-Xylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		

Analytical Method:

SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS. REPORTED RESULTS AND REPORTING LIMITS FOR 1,4-DIOXANE AND TERT-BUTYLALCOHOL ARE ESTIMATED SINCE RESPONSE FACTORS FOR THESE COMPOUNDS ARE BELOW METHOD SPECIFICATIONS.

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: VM-05-Z1

Sample ID: 08B48567

‡Sampled: 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	mg/kg dry wt	ND	12/05/08	MFF	0.082		
Acrylonitrile	mg/kg dry wt	ND	12/05/08	MFF	0.005		
tert-Amylmethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Benzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromochloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromodichloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromoform	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Bromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.009		
2-Butanone (MEK)	mg/kg dry wt	ND	12/05/08	MFF	0.033		
tert-Butyl Alcohol	mg/kg dry wt	ND	12/05/08	MFF	0.033		
n-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
sec-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
tert-Butylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
tert-Butylethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Carbon Disulfide	mg/kg dry wt	ND	12/05/08	MFF	0.005		
Carbon Tetrachloride	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Chlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Chlorodibromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Chloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.017		
Chloroform	mg/kg dry wt	ND	12/05/08	MFF	0.004		
Chloromethane	mg/kg dry wt	ND	12/05/08	MFF	0.009		
2-Chlorotoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
4-Chlorotoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dibromo-3-Chloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dibromoethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Dibromomethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: VM-05-Z1

Sample ID: 08B48567

‡Sampled: 12/3/2008
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,4-Dichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
trans-1,4-Dichloro-2-Butene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
Dichlorodifluoromethane	mg/kg dry wt	ND	12/05/08	MFF	0.017		
1,1-Dichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
cis-1,2-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
trans-1,2-Dichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
2,2-Dichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
cis-1,3-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.001		
trans-1,3-Dichloropropene	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Diethyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.017		
Diisopropyl Ether	mg/kg dry wt	ND	12/05/08	MFF	0.001		
1,4-Dioxane	mg/kg dry wt	ND	12/05/08	MFF	0.082		
Ethyl Benzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Hexachlorobutadiene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
2-Hexanone	mg/kg dry wt	ND	12/05/08	MFF	0.017		
Isopropylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
p-Isopropyltoluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
MTBE	mg/kg dry wt	ND	12/05/08	MFF	0.004		
Methylene Chloride	mg/kg dry wt	ND	12/05/08	MFF	0.017		
MIBK	mg/kg dry wt	ND	12/05/08	MFF	0.017		
Naphthalene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
n-Propylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Styrene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,1,2-Tetrachloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: VM-05-Z1

Sample ID: 08B48567

‡Sampled: 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,1,2,2-Tetrachloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.001		
Tetrachloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Tetrahydrofuran	mg/kg dry wt	ND	12/05/08	MFF	0.009		
Toluene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2,3-Trichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,2,4-Trichlorobenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,1-Trichloroethane	mg/kg dry wt	0.013	12/05/08	MFF	0.002		
1,1,2-Trichloroethane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Trichloroethylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Trichlorofluoromethane	mg/kg dry wt	ND	12/05/08	MFF	0.009		
1,2,3-Trichloropropane	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,1,2-Trichloro-1,2,2-Trifluoroethane	mg/kg dry wt	ND	12/05/08	MFF	0.009		
1,2,4-Trimethylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
1,3,5-Trimethylbenzene	mg/kg dry wt	ND	12/05/08	MFF	0.002		
Vinyl Chloride	mg/kg dry wt	ND	12/05/08	MFF	0.009		
m + p Xylene	mg/kg dry wt	ND	12/05/08	MFF	0.004		
o-Xylene	mg/kg dry wt	ND	12/05/08	MFF	0.002		

Analytical Method:

SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS. REPORTED RESULTS AND REPORTING LIMITS FOR 1,4-DIOXANE AND TERT-BUTYLALCOHOL ARE ESTIMATED SINCE RESPONSE FACTORS FOR THESE COMPOUNDS ARE BELOW METHOD SPECIFICATIONS.

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Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: TCLP-01

Sample ID : *08B48568

‡Sampled : 12/3/2008

Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
pH	units	6.51	12/05/08	LL			

Analytical Method:

SW846 9045

ELECTRODE DETERMINATION.

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: MW-07-Z1

Sample ID: 08B48557

‡Sampled : 12/3/2008
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	81.9	12/08/08	JM			

Field Sample #: SVE-01-Z1

Sample ID: 08B48559

‡Sampled : 12/3/2008
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	79.1	12/08/08	JM			

Field Sample #: SVE-01-Z2

Sample ID: 08B48560

‡Sampled : 12/3/2008
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	84.3	12/08/08	JM			

Field Sample #: SVE-01-Z3

Sample ID: 08B48561

‡Sampled : 12/3/2008
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	81.9	12/08/08	JM			

Field Sample #: SVE-01-Z4 QC

Sample ID: 08B48562

‡Sampled : 12/3/2008
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	88.1	12/08/08	JM			

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: VM-01-Z1

Sample ID: 08B48563

‡Sampled : 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	79.4	12/08/08	JM			

Field Sample #: VM-01-Z1/Q

Sample ID: 08B48564

‡Sampled : 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	79.6	12/08/08	JM			

Field Sample #: VM-02-Z1

Sample ID: 08B48566

‡Sampled : 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	72.0	12/08/08	JM			

Field Sample #: VM-03-Z1

Sample ID: 08B48565

‡Sampled : 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	87.8	12/08/08	JM			

Field Sample #: VM-04-Z1

Sample ID: 08B48558

‡Sampled : 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	78.8	12/08/08	JM			

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Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: VM-05-Z1

Sample ID: 08B48567

‡Sampled: 12/3/2008

Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	75.3	12/08/08	JM			

Analytical Method:

SM 2540G

PERCENT OF SAMPLE REMAINING AFTER DRYING OVERNIGHT AT 103-105 DEGREES CENTIGRADE.

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Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

Field Sample #: TCLP-01

Sample ID : 08B48568

‡Sampled : 12/3/2008
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Arsenic	mg/l leachate	ND	12/08/08	OP	0.010	5	P
Barium	mg/l leachate	0.36	12/08/08	OP	0.10	100	P
Cadmium	mg/l leachate	ND	12/08/08	OP	0.005	1	P
Chromium	mg/l leachate	ND	12/08/08	OP	0.01	5	P
Lead	mg/l leachate	ND	12/08/08	OP	0.015	5	P
Mercury	mg/l leachate	ND	12/09/08	KM	0.00010	0.2	P
Selenium	mg/l leachate	ND	12/08/08	OP	0.05	1	P
Silver	mg/l leachate	0.023	12/08/08	OP	0.005	5	P

Analytical Method:

SW846 1311/6010 1311/7470

SW846 1311 TCLP EXTRACTION. SAMPLES ARE EXTRACTED FOR 18-24 HOURS INTO A pH 5.0 BUFFER SOLUTION TO PRODUCE A LEACHATE. WATER SAMPLES ARE FILTERED, NOT EXTRACTED.

SW846 6010 ARSENIC, BARIUM, CADMIUM, CHROMIUM, LEAD, SELENIUM AND SILVER LEACHATES ARE ANALYZED BY INDUCTIVELY COUPLED PLASMA EMISSION SPECTROMETRY.

SW846 7470 MERCURY LEACHATE IS ANALYZED BY COLD VAPOR (FLAMELESS) ATOMIC ABSORPTION SPECTROPHOTOMETRY.

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Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-21835

Date Received: 12/4/2008

Job Number: 2700.DC21.01

The following notes were attached to the reported analysis :

Sample ID: * 08B48568

Analysis: pH

19.4 degrees celsius

** END OF REPORT **

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QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 12/10/2008

Lims Bat # : LIMIT-21835

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QC Batch Number: GCMS/VOL-21117

Sample Id	Analysis	QC Analysis	Values	Units	Limits
08B48557	1,2-Dichloroethane-d4	Surrogate Recovery	106.600	%	70-130
	Toluene-d8	Surrogate Recovery	99.560	%	70-130
	Bromofluorobenzene	Surrogate Recovery	100.200	%	70-130
08B48558	1,2-Dichloroethane-d4	Surrogate Recovery	104.720	%	70-130
	Toluene-d8	Surrogate Recovery	98.080	%	70-130
	Bromofluorobenzene	Surrogate Recovery	100.600	%	70-130
08B48559	1,2-Dichloroethane-d4	Surrogate Recovery	106.400	%	70-130
	Toluene-d8	Surrogate Recovery	99.600	%	70-130
	Bromofluorobenzene	Surrogate Recovery	99.960	%	70-130
08B48560	1,2-Dichloroethane-d4	Surrogate Recovery	101.400	%	70-130
	Toluene-d8	Surrogate Recovery	98.840	%	70-130
	Bromofluorobenzene	Surrogate Recovery	100.880	%	70-130
08B48561	1,2-Dichloroethane-d4	Surrogate Recovery	104.760	%	70-130
	Toluene-d8	Surrogate Recovery	99.360	%	70-130
	Bromofluorobenzene	Surrogate Recovery	99.480	%	70-130
08B48562	Acetone	Sample Amount	<0.14	mg/kg dry wt	
		Matrix Spk Amt Added	0.170	mg/kg dry wt	
		MS Amt Measured	0.168	mg/kg dry wt	
		Matrix Spike % Rec.	98.910	%	70-130
		MSD Amount Added	0.138	mg/kg dry wt	
		MSD Amt Measured	0.108	mg/kg dry wt	
		MSD % Recovery	78.620	%	
		MSD Range	20.289	units	
		MS Duplicate RPD	42.815	%	0-30
	Benzene	Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.015	mg/kg dry wt	
		Matrix Spike % Rec.	93.600	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	89.400	%	
		MSD Range	4.199	units	
		MS Duplicate RPD	24.989	%	0-30
	Carbon Tetrachloride	Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	96.500	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 12/10/2008

Lims Bat # : LIMIT-21835

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QC Batch Number: GCMS/VOL-21117

Sample Id	Analysis	QC Analysis	Values	Units	Limits
08B48562	Carbon Tetrachloride	MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	90.800	%	
		MSD Range	5.699	units	
		MS Duplicate RPD	26.461	%	0-30
	Chloroform	Sample Amount	<0.006	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.014	mg/kg dry wt	
		Matrix Spike % Rec.	86.100	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.011	mg/kg dry wt	
		MSD % Recovery	80.900	%	
		MSD Range	5.199	units	
	1,2-Dichloroethane	MS Duplicate RPD	26.600	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.015	mg/kg dry wt	
		Matrix Spike % Rec.	92.499	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	88.000	%	
	1,4-Dichlorobenzene	MSD Range	4.499	units	
		MS Duplicate RPD	25.379	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.015	mg/kg dry wt	
		Matrix Spike % Rec.	91.699	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.011	mg/kg dry wt	
	Ethyl Benzene	MSD % Recovery	85.900	%	
		MSD Range	5.799	units	
		MS Duplicate RPD	26.899	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	99.400	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
	2-Butanone (MEK)	MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	92.600	%	
		MSD Range	6.799	units	
		MS Duplicate RPD	27.441	%	0-30
		Sample Amount	<0.054	mg/kg dry wt	
		Matrix Spk Amt Added	0.170	mg/kg dry wt	
		MS Amt Measured	0.155	mg/kg dry wt	

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

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Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 12/10/2008

Lims Bat # : LIMIT-21835

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QC Batch Number: GCMS/VOL-21117

Sample Id	Analysis	QC Analysis	Values	Units	Limits
08B48562					
	2-Butanone (MEK)	Matrix Spike % Rec.	91.240	%	70-130
		MSD Amount Added	0.138	mg/kg dry wt	
		MSD Amt Measured	0.111	mg/kg dry wt	
		MSD % Recovery	80.730	%	
		MSD Range	10.509	units	
		MS Duplicate RPD	32.477	%	0-30
	MIBK	Sample Amount	<0.027	mg/kg dry wt	
		Matrix Spk Amt Added	0.170	mg/kg dry wt	
		MS Amt Measured	0.159	mg/kg dry wt	
		Matrix Spike % Rec.	93.670	%	70-130
		MSD Amount Added	0.138	mg/kg dry wt	
		MSD Amt Measured	0.120	mg/kg dry wt	
		MSD % Recovery	87.110	%	
		MSD Range	6.559	units	
		MS Duplicate RPD	27.612	%	0-30
	Naphthalene	Sample Amount	<0.006	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.014	mg/kg dry wt	
		Matrix Spike % Rec.	87.499	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.011	mg/kg dry wt	
		MSD % Recovery	86.100	%	
		MSD Range	1.399	units	
		MS Duplicate RPD	22.052	%	0-30
	Styrene	Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	99.799	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	93.700	%	
		MSD Range	6.099	units	
		MS Duplicate RPD	26.676	%	0-30
	Tetrachloroethylene	Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	97.200	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	89.000	%	
		MSD Range	8.200	units	
		MS Duplicate RPD	29.134	%	0-30
	Toluene	Sample Amount	<0.003	mg/kg dry wt	

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 12/10/2008

Lims Bat #: LIMIT-21835

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QC Batch Number: GCMS/VOL-21117

Sample Id	Analysis	QC Analysis	Values	Units	Limits
08B48562	Toluene	Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	94.699	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	89.900	%	
		MSD Range	4.799	units	
	1,1,1-Trichloroethane	MS Duplicate RPD	25.589	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	94.300	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
	Trichloroethylene	MSD % Recovery	89.500	%	
		MSD Range	4.799	units	
		MS Duplicate RPD	25.612	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.015	mg/kg dry wt	
		Matrix Spike % Rec.	93.299	%	70-130
	1,1,2-Trichloro-1,2,2-Trifluoroethane	MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	88.800	%	
		MSD Range	4.499	units	
		MS Duplicate RPD	25.335	%	0-30
		Sample Amount	<0.014	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
	Trichlorofluoromethane	MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	99.300	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.013	mg/kg dry wt	
		MSD % Recovery	94.600	%	
		MSD Range	4.699	units	
		MS Duplicate RPD	25.242	%	0-30
		Sample Amount	<0.014	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.015	mg/kg dry wt	
		Matrix Spike % Rec.	91.300	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.011	mg/kg dry wt	
		MSD % Recovery	86.299	%	
		MSD Range	5.000	units	

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08B48562					
	Trichlorofluoromethane	MS Duplicate RPD	26.013	%	0-30
	o-Xylene	Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	94.799	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	90.600	%	
		MSD Range	4.199	units	
	m + p Xylene	MS Duplicate RPD	24.930	%	0-30
		Sample Amount	<0.006	mg/kg dry wt	
		Matrix Spk Amt Added	0.034	mg/kg dry wt	
		MS Amt Measured	0.033	mg/kg dry wt	
		Matrix Spike % Rec.	98.350	%	70-130
		MSD Amount Added	0.027	mg/kg dry wt	
		MSD Amt Measured	0.025	mg/kg dry wt	
		MSD % Recovery	91.700	%	
		MSD Range	6.650	units	
	1,2-Dichlorobenzene	MS Duplicate RPD	27.357	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	94.100	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	87.500	%	
		MSD Range	6.599	units	
	1,3-Dichlorobenzene	MS Duplicate RPD	27.623	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	95.900	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	88.900	%	
		MSD Range	6.999	units	
	1,1-Dichloroethane	MS Duplicate RPD	27.925	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.015	mg/kg dry wt	
		Matrix Spike % Rec.	92.000	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	

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08B48562					
	1,1-Dichloroethane	MSD % Recovery	86.900	%	
		MSD Range	5.099	units	
		MS Duplicate RPD	26.083	%	0-30
	1,1-Dichloroethylene	Sample Amount	<0.006	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.014	mg/kg dry wt	
		Matrix Spike % Rec.	87.900	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.011	mg/kg dry wt	
		MSD % Recovery	83.600	%	
		MSD Range	4.299	units	
		MS Duplicate RPD	25.407	%	0-30
	1,4-Dioxane	Sample Amount	<0.14	mg/kg dry wt	
		Matrix Spk Amt Added	0.170	mg/kg dry wt	
		MS Amt Measured	0.139	mg/kg dry wt	
		Matrix Spike % Rec.	81.920	%	70-130
		MSD Amount Added	0.138	mg/kg dry wt	
		MSD Amt Measured	0.111	mg/kg dry wt	
		MSD % Recovery	80.390	%	
		MSD Range	1.529	units	
		MS Duplicate RPD	22.321	%	0-30
	MTBE	Sample Amount	<0.006	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	97.300	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	90.600	%	
		MSD Range	6.699	units	
		MS Duplicate RPD	27.488	%	0-30
	trans-1,2-Dichloroethylene	Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.015	mg/kg dry wt	
		Matrix Spike % Rec.	90.100	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.011	mg/kg dry wt	
		MSD % Recovery	85.100	%	
		MSD Range	5.000	units	
		MS Duplicate RPD	26.089	%	0-30
	Vinyl Chloride	Sample Amount	<0.014	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.014	mg/kg dry wt	
		Matrix Spike % Rec.	82.500	%	70-130

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08B48562	Vinyl Chloride	MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.010	mg/kg dry wt	
		MSD % Recovery	77.400	%	
		MSD Range	5.099	units	
		MS Duplicate RPD	26.749	%	0-30
	Methylene Chloride	Sample Amount	<0.027	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.017	mg/kg dry wt	
		Matrix Spike % Rec.	102.300	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.013	mg/kg dry wt	
		MSD % Recovery	100.800	%	
		MSD Range	1.499	units	
		MS Duplicate RPD	21.918	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
	Chlorobenzene	Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	95.200	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	89.300	%	
		MSD Range	5.899	units	
		MS Duplicate RPD	26.765	%	0-30
		Sample Amount	<0.014	mg/kg dry wt	
	Chloromethane	Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.012	mg/kg dry wt	
		Matrix Spike % Rec.	74.000	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.009	mg/kg dry wt	
		MSD % Recovery	68.400	%	
		MSD Range	5.599	units	
		MS Duplicate RPD	28.209	%	0-30
		Sample Amount	<0.014	mg/kg dry wt	
	Bromomethane	Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.011	mg/kg dry wt	
		Matrix Spike % Rec.	68.499	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.009	mg/kg dry wt	
		MSD % Recovery	68.300	%	
		MSD Range	0.199	units	
		MS Duplicate RPD	20.746	%	0-30
	Chloroethane	Sample Amount	<0.027	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	

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08B48562	Chloroethane	MS Amt Measured	0.013	mg/kg dry wt	
		Matrix Spike % Rec.	80.300	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.010	mg/kg dry wt	
		MSD % Recovery	78.800	%	
		MSD Range	1.499	units	
	cis-1,3-Dichloropropene	MS Duplicate RPD	22.321	%	0-30
		Sample Amount	<0.002	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	95.200	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
	trans-1,3-Dichloropropene	MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	89.300	%	
		MSD Range	5.899	units	
		MS Duplicate RPD	26.765	%	0-30
		Sample Amount	<0.002	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
	Chlorodibromomethane	MS Amt Measured	0.017	mg/kg dry wt	
		Matrix Spike % Rec.	102.500	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.013	mg/kg dry wt	
		MSD % Recovery	96.400	%	
		MSD Range	6.100	units	
	1,1,2-Trichloroethane	MS Duplicate RPD	26.508	%	0-30
		Sample Amount	<0.002	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.015	mg/kg dry wt	
		Matrix Spike % Rec.	91.200	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.011	mg/kg dry wt	
		MSD % Recovery	85.400	%	
		MSD Range	5.799	units	
		MS Duplicate RPD	26.935	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.015	mg/kg dry wt	
		Matrix Spike % Rec.	88.199	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.011	mg/kg dry wt	
		MSD % Recovery	84.800	%	
		MSD Range	3.399	units	
		MS Duplicate RPD	24.339	%	0-30

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08B48562	Bromoform	Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.017	mg/kg dry wt	
		Matrix Spike % Rec.	103.000	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.013	mg/kg dry wt	
		MSD % Recovery	96.200	%	
		MSD Range	6.799	units	
		MS Duplicate RPD	27.189	%	0-30
	1,1,2,2-Tetrachloroethane	Sample Amount	<0.002	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.015	mg/kg dry wt	
		Matrix Spike % Rec.	93.600	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	87.500	%	
		MSD Range	6.099	units	
		MS Duplicate RPD	27.100	%	0-30
	2-Chlorotoluene	Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	95.700	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	90.200	%	
		MSD Range	5.499	units	
		MS Duplicate RPD	26.295	%	0-30
	Hexachlorobutadiene	Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.017	mg/kg dry wt	
		Matrix Spike % Rec.	101.300	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	93.200	%	
		MSD Range	8.099	units	
		MS Duplicate RPD	28.664	%	0-30
	Isopropylbenzene	Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.018	mg/kg dry wt	
		Matrix Spike % Rec.	109.300	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.014	mg/kg dry wt	
		MSD % Recovery	102.700	%	

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08B48562	Isopropylbenzene	MSD Range	6.599	units	
		MS Duplicate RPD	26.599	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
	p-Isopropyltoluene	Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.017	mg/kg dry wt	
		Matrix Spike % Rec.	101.800	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.013	mg/kg dry wt	
		MSD % Recovery	95.300	%	
	n-Propylbenzene	MSD Range	6.499	units	
		MS Duplicate RPD	26.962	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	99.699	%	70-130
	sec-Butylbenzene	MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.013	mg/kg dry wt	
		MSD % Recovery	94.000	%	
		MSD Range	5.699	units	
		MS Duplicate RPD	26.263	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
	tert-Butylbenzene	Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.017	mg/kg dry wt	
		Matrix Spike % Rec.	101.500	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.013	mg/kg dry wt	
		MSD % Recovery	94.600	%	
	1,2,3-Trichlorobenzene	MSD Range	6.899	units	
		MS Duplicate RPD	27.396	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	98.500	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	92.300	%	
		MSD Range	6.199	units	
		MS Duplicate RPD	26.867	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.015	mg/kg dry wt	
		Matrix Spike % Rec.	92.100	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	

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08B48562	1,2,3-Trichlorobenzene	MSD Amt Measured	0.011	mg/kg dry wt	
		MSD % Recovery	85.500	%	
		MSD Range	6.599	units	
		MS Duplicate RPD	27.784	%	0-30
	1,2,4-Trichlorobenzene	Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	95.399	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.011	mg/kg dry wt	
		MSD % Recovery	86.200	%	
		MSD Range	9.199	units	
	1,2,4-Trimethylbenzene	MS Duplicate RPD	30.432	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	98.500	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	92.200	%	
	1,3,5-Trimethylbenzene	MSD Range	6.299	units	
		MS Duplicate RPD	26.973	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.017	mg/kg dry wt	
		Matrix Spike % Rec.	101.300	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.013	mg/kg dry wt	
	4-Chlorotoluene	MSD % Recovery	95.100	%	
		MSD Range	6.199	units	
		MS Duplicate RPD	26.685	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	96.700	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
	Dibromomethane	MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	91.300	%	
		MSD Range	5.400	units	
		MS Duplicate RPD	26.125	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.015	mg/kg dry wt	

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08B48562	Dibromomethane	Matrix Spike % Rec.	91.200	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.011	mg/kg dry wt	
		MSD % Recovery	86.100	%	
		MSD Range	5.099	units	
		MS Duplicate RPD	26.133	%	0-30
	cis-1,2-Dichloroethylene	Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.015	mg/kg dry wt	
		Matrix Spike % Rec.	92.900	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.011	mg/kg dry wt	
	1,1-Dichloropropene	MSD % Recovery	85.600	%	
		MSD Range	7.299	units	
		MS Duplicate RPD	28.517	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
	1,2-Dichloropropane	Matrix Spike % Rec.	97.699	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	90.700	%	
		MSD Range	6.999	units	
		MS Duplicate RPD	27.783	%	0-30
	1,3-Dichloropropane	Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.015	mg/kg dry wt	
		Matrix Spike % Rec.	89.100	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.011	mg/kg dry wt	
	2,2-Dichloropropane	MSD % Recovery	86.000	%	
		MSD Range	3.100	units	
		MS Duplicate RPD	23.955	%	0-30
		Sample Amount	<0.002	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.015	mg/kg dry wt	
		Matrix Spike % Rec.	92.300	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.011	mg/kg dry wt	
		MSD % Recovery	86.500	%	
		MSD Range	5.799	units	
		MS Duplicate RPD	26.856	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	

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08B48562	2,2-Dichloropropane	Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.015	mg/kg dry wt	
		Matrix Spike % Rec.	92.200	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.011	mg/kg dry wt	
		MSD % Recovery	85.700	%	
		MSD Range	6.500	units	
	1,1,1,2-Tetrachloroethane	MS Duplicate RPD	27.661	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	95.499	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
	1,2,3-Trichloropropane	MSD % Recovery	89.800	%	
		MSD Range	5.699	units	
		MS Duplicate RPD	26.526	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.014	mg/kg dry wt	
		Matrix Spike % Rec.	82.299	%	70-130
	n-Butylbenzene	MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.010	mg/kg dry wt	
		MSD % Recovery	77.200	%	
		MSD Range	5.099	units	
		MS Duplicate RPD	26.765	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
	Dichlorodifluoromethane	MS Amt Measured	0.017	mg/kg dry wt	
		Matrix Spike % Rec.	102.100	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.013	mg/kg dry wt	
		MSD % Recovery	94.200	%	
		MSD Range	7.899	units	
		MS Duplicate RPD	28.389	%	0-30
		Sample Amount	<0.027	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.013	mg/kg dry wt	
		Matrix Spike % Rec.	79.200	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.010	mg/kg dry wt	
		MSD % Recovery	73.400	%	
		MSD Range	5.800	units	

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08B48562	Dichlorodifluoromethane Bromochloromethane	MS Duplicate RPD	27.950	%	0-30
		Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	99.699	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	93.400	%	
		MSD Range	6.299	units	
		MS Duplicate RPD	26.892	%	0-30
	Bromobenzene	Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	96.099	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	90.700	%	
		MSD Range	5.399	units	
		MS Duplicate RPD	26.161	%	0-30
		Sample Amount	<0.009	mg/kg dry wt	
	Acrylonitrile	Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.015	mg/kg dry wt	
		Matrix Spike % Rec.	88.300	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.011	mg/kg dry wt	
		MSD % Recovery	83.100	%	
		MSD Range	5.199	units	
		MS Duplicate RPD	26.443	%	0-30
		Sample Amount	<0.009	mg/kg dry wt	
	Carbon Disulfide	Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	97.900	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	92.800	%	
		MSD Range	5.099	units	
		MS Duplicate RPD	25.735	%	0-30
		Sample Amount	<0.027	mg/kg dry wt	
	2-Hexanone	Matrix Spk Amt Added	0.170	mg/kg dry wt	
		MS Amt Measured	0.154	mg/kg dry wt	
		Matrix Spike % Rec.	91.019	%	70-130
		MSD Amount Added	0.138	mg/kg dry wt	
		MSD Amt Measured	0.117	mg/kg dry wt	

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08B48562					
	2-Hexanone	MSD % Recovery	84.570	%	
		MSD Range	6.449	units	
		MS Duplicate RPD	27.700	%	0-30
	trans-1,4-Dichloro-2-Butene	Sample Amount	<0.006	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.013	mg/kg dry wt	
		Matrix Spike % Rec.	81.499	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.010	mg/kg dry wt	
		MSD % Recovery	74.000	%	
		MSD Range	7.499	units	
		MS Duplicate RPD	29.956	%	0-30
	Diethyl Ether	Sample Amount	<0.027	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.015	mg/kg dry wt	
		Matrix Spike % Rec.	88.199	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	86.800	%	
		MSD Range	1.399	units	
		MS Duplicate RPD	22.039	%	0-30
	Bromodichloromethane	Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.014	mg/kg dry wt	
		Matrix Spike % Rec.	88.000	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.011	mg/kg dry wt	
		MSD % Recovery	83.200	%	
		MSD Range	4.799	units	
		MS Duplicate RPD	25.990	%	0-30
	1,2-Dichloroethane-d4	Surrogate Recovery	102.600	%	70-130
	Toluene-d8	Surrogate Recovery	99.600	%	70-130
	Bromofluorobenzene	Surrogate Recovery	100.160	%	70-130
	1,2-Dibromo-3-Chloropropane	Sample Amount	<0.003	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.014	mg/kg dry wt	
		Matrix Spike % Rec.	84.200	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.010	mg/kg dry wt	
		MSD % Recovery	78.500	%	
		MSD Range	5.699	units	
		MS Duplicate RPD	27.366	%	0-30
	1,2-Dibromoethane	Sample Amount	<0.002	mg/kg dry wt	

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08B48562	1,2-Dibromoethane	Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.015	mg/kg dry wt	
		Matrix Spike % Rec.	92.800	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	86.600	%	
		MSD Range	6.199	units	
		MS Duplicate RPD	27.273	%	0-30
	Tetrahydrofuran	Sample Amount	<0.014	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.015	mg/kg dry wt	
		Matrix Spike % Rec.	93.899	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.011	mg/kg dry wt	
		MSD % Recovery	86.000	%	
		MSD Range	7.899	units	
		MS Duplicate RPD	29.109	%	0-30
	tert-Butyl Alcohol	Sample Amount	<0.054	mg/kg dry wt	
		Matrix Spk Amt Added	0.170	mg/kg dry wt	
		MS Amt Measured	0.137	mg/kg dry wt	
		Matrix Spike % Rec.	80.909	%	70-130
		MSD Amount Added	0.138	mg/kg dry wt	
		MSD Amt Measured	0.102	mg/kg dry wt	
		MSD % Recovery	73.710	%	
		MSD Range	7.199	units	
		MS Duplicate RPD	29.629	%	0-30
	Diisopropyl Ether	Sample Amount	<0.002	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	95.600	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	90.000	%	
		MSD Range	5.599	units	
		MS Duplicate RPD	26.410	%	0-30
	tert-Butylethyl Ether	Sample Amount	<0.002	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	95.600	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	89.300	%	
		MSD Range	6.299	units	

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08B48562	tert-Butylethyl Ether	MS Duplicate RPD	27.177	%	0-30
	tert-Amylmethyl Ether	Sample Amount	<0.002	mg/kg dry wt	
		Matrix Spk Amt Added	0.017	mg/kg dry wt	
		MS Amt Measured	0.016	mg/kg dry wt	
		Matrix Spike % Rec.	97.100	%	70-130
		MSD Amount Added	0.013	mg/kg dry wt	
		MSD Amt Measured	0.012	mg/kg dry wt	
		MSD % Recovery	90.299	%	
		MSD Range	6.800	units	
		MS Duplicate RPD	27.612	%	0-30
08B48563	1,2-Dichloroethane-d4	Surrogate Recovery	106.200	%	70-130
	Toluene-d8	Surrogate Recovery	99.360	%	70-130
	Bromofluorobenzene	Surrogate Recovery	99.520	%	70-130
08B48564	1,2-Dichloroethane-d4	Surrogate Recovery	106.120	%	70-130
	Toluene-d8	Surrogate Recovery	99.400	%	70-130
	Bromofluorobenzene	Surrogate Recovery	99.920	%	70-130
08B48565	1,2-Dichloroethane-d4	Surrogate Recovery	104.640	%	70-130
	Toluene-d8	Surrogate Recovery	98.960	%	70-130
	Bromofluorobenzene	Surrogate Recovery	97.960	%	70-130
08B48566	1,2-Dichloroethane-d4	Surrogate Recovery	103.680	%	70-130
	Toluene-d8	Surrogate Recovery	99.320	%	70-130
	Bromofluorobenzene	Surrogate Recovery	100.600	%	70-130
08B48567	1,2-Dichloroethane-d4	Surrogate Recovery	107.360	%	70-130
	Toluene-d8	Surrogate Recovery	98.560	%	70-130
	Bromofluorobenzene	Surrogate Recovery	100.080	%	70-130
BLANK-127457	Acetone	Blank	<0.10	mg/kg dry wt	
	Benzene	Blank	<0.002	mg/kg dry wt	
	Carbon Tetrachloride	Blank	<0.002	mg/kg dry wt	
	Chloroform	Blank	<0.004	mg/kg dry wt	
	1,2-Dichloroethane	Blank	<0.002	mg/kg dry wt	
	1,4-Dichlorobenzene	Blank	<0.002	mg/kg dry wt	
	Ethyl Benzene	Blank	<0.002	mg/kg dry wt	
	2-Butanone (MEK)	Blank	<0.040	mg/kg dry wt	
	MIBK	Blank	<0.020	mg/kg dry wt	
	Naphthalene	Blank	<0.004	mg/kg dry wt	
	Styrene	Blank	<0.002	mg/kg dry wt	
	Tetrachloroethylene	Blank	<0.002	mg/kg dry wt	

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BLANK-127457					
	Toluene	Blank	<0.002	mg/kg dry wt	
	1,1,1-Trichloroethane	Blank	<0.002	mg/kg dry wt	
	Trichloroethylene	Blank	<0.002	mg/kg dry wt	
	1,1,2-Trichloro-1,2,2-Trifluoroethane	Blank	<0.010	mg/kg dry wt	
	Trichlorofluoromethane	Blank	<0.010	mg/kg dry wt	
	o-Xylene	Blank	<0.002	mg/kg dry wt	
	m + p Xylene	Blank	<0.004	mg/kg dry wt	
	1,2-Dichlorobenzene	Blank	<0.002	mg/kg dry wt	
	1,3-Dichlorobenzene	Blank	<0.002	mg/kg dry wt	
	1,1-Dichloroethane	Blank	<0.002	mg/kg dry wt	
	1,1-Dichloroethylene	Blank	<0.004	mg/kg dry wt	
	1,4-Dioxane	Blank	<0.10	mg/kg dry wt	
	MTBE	Blank	<0.004	mg/kg dry wt	
	trans-1,2-Dichloroethylene	Blank	<0.002	mg/kg dry wt	
	Vinyl Chloride	Blank	<0.010	mg/kg dry wt	
	Methylene Chloride	Blank	<0.020	mg/kg dry wt	
	Chlorobenzene	Blank	<0.002	mg/kg dry wt	
	Chloromethane	Blank	<0.010	mg/kg dry wt	
	Bromomethane	Blank	<0.010	mg/kg dry wt	
	Chloroethane	Blank	<0.020	mg/kg dry wt	
	cis-1,3-Dichloropropene	Blank	<0.001	mg/kg dry wt	
	trans-1,3-Dichloropropene	Blank	<0.001	mg/kg dry wt	
	Chlorodibromomethane	Blank	<0.001	mg/kg dry wt	
	1,1,2-Trichloroethane	Blank	<0.002	mg/kg dry wt	
	Bromoform	Blank	<0.002	mg/kg dry wt	
	1,1,2,2-Tetrachloroethane	Blank	<0.001	mg/kg dry wt	
	2-Chlorotoluene	Blank	<0.002	mg/kg dry wt	
	Hexachlorobutadiene	Blank	<0.002	mg/kg dry wt	
	Isopropylbenzene	Blank	<0.002	mg/kg dry wt	
	p-Isopropyltoluene	Blank	<0.002	mg/kg dry wt	
	n-Propylbenzene	Blank	<0.002	mg/kg dry wt	
	sec-Butylbenzene	Blank	<0.002	mg/kg dry wt	
	tert-Butylbenzene	Blank	<0.002	mg/kg dry wt	
	1,2,3-Trichlorobenzene	Blank	<0.002	mg/kg dry wt	
	1,2,4-Trichlorobenzene	Blank	<0.002	mg/kg dry wt	
	1,2,4-Trimethylbenzene	Blank	<0.002	mg/kg dry wt	
	1,3,5-Trimethylbenzene	Blank	<0.002	mg/kg dry wt	
	4-Chlorotoluene	Blank	<0.002	mg/kg dry wt	
	Dibromomethane	Blank	<0.002	mg/kg dry wt	
	cis-1,2-Dichloroethylene	Blank	<0.002	mg/kg dry wt	
	1,1-Dichloropropene	Blank	<0.002	mg/kg dry wt	
	1,2-Dichloropropane	Blank	<0.002	mg/kg dry wt	
	1,3-Dichloropropane	Blank	<0.001	mg/kg dry wt	

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BLANK-127457					
	2,2-Dichloropropane	Blank	<0.002	mg/kg dry wt	
	1,1,1,2-Tetrachloroethane	Blank	<0.002	mg/kg dry wt	
	1,2,3-Trichloropropane	Blank	<0.002	mg/kg dry wt	
	n-Butylbenzene	Blank	<0.002	mg/kg dry wt	
	Dichlorodifluoromethane	Blank	<0.020	mg/kg dry wt	
	Bromochloromethane	Blank	<0.002	mg/kg dry wt	
	Bromobenzene	Blank	<0.002	mg/kg dry wt	
	Acrylonitrile	Blank	<0.006	mg/kg dry wt	
	Carbon Disulfide	Blank	<0.006	mg/kg dry wt	
	2-Hexanone	Blank	<0.020	mg/kg dry wt	
	trans-1,4-Dichloro-2-Butene	Blank	<0.004	mg/kg dry wt	
	Diethyl Ether	Blank	<0.020	mg/kg dry wt	
	Bromodichloromethane	Blank	<0.002	mg/kg dry wt	
	1,2-Dibromo-3-Chloropropane	Blank	<0.002	mg/kg dry wt	
	1,2-Dibromoethane	Blank	<0.001	mg/kg dry wt	
	Tetrahydrofuran	Blank	<0.010	mg/kg dry wt	
	tert-Butyl Alcohol	Blank	<0.040	mg/kg dry wt	
	Diisopropyl Ether	Blank	<0.001	mg/kg dry wt	
	tert-Butylethyl Ether	Blank	<0.001	mg/kg dry wt	
	tert-Amylmethyl Ether	Blank	<0.001	mg/kg dry wt	
LFBLANK-89398					
	Acetone	Lab Fort Blank Amt.	0.200	mg/kg dry wt	
		Lab Fort Blk. Found	0.190	mg/kg dry wt	
		Lab Fort Blk. % Rec.	95.470	%	50-160
	Benzene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.020	mg/kg dry wt	
		Lab Fort Blk. % Rec.	102.400	%	70-130
	Carbon Tetrachloride	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.021	mg/kg dry wt	
		Lab Fort Blk. % Rec.	105.800	%	70-130
	Chloroform	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	95.400	%	70-130
	1,2-Dichloroethane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.020	mg/kg dry wt	
		Lab Fort Blk. % Rec.	103.900	%	70-130
	1,4-Dichlorobenzene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.020	mg/kg dry wt	
		Lab Fort Blk. % Rec.	100.700	%	70-130
	Ethyl Benzene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.022	mg/kg dry wt	
		Lab Fort Blk. % Rec.	110.200	%	70-130
	2-Butanone (MEK)	Lab Fort Blank Amt.	0.200	mg/kg dry wt	

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LFBLANK-89398					
2-Butanone (MEK)		Lab Fort Blk. Found	0.190	mg/kg dry wt	70-160
		Lab Fort Blk. % Rec.	95.140	%	
MIBK		Lab Fort Blank Amt.	0.200	mg/kg dry wt	70-160
		Lab Fort Blk. Found	0.217	mg/kg dry wt	
		Lab Fort Blk. % Rec.	108.540	%	
Naphthalene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	40-130
		Lab Fort Blk. Found	0.022	mg/kg dry wt	
		Lab Fort Blk. % Rec.	113.700	%	
Styrene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	70-130
		Lab Fort Blk. Found	0.022	mg/kg dry wt	
		Lab Fort Blk. % Rec.	112.500	%	
Tetrachloroethylene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	70-160
		Lab Fort Blk. Found	0.021	mg/kg dry wt	
		Lab Fort Blk. % Rec.	106.300	%	
Toluene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	70-130
		Lab Fort Blk. Found	0.020	mg/kg dry wt	
		Lab Fort Blk. % Rec.	102.900	%	
1,1,1-Trichloroethane		Lab Fort Blank Amt.	0.020	mg/kg dry wt	70-130
		Lab Fort Blk. Found	0.020	mg/kg dry wt	
		Lab Fort Blk. % Rec.	104.100	%	
Trichloroethylene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	70-130
		Lab Fort Blk. Found	0.020	mg/kg dry wt	
		Lab Fort Blk. % Rec.	102.800	%	
1,1,2-Trichloro-1,2,2-Trifluoroethane		Lab Fort Blank Amt.	0.020	mg/kg dry wt	70-130
		Lab Fort Blk. Found	0.022	mg/kg dry wt	
		Lab Fort Blk. % Rec.	111.000	%	
Trichlorofluoromethane		Lab Fort Blank Amt.	0.020	mg/kg dry wt	70-130
		Lab Fort Blk. Found	0.020	mg/kg dry wt	
		Lab Fort Blk. % Rec.	100.200	%	
o-Xylene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	70-130
		Lab Fort Blk. Found	0.021	mg/kg dry wt	
		Lab Fort Blk. % Rec.	106.900	%	
m + p Xylene		Lab Fort Blank Amt.	0.040	mg/kg dry wt	70-130
		Lab Fort Blk. Found	0.043	mg/kg dry wt	
		Lab Fort Blk. % Rec.	108.250	%	
1,2-Dichlorobenzene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	70-130
		Lab Fort Blk. Found	0.020	mg/kg dry wt	
		Lab Fort Blk. % Rec.	104.600	%	
1,3-Dichlorobenzene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	70-130
		Lab Fort Blk. Found	0.021	mg/kg dry wt	
		Lab Fort Blk. % Rec.	105.400	%	
1,1-Dichloroethane		Lab Fort Blank Amt.	0.020	mg/kg dry wt	70-130
		Lab Fort Blk. Found	0.019	mg/kg dry wt	

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 12/10/2008

Lims Bat # : LIMIT-21835

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QC Batch Number: GCMS/VOL-21117

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-89398					
	1,1-Dichloroethane	Lab Fort Blk. % Rec.	99.600	%	70-130
	1,1-Dichloroethylene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	95.400	%	70-130
	1,4-Dioxane	Lab Fort Blank Amt.	0.200	mg/kg dry wt	
		Lab Fort Blk. Found	0.181	mg/kg dry wt	
		Lab Fort Blk. % Rec.	90.790	%	40-160
	MTBE	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.020	mg/kg dry wt	
		Lab Fort Blk. % Rec.	104.700	%	70-130
	trans-1,2-Dichloroethylene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	98.700	%	70-130
	Vinyl Chloride	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	93.000	%	40-130
	Methylene Chloride	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.021	mg/kg dry wt	
		Lab Fort Blk. % Rec.	105.000	%	40-160
	Chlorobenzene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.021	mg/kg dry wt	
		Lab Fort Blk. % Rec.	106.200	%	70-130
	Chloromethane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.016	mg/kg dry wt	
		Lab Fort Blk. % Rec.	80.700	%	40-130
	Bromomethane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.013	mg/kg dry wt	
		Lab Fort Blk. % Rec.	66.500	%	40-130
	Chloroethane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.017	mg/kg dry wt	
		Lab Fort Blk. % Rec.	87.800	%	40-160
	cis-1,3-Dichloropropene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.021	mg/kg dry wt	
		Lab Fort Blk. % Rec.	106.400	%	70-130
	trans-1,3-Dichloropropene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.023	mg/kg dry wt	
		Lab Fort Blk. % Rec.	115.200	%	70-130
	Chlorodibromomethane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.021	mg/kg dry wt	
		Lab Fort Blk. % Rec.	105.700	%	70-130
	1,1,2-Trichloroethane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.020	mg/kg dry wt	
		Lab Fort Blk. % Rec.	102.100	%	70-130

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 12/10/2008

Lims Bat # : LIMIT-21835

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QC Batch Number: GCMS/VOL-21117

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-89398					
Bromoform		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.024	mg/kg dry wt	
		Lab Fort Blk. % Rec.	122.900	%	70-130
1,1,2,2-Tetrachloroethane		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.021	mg/kg dry wt	
		Lab Fort Blk. % Rec.	107.400	%	70-130
2-Chlorotoluene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.021	mg/kg dry wt	
		Lab Fort Blk. % Rec.	106.900	%	70-130
Hexachlorobutadiene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.023	mg/kg dry wt	
		Lab Fort Blk. % Rec.	115.000	%	70-130
Isopropylbenzene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.024	mg/kg dry wt	
		Lab Fort Blk. % Rec.	123.700	%	70-130
p-Isopropyltoluene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.022	mg/kg dry wt	
		Lab Fort Blk. % Rec.	112.800	%	70-130
n-Propylbenzene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.022	mg/kg dry wt	
		Lab Fort Blk. % Rec.	110.900	%	70-130
sec-Butylbenzene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.022	mg/kg dry wt	
		Lab Fort Blk. % Rec.	113.500	%	70-130
tert-Butylbenzene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.022	mg/kg dry wt	
		Lab Fort Blk. % Rec.	111.500	%	70-160
1,2,3-Trichlorobenzene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.021	mg/kg dry wt	
		Lab Fort Blk. % Rec.	105.500	%	70-130
1,2,4-Trichlorobenzene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.020	mg/kg dry wt	
		Lab Fort Blk. % Rec.	101.900	%	40-130
1,2,4-Trimethylbenzene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.021	mg/kg dry wt	
		Lab Fort Blk. % Rec.	109.300	%	70-130
1,3,5-Trimethylbenzene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.022	mg/kg dry wt	
		Lab Fort Blk. % Rec.	112.800	%	70-130
4-Chlorotoluene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.021	mg/kg dry wt	
		Lab Fort Blk. % Rec.	107.700	%	70-130
Dibromomethane		Lab Fort Blank Amt.	0.020	mg/kg dry wt	

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 12/10/2008

Lims Bat # : LIMIT-21835

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QC Batch Number: GCMS/VOL-21117

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-89398					
Dibromomethane		Lab Fort Blk. Found	0.020	mg/kg dry wt	
		Lab Fort Blk. % Rec.	101.400	%	70-130
cis-1,2-Dichloroethylene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	98.700	%	70-130
1,1-Dichloropropene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.020	mg/kg dry wt	
		Lab Fort Blk. % Rec.	104.200	%	70-130
1,2-Dichloropropane		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.020	mg/kg dry wt	
		Lab Fort Blk. % Rec.	101.100	%	70-130
1,3-Dichloropropane		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.020	mg/kg dry wt	
		Lab Fort Blk. % Rec.	104.400	%	70-130
2,2-Dichloropropane		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	97.000	%	70-130
1,1,1,2-Tetrachloroethane		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.022	mg/kg dry wt	
		Lab Fort Blk. % Rec.	110.600	%	70-130
1,2,3-Trichloropropane		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.017	mg/kg dry wt	
		Lab Fort Blk. % Rec.	87.400	%	70-130
n-Butylbenzene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.022	mg/kg dry wt	
		Lab Fort Blk. % Rec.	111.300	%	70-130
Dichlorodifluoromethane		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	90.300	%	40-160
Bromochloromethane		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.021	mg/kg dry wt	
		Lab Fort Blk. % Rec.	107.400	%	70-130
Bromobenzene		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.021	mg/kg dry wt	
		Lab Fort Blk. % Rec.	108.100	%	70-130
Acrylonitrile		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	97.100	%	70-160
Carbon Disulfide		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.021	mg/kg dry wt	
		Lab Fort Blk. % Rec.	108.700	%	70-130
2-Hexanone		Lab Fort Blank Amt.	0.200	mg/kg dry wt	
		Lab Fort Blk. Found	0.210	mg/kg dry wt	

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 12/10/2008

Lims Bat # : LIMIT-21835

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QC Batch Number: GCMS/VOL-21117

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-89398					
	2-Hexanone	Lab Fort Blk. % Rec.	105.400	%	70-160
	trans-1,4-Dichloro-2-Butene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	92.000	%	70-130
	Diethyl Ether	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	96.300	%	70-130
	Bromodichloromethane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	99.700	%	70-130
	1,2-Dibromo-3-Chloropropane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.020	mg/kg dry wt	
		Lab Fort Blk. % Rec.	101.800	%	70-130
	1,2-Dibromoethane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.021	mg/kg dry wt	
		Lab Fort Blk. % Rec.	106.300	%	70-130
	Tetrahydrofuran	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	97.800	%	70-130
	tert-Butyl Alcohol	Lab Fort Blank Amt.	0.200	mg/kg dry wt	
		Lab Fort Blk. Found	0.181	mg/kg dry wt	
		Lab Fort Blk. % Rec.	90.920	%	40-130
	Diisopropyl Ether	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.020	mg/kg dry wt	
		Lab Fort Blk. % Rec.	102.800	%	70-130
	tert-Butylethyl Ether	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.020	mg/kg dry wt	
		Lab Fort Blk. % Rec.	103.100	%	70-130
	tert-Amylmethyl Ether	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.021	mg/kg dry wt	
		Lab Fort Blk. % Rec.	105.700	%	70-130

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 12/10/2008

Lims Bat # : LIMIT-21835

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QC Batch Number: HG/TCLP-3396

Sample Id	Analysis	QC Analysis	Values	Units	Limits
08B48568	Mercury	Sample Amount	<0.00010	mg/l leachate	
		Matrix Spk Amt Added	0.00200	mg/l leachate	
		MS Amt Measured	0.00190	mg/l leachate	
		Matrix Spike % Rec.	95.45000	%	75-125
BLANK-127531	Mercury	Blank	<0.00010	mg/l leachate	
LFBLANK-89488	Mercury	Lab Fort Blank Amt.	0.00200	mg/l leachate	
		Lab Fort Blk. Found	0.00198	mg/l leachate	
		Lab Fort Blk. % Rec.	99.25000	%	80-120
		Dup Lab Fort Bl Amt.	0.00200	mg/l leachate	
		Dup Lab Fort Bl. Fnd	0.00196	mg/l leachate	
		Dup Lab Fort Bl %Rec	98.45000	%	
		Lab Fort Blank Range	0.79999	units	
		Lab Fort Bl. Av. Rec	98.85000	%	
		LFB Duplicate RPD	0.80930	%	

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 12/10/2008

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QC Batch Number: ICP/TCLP-4605

Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-127472					
	Silver	Blank	<0.005	mg/l leachate	
	Arsenic	Blank	<0.010	mg/l leachate	
	Barium	Blank	<0.10	mg/l leachate	
	Cadmium	Blank	<0.005	mg/l leachate	
	Chromium	Blank	<0.01	mg/l leachate	
	Lead	Blank	<0.015	mg/l leachate	
	Selenium	Blank	<0.05	mg/l leachate	
LFBLANK-89427					
	Silver	Lab Fort Blank Amt.	0.500	mg/l leachate	
		Lab Fort Blk. Found	0.494	mg/l leachate	
		Lab Fort Blk. % Rec.	98.840	%	80-120
	Arsenic	Lab Fort Blank Amt.	0.500	mg/l leachate	
		Lab Fort Blk. Found	0.556	mg/l leachate	
		Lab Fort Blk. % Rec.	111.200	%	80-120
	Barium	Lab Fort Blank Amt.	0.50	mg/l leachate	
		Lab Fort Blk. Found	0.49	mg/l leachate	
		Lab Fort Blk. % Rec.	99.20	%	80-120
	Cadmium	Lab Fort Blank Amt.	0.500	mg/l leachate	
		Lab Fort Blk. Found	0.532	mg/l leachate	
		Lab Fort Blk. % Rec.	106.420	%	80-120
	Chromium	Lab Fort Blank Amt.	0.50	mg/l leachate	
		Lab Fort Blk. Found	0.48	mg/l leachate	
		Lab Fort Blk. % Rec.	96.94	%	80-120
	Lead	Lab Fort Blank Amt.	0.500	mg/l leachate	
		Lab Fort Blk. Found	0.470	mg/l leachate	
		Lab Fort Blk. % Rec.	94.160	%	80-120
	Selenium	Lab Fort Blank Amt.	0.50	mg/l leachate	
		Lab Fort Blk. Found	0.53	mg/l leachate	
		Lab Fort Blk. % Rec.	106.96	%	80-120

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 12/10/2008

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QUALITY CONTROL DEFINITIONS AND ABBREVIATIONS

QC BATCH NUMBER	This is the number assigned to all samples analyzed together that would be subject to comparison with a particular set of Quality Control Data.
LIMITS	Upper and Lower Control Limits for the QC ANALYSIS Reported. All values normally would fall within these statistically determined limits, unless there is an unusual circumstance that would be documented in a NOTE appearing on the last page of the QC SUMMARY REPORT. Not all QC results will have Limits defined.
Sample Amount	Amount of analyte found in a sample.
Blank	Method Blank that has been taken through all the steps of the analysis.
LFBLANK	Laboratory Fortified Blank (a control sample)
STDADD	Standard Added (a laboratory control sample)
Matrix Spk Amt Added	Amount of analyte spiked into a sample
MS Amt Measured	Amount of analyte found including amount that was spiked
Matrix Spike % Rec.	% Recovery of spiked amount in sample.
Duplicate Value	The result from the Duplicate analysis of the sample.
Duplicate RPD	The Relative Percent Difference between two Duplicate Analyses.
Surrogate Recovery	The % Recovery for non-environmental compounds (surrogates) spiked into samples to determine the performance of the analytical methods.
Sur. Recovery (ELCD)	Surrogate Recovery on the Electrolytic Conductivity Detector.
Sur. Recovery (PID)	Surrogate Recovery on the Photoionization Detector.
Standard Measured	Amount measured for a laboratory control sample
Standard Amt Added	Known value for a laboratory control sample
Standard % Recovery	% recovered for a laboratory control sample with a known value.
Lab Fort Blank Amt	Laboratory Fortified Blank Amount Added
Lab Fort Blk. Found	Laboratory Fortified Blank Amount Found
Lab Fort Blk % Rec	Laboratory Fortified Blank % Recovered
Dup Lab Fort Bl Amt	Duplicate Laboratory Fortified Blank Amount Added
Dup Lab Fort Bl Fnd	Duplicate Laboratory Fortified Blank Amount Found
Dup Lab Fort Bl % Rec	Duplicate Laboratory Fortified Blank % Recovery
Lab Fort Blank Range	Laboratory Fortified Blank Range (Absolute value of difference between recoveries for Lab Fortified Blank and Lab Fortified Blank Duplicate).
Lab Fort Bl. Av. Rec.	Laboratory Fortified Blank Average Recovery
Duplicate Sample Amt	Sample Value for Duplicate used with Matrix Spike Duplicate
MSD Amount Added	Matrix Spike Duplicate Amount Added (Spiked)
MSD Amt Measured	Matrix Spike Duplicate Amount Measured
MSD % Recovery	Matrix Spike Duplicate % Recovery
MSD Range	Absolute difference between Matrix Spike and Matrix Spike Duplicate Recoveries

[Close Window](#)

Tracking Summary

Tracking Numbers

Tracking Number: J217 9514 331
Type: Package
Status: **Delivered**
Delivered On: 12/04/2008
9:33 A.M.
Delivered To: EAST LONGMEADOW, MA, US
Signed By: MURPHY
Service: NEXT DAY AIR

Tracking results provided by UPS: 12/04/2008 10:53 A.M. ET

NOTICE: UPS authorizes you to use UPS tracking systems solely to track shipments tendered by or for you to UPS for delivery and for no other purpose. Any other use of UPS tracking systems and information is strictly prohibited.

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39 SPRUCE ST

EAST LONGMEADOW MA 01028-2817

P: BLUE S: LEFT I: 70B

88-1432

J2179514331

1030

NZ59BWH MASPR206 Dec 04 08:25:42 2008
US 0110 HIP 7.0.6 LP2644



UPS Next Day Air®
UPS Worldwide Express™

Shipping Document

WEIGHT	39	DIMENSIONAL WEIGHT	17.1	LARGE PACKAGE	<input type="checkbox"/>	SHIP TO RELEASE	<input type="checkbox"/>
				EXPRESS (INT'L)	<input type="checkbox"/>	<small>The shipper warrants that this is a true and accurate description of the contents of the package. The shipper certifies that these commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to U.S. law is prohibited.</small>	
				DOCUMENTS ONLY	<input type="checkbox"/>		

SATURDAY DELIVERY

J217 951 433 1



J217 951 433 1

SHIPMENT FROM

UPS ACCOUNT NO.

REFERENCE NUMBER

2700.DC21.01

TELEPHONE

Rick Watt 716-684-8060

Ecology and Environment

368 Pleasantview Dr.

Lancaster, NY 14086

DELIVERY TO

TELEPHONE

Receiving 413-525-2331

Con-Test Lab

39 Spruce St.

East Longmeadow MA 01028

UPS Next Day Air®

1

J217 951 433 1



J217 951 433 1

DATE OF SHIPMENT



EXTREMELY URGENT

UPS Next Day Air®

Sample Receipt Checklist

 CLIENT NAME: Ecology Env. RECEIVED BY: K DATE: 12/4/08

1) Was the chain(s) of custody relinquished and signed?

Yes No

2) Does the chain agree with the samples?

Yes No

If not, explain:

3) Are all the samples in good condition?

Yes No

If not, explain:

4) How were the samples received:

 On Ice ☒

 Direct from Sampling ☐

 Ambient ☐

 In Cooler(s) ☒

Were the samples received in Temperature Compliance of (2-6°C)?

Yes No

 Temperature °C by Temp blank _____ Temperature °C by Temp gun 5°C

5) Are there Dissolved samples for the lab to filter?

Yes No

Who was notified _____ Date _____ Time _____

6) Are there any samples "On Hold"?

Yes No

 Stored where:

7) Are there any RUSH or SHORT HOLDING TIME samples?

Yes No

Who was notified _____ Date _____ Time _____

8) Location where samples are stored:

19C

 Permission to subcontract samples? Yes No
 (Walk-in clients only) if not already approved

Client Signature: _____

Containers sent in to Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz clear jar	1
500 mL Amber		4 oz clear jar	10
250 mL Amber (8oz amber)		2 oz clear jar	
1 Liter Plastic		Other glass jar	
500 mL Plastic		Plastic Bag / Ziploc	
250 mL plastic		Air Cassette	
40 mL Vial - type listed below	39	Brass Sleeves	
Colisure / bacteria bottle		Tubes	
Dissolved Oxygen bottle		Summa Cans	
Flashpoint bottle		Regulators	
Encore		Other	DI VIALS / ENCORE
			FROZEN AT:

Laboratory Comments:

12-04-08 10:47 OUT

 40 mL vials: # HCl _____ # Methanol 13

 # Bisulfate _____ # DI Water 26

Thiosulfate _____ Unpreserved _____

Time and Date Frozen: _____

Do all samples have the proper pH: Yes No N/A

ECOLOGY & ENVIRONMENT

368 PLEASANT VIEW

LANCASTER, NY 14086

ATTN: RICK WATT

CONTRACT NUMBER:

PURCHASE ORDER NUMBER:

PROJECT NUMBER:

ANALYTICAL SUMMARY

LIMS BAT #: LIMIT-22130

JOB NUMBER: 2700.DC21.01

PROJECT LOCATION: BRIGHT OUTDOORS

FIELD SAMPLE #	LAB ID	MATRIX	SAMPLE DESCRIPTION	TEST	Subcontract Lab (if any) Cert. Nos.
MW-01	08B50004	GRND WATER	Not Specified	8260 water	
MW-02	08B50005	GRND WATER	Not Specified	8260 water	
MW-03 QC	08B50006	GRND WATER	Not Specified	8260 water	
MW-04	08B50007	GRND WATER	Not Specified	8260 water	
MW-05	08B50008	GRND WATER	Not Specified	8260 water	
MW-06	08B50009	GRND WATER	Not Specified	8260 water	
MW-07	08B50010	GRND WATER	Not Specified	8260 water	
MW-08	08B50011	GRND WATER	Not Specified	8260 water	
MW-08/Q	08B50012	GRND WATER	Not Specified	8260 water	
TB121608	08B50013	WATER OTHE	Not Specified	8260 water	



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

REPORT DATE 12/26/2008

ECOLOGY & ENVIRONMENT

368 PLEASANT VIEW

LANCASTER, NY 14086

ATTN: RICK WATT

CONTRACT NUMBER:

PURCHASE ORDER NUMBER:

PROJECT NUMBER:

ANALYTICAL SUMMARY

LIMS BAT #: LIMIT-22130

JOB NUMBER: 2700.DC21.01

Comments :

LIMS BATCH NO. : LIMIT-22130

In method 8260, the initial and/or continuing calibration did not meet method specifications. For all samples, tert-Butyl Alcohol, 1,4-Dioxane, and 1,2-Dibromo-3-chloropropane were calibrated with a relative response factor <0.05.

In method 8260, any reported result for Acetone, tert-Butyl Alcohol, Methyl tert-Butyl Ether, Carbon Tetrachloride, Diisopropyl Ether, tert-Butyl Ethyl Ether, 2,2-Dichloropropane, Tetrahydrofuran, 1,1,1-Trichloroethane, tert-Amyl Methyl Ether, 1,4-Dioxane, cis-1,3-Dichloropropene, 2-Hexanone, trans-1,3-Dichloropropene, 1,2-Dibromoethane, 1,1,1,2-Tetrachloroethane, 1,2,4-Trichlorobenzene, trans-1,4-Dichloro-2-butene, and 1,2-Dibromo-3-chloropropane in all samples is estimated and likely to be biased on the low side based on continuing calibration bias.

In method 8260, any reported result for Acetone, Carbon Tetrachloride, 1,1,1-Trichloroethane, 1,4-Dioxane, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, 2,2-Dichloropropane, tert-Butyl Alcohol, trans-1,4-Dichloro-2-butene, 1,2-Dibromo-3-chloropropane, tert-Butyl Ethyl Ether, and tert-Amyl Methyl Ether in all samples is likely to be biased on the low side based on laboratory fortified blank (laboratory control sample) recovery bias.

In method 8260 for sample 08B50006, either matrix spike or matrix spike duplicate recovery for Carbon Tetrachloride, trans-1,2-Dichloroethene, cis-1,3-Dichloropropene, and 1,2-Dibromo-3-chloropropane is outside of control limits, but the other is within limits. Outlier should be viewed as a one-time anomaly.

In method 8260 for sample 08B50006, matrix spike and matrix spike duplicate recovery for tert-Butyl Alcohol, trans-1,3-Dichloropropene, 2,2-Dichloropropane, trans-1,4-Dichloro-2-butene, tert-Butyl Ethyl Ether, and tert-Amyl Methyl Ether is biased on the low side. Possibility of sample matrix effects that lead to low bias for reported results cannot be eliminated.

The results of analyses performed are based on samples as submitted to the laboratory and relate only to the items collected and tested.

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations. AIHA accreditations only apply to NIOSH methods and Environmental Lead Analyses.

AIHA 100033	AIHA ELLAP (LEAD) : 100033	NORTH CAROLINA CERT. # 652
MASSACHUSETTS MA0100	NEW HAMPSHIRE NELAP 2516	NEW JERSEY NELAP NJ MA007 (AIR)
CONNECTICUT PH-0567	VERMONT DOH (LEAD) No. LL015036	FLORIDA DOH E871027 (AIR)
NEW YORK ELAP/NELAP 10899	RHODE ISLAND (LIC. No. 112)	

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Edward Denson 12/26/08

SIGNATURE

DATE

Tod Kopyscinski
Air Laboratory Manager

Michael Erickson
Assistant Laboratory Director

Edward Denson
Technical Director

Daren Damboragian
Organics Department Supervisor

* See end of data tabulation for notes and comments pertaining to this sample

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Purchase Order No.:

Project Location: BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-22130

Date Received: 12/17/2008

Job Number: 2700.DC21.01

Field Sample #: MW-01

Sample ID: 08B50004

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	ug/l	ND	12/18/08	LBD	50.0		
Acrylonitrile	ug/l	ND	12/18/08	LBD	5.0		
tert-Amylmethyl Ether	ug/l	ND	12/18/08	LBD	0.5		
Benzene	ug/l	ND	12/18/08	LBD	1.0		
Bromobenzene	ug/l	ND	12/18/08	LBD	1.0		
Bromochloromethane	ug/l	ND	12/18/08	LBD	1.0		
Bromodichloromethane	ug/l	ND	12/18/08	LBD	1.0		
Bromoform	ug/l	ND	12/18/08	LBD	4.0		
Bromomethane	ug/l	ND	12/18/08	LBD	2.0		
2-Butanone (MEK)	ug/l	ND	12/18/08	LBD	20.0		
tert-Butyl Alcohol	ug/l	ND	12/18/08	LBD	20.0		
n-Butylbenzene	ug/l	ND	12/18/08	LBD	1.0		
sec-Butylbenzene	ug/l	ND	12/18/08	LBD	1.0		
tert-Butylbenzene	ug/l	ND	12/18/08	LBD	1.0		
tert-Butylethyl Ether	ug/l	ND	12/18/08	LBD	0.5		
Carbon Disulfide	ug/l	ND	12/18/08	LBD	3.0		
Carbon Tetrachloride	ug/l	ND	12/18/08	LBD	1.0		
Chlorobenzene	ug/l	ND	12/18/08	LBD	1.0		
Chlorodibromomethane	ug/l	ND	12/18/08	LBD	0.5		
Chloroethane	ug/l	ND	12/18/08	LBD	2.0		
Chloroform	ug/l	ND	12/18/08	LBD	2.0		
Chloromethane	ug/l	ND	12/18/08	LBD	2.0		
2-Chlorotoluene	ug/l	ND	12/18/08	LBD	1.0		
4-Chlorotoluene	ug/l	ND	12/18/08	LBD	1.0		
1,2-Dibromo-3-Chloropropane	ug/l	ND	12/18/08	LBD	5.0		
1,2-Dibromoethane	ug/l	ND	12/18/08	LBD	0.50		
Dibromomethane	ug/l	ND	12/18/08	LBD	1.0		
1,2-Dichlorobenzene	ug/l	ND	12/18/08	LBD	1.0		
1,3-Dichlorobenzene	ug/l	ND	12/18/08	LBD	1.0		

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

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‡ = See attached chain-of-custody record for time sampled

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Purchase Order No.:

Project Location: BRIGHT OUTDOORS
Date Received: 12/17/2008

LIMS-BAT #: LIMIT-22130
Job Number: 2700.DC21.01

Field Sample #: MW-01

Sample ID: 08B50004

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,4-Dichlorobenzene	ug/l	ND	12/18/08	LBD	1.0		
trans-1,4-Dichloro-2-Butene	ug/l	ND	12/18/08	LBD	2.0		
Dichlorodifluoromethane	ug/l	ND	12/18/08	LBD	2.0		
1,1-Dichloroethane	ug/l	ND	12/18/08	LBD	1.0		
1,2-Dichloroethane	ug/l	ND	12/18/08	LBD	1.0		
1,1-Dichloroethylene	ug/l	ND	12/18/08	LBD	1.0		
cis-1,2-Dichloroethylene	ug/l	ND	12/18/08	LBD	1.0		
trans-1,2-Dichloroethylene	ug/l	ND	12/18/08	LBD	1.0		
1,2-Dichloropropane	ug/l	ND	12/18/08	LBD	1.0		
1,3-Dichloropropane	ug/l	ND	12/18/08	LBD	0.5		
2,2-Dichloropropane	ug/l	ND	12/18/08	LBD	1.0		
1,1-Dichloropropene	ug/l	ND	12/18/08	LBD	2.0		
cis-1,3-Dichloropropene	ug/l	ND	12/18/08	LBD	1.0		
trans-1,3-Dichloropropene	ug/l	ND	12/18/08	LBD	0.5		
Diethyl Ether	ug/l	ND	12/18/08	LBD	2.0		
Diisopropyl Ether	ug/l	ND	12/18/08	LBD	0.5		
1,4-Dioxane	ug/l	ND	12/18/08	LBD	50.0		
Ethyl Benzene	ug/l	ND	12/18/08	LBD	1.0		
Hexachlorobutadiene	ug/l	ND	12/18/08	LBD	3.0		
2-Hexanone	ug/l	ND	12/18/08	LBD	10.0		
Isopropylbenzene	ug/l	ND	12/18/08	LBD	1.0		
p-Isopropyltoluene	ug/l	ND	12/18/08	LBD	1.0		
MTBE	ug/l	ND	12/18/08	LBD	1.0		
Methylene Chloride	ug/l	ND	12/18/08	LBD	5.0		
MIBK	ug/l	ND	12/18/08	LBD	10.0		
Naphthalene	ug/l	ND	12/18/08	LBD	7.0		
n-Propylbenzene	ug/l	ND	12/18/08	LBD	1.0		
Styrene	ug/l	ND	12/18/08	LBD	1.0		
1,1,1,2-Tetrachloroethane	ug/l	ND	12/18/08	LBD	1.0		

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Purchase Order No.:

Project Location: BRIGHT OUTDOORS
Date Received: 12/17/2008

LIMS-BAT #: LIMIT-22130
Job Number: 2700.DC21.01

Field Sample #: MW-01

Sample ID: 08B50004

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,1,2,2-Tetrachloroethane	ug/l	ND	12/18/08	LBD	0.5		
Tetrachloroethylene	ug/l	ND	12/18/08	LBD	1.0		
Tetrahydrofuran	ug/l	ND	12/18/08	LBD	10.0		
Toluene	ug/l	ND	12/18/08	LBD	1.0		
1,2,3-Trichlorobenzene	ug/l	ND	12/18/08	LBD	6.0		
1,2,4-Trichlorobenzene	ug/l	ND	12/18/08	LBD	4.0		
1,1,1-Trichloroethane	ug/l	8.3	12/18/08	LBD	1.0		
1,1,2-Trichloroethane	ug/l	ND	12/18/08	LBD	1.0		
Trichloroethylene	ug/l	1.2	12/18/08	LBD	1.0		
Trichlorofluoromethane	ug/l	ND	12/18/08	LBD	2.0		
1,2,3-Trichloropropane	ug/l	ND	12/18/08	LBD	2.0		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	ND	12/18/08	LBD	1.0		
1,2,4-Trimethylbenzene	ug/l	ND	12/18/08	LBD	1.0		
1,3,5-Trimethylbenzene	ug/l	ND	12/18/08	LBD	1.0		
Vinyl Chloride	ug/l	ND	12/18/08	LBD	2.0		
m + p Xylene	ug/l	ND	12/18/08	LBD	2.0		
o-Xylene	ug/l	ND	12/18/08	LBD	1.0		

Analytical Method:

SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS. REPORTED RESULTS AND REPORTING LIMITS FOR 1,4-DIOXANE AND TERT-BUTYLALCOHOL ARE ESTIMATED SINCE RESPONSE FACTORS FOR THESE COMPOUNDS ARE BELOW METHOD SPECIFICATIONS.

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Purchase Order No.:

Project Location: BRIGHT OUTDOORS
Date Received: 12/17/2008

LIMS-BAT #: LIMIT-22130
Job Number: 2700.DC21.01

Field Sample #: MW-02

Sample ID: 08B50005

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	ug/l	ND	12/18/08	LBD	50.0		
Acrylonitrile	ug/l	ND	12/18/08	LBD	5.0		
tert-Amylmethyl Ether	ug/l	ND	12/18/08	LBD	0.5		
Benzene	ug/l	ND	12/18/08	LBD	1.0		
Bromobenzene	ug/l	ND	12/18/08	LBD	1.0		
Bromochloromethane	ug/l	ND	12/18/08	LBD	1.0		
Bromodichloromethane	ug/l	ND	12/18/08	LBD	1.0		
Bromoform	ug/l	ND	12/18/08	LBD	4.0		
Bromomethane	ug/l	ND	12/18/08	LBD	2.0		
2-Butanone (MEK)	ug/l	ND	12/18/08	LBD	20.0		
tert-Butyl Alcohol	ug/l	ND	12/18/08	LBD	20.0		
n-Butylbenzene	ug/l	ND	12/18/08	LBD	1.0		
sec-Butylbenzene	ug/l	ND	12/18/08	LBD	1.0		
tert-Butylbenzene	ug/l	ND	12/18/08	LBD	1.0		
tert-Butylethyl Ether	ug/l	ND	12/18/08	LBD	0.5		
Carbon Disulfide	ug/l	ND	12/18/08	LBD	3.0		
Carbon Tetrachloride	ug/l	ND	12/18/08	LBD	1.0		
Chlorobenzene	ug/l	ND	12/18/08	LBD	1.0		
Chlorodibromomethane	ug/l	ND	12/18/08	LBD	0.5		
Chloroethane	ug/l	ND	12/18/08	LBD	2.0		
Chloroform	ug/l	ND	12/18/08	LBD	2.0		
Chloromethane	ug/l	ND	12/18/08	LBD	2.0		
2-Chlorotoluene	ug/l	ND	12/18/08	LBD	1.0		
4-Chlorotoluene	ug/l	ND	12/18/08	LBD	1.0		
1,2-Dibromo-3-Chloropropane	ug/l	ND	12/18/08	LBD	5.0		
1,2-Dibromoethane	ug/l	ND	12/18/08	LBD	0.50		
Dibromomethane	ug/l	ND	12/18/08	LBD	1.0		
1,2-Dichlorobenzene	ug/l	ND	12/18/08	LBD	1.0		
1,3-Dichlorobenzene	ug/l	ND	12/18/08	LBD	1.0		

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Project Location: BRIGHT OUTDOORS
Date Received: 12/17/2008

Field Sample #: MW-02

Purchase Order No.:

LIMS-BAT #: LIMIT-22130
Job Number: 2700.DC21.01

Sample ID: 08B50005

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,4-Dichlorobenzene	ug/l	ND	12/18/08	LBD	1.0		
trans-1,4-Dichloro-2-Butene	ug/l	ND	12/18/08	LBD	2.0		
Dichlorodifluoromethane	ug/l	ND	12/18/08	LBD	2.0		
1,1-Dichloroethane	ug/l	ND	12/18/08	LBD	1.0		
1,2-Dichloroethane	ug/l	ND	12/18/08	LBD	1.0		
1,1-Dichloroethylene	ug/l	ND	12/18/08	LBD	1.0		
cis-1,2-Dichloroethylene	ug/l	ND	12/18/08	LBD	1.0		
trans-1,2-Dichloroethylene	ug/l	ND	12/18/08	LBD	1.0		
1,2-Dichloropropane	ug/l	ND	12/18/08	LBD	1.0		
1,3-Dichloropropane	ug/l	ND	12/18/08	LBD	0.5		
2,2-Dichloropropane	ug/l	ND	12/18/08	LBD	1.0		
1,1-Dichloropropene	ug/l	ND	12/18/08	LBD	2.0		
cis-1,3-Dichloropropene	ug/l	ND	12/18/08	LBD	1.0		
trans-1,3-Dichloropropene	ug/l	ND	12/18/08	LBD	0.5		
Diethyl Ether	ug/l	ND	12/18/08	LBD	2.0		
Diisopropyl Ether	ug/l	ND	12/18/08	LBD	0.5		
1,4-Dioxane	ug/l	ND	12/18/08	LBD	50.0		
Ethyl Benzene	ug/l	ND	12/18/08	LBD	1.0		
Hexachlorobutadiene	ug/l	ND	12/18/08	LBD	3.0		
2-Hexanone	ug/l	ND	12/18/08	LBD	10.0		
Isopropylbenzene	ug/l	ND	12/18/08	LBD	1.0		
p-Isopropyltoluene	ug/l	ND	12/18/08	LBD	1.0		
MTBE	ug/l	ND	12/18/08	LBD	1.0		
Methylene Chloride	ug/l	ND	12/18/08	LBD	5.0		
MIBK	ug/l	ND	12/18/08	LBD	10.0		
Naphthalene	ug/l	ND	12/18/08	LBD	7.0		
n-Propylbenzene	ug/l	ND	12/18/08	LBD	1.0		
Styrene	ug/l	ND	12/18/08	LBD	1.0		
1,1,1,2-Tetrachloroethane	ug/l	ND	12/18/08	LBD	1.0		

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ECOLOGY & ENVIRONMENT
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Purchase Order No.:

Project Location: BRIGHT OUTDOORS
Date Received: 12/17/2008

LIMS-BAT #: LIMIT-22130
Job Number: 2700.DC21.01

Field Sample #: MW-02

Sample ID: 08B50005

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,1,2,2-Tetrachloroethane	ug/l	ND	12/18/08	LBD	0.5		
Tetrachloroethylene	ug/l	ND	12/18/08	LBD	1.0		
Tetrahydrofuran	ug/l	ND	12/18/08	LBD	10.0		
Toluene	ug/l	ND	12/18/08	LBD	1.0		
1,2,3-Trichlorobenzene	ug/l	ND	12/18/08	LBD	6.0		
1,2,4-Trichlorobenzene	ug/l	ND	12/18/08	LBD	4.0		
1,1,1-Trichloroethane	ug/l	4.6	12/18/08	LBD	1.0		
1,1,2-Trichloroethane	ug/l	ND	12/18/08	LBD	1.0		
Trichloroethylene	ug/l	7.4	12/18/08	LBD	1.0		
Trichlorofluoromethane	ug/l	ND	12/18/08	LBD	2.0		
1,2,3-Trichloropropane	ug/l	ND	12/18/08	LBD	2.0		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	ND	12/18/08	LBD	1.0		
1,2,4-Trimethylbenzene	ug/l	ND	12/18/08	LBD	1.0		
1,3,5-Trimethylbenzene	ug/l	ND	12/18/08	LBD	1.0		
Vinyl Chloride	ug/l	ND	12/18/08	LBD	2.0		
m + p Xylene	ug/l	ND	12/18/08	LBD	2.0		
o-Xylene	ug/l	ND	12/18/08	LBD	1.0		

Analytical Method:

SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS. REPORTED RESULTS AND REPORTING LIMITS FOR 1,4-DIOXANE AND TERT-BUTYLALCOHOL ARE ESTIMATED SINCE RESPONSE FACTORS FOR THESE COMPOUNDS ARE BELOW METHOD SPECIFICATIONS.

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Purchase Order No.:

Project Location: BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-22130

Date Received: 12/17/2008

Job Number: 2700.DC21.01

Field Sample #: MW-03 QC

Sample ID: 08B50006

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	ug/l	ND	12/19/08	LBD	50.0		
Acrylonitrile	ug/l	ND	12/19/08	LBD	5.0		
tert-Amylmethyl Ether	ug/l	ND	12/19/08	LBD	0.5		
Benzene	ug/l	ND	12/19/08	LBD	1.0		
Bromobenzene	ug/l	ND	12/19/08	LBD	1.0		
Bromochloromethane	ug/l	ND	12/19/08	LBD	1.0		
Bromodichloromethane	ug/l	ND	12/19/08	LBD	1.0		
Bromoform	ug/l	ND	12/19/08	LBD	4.0		
Bromomethane	ug/l	ND	12/19/08	LBD	2.0		
2-Butanone (MEK)	ug/l	ND	12/19/08	LBD	20.0		
tert-Butyl Alcohol	ug/l	ND	12/19/08	LBD	20.0		
n-Butylbenzene	ug/l	ND	12/19/08	LBD	1.0		
sec-Butylbenzene	ug/l	ND	12/19/08	LBD	1.0		
tert-Butylbenzene	ug/l	ND	12/19/08	LBD	1.0		
tert-Butylethyl Ether	ug/l	ND	12/19/08	LBD	0.5		
Carbon Disulfide	ug/l	ND	12/19/08	LBD	3.0		
Carbon Tetrachloride	ug/l	ND	12/19/08	LBD	1.0		
Chlorobenzene	ug/l	ND	12/19/08	LBD	1.0		
Chlorodibromomethane	ug/l	ND	12/19/08	LBD	0.5		
Chloroethane	ug/l	ND	12/19/08	LBD	2.0		
Chloroform	ug/l	ND	12/19/08	LBD	2.0		
Chloromethane	ug/l	ND	12/19/08	LBD	2.0		
2-Chlorotoluene	ug/l	ND	12/19/08	LBD	1.0		
4-Chlorotoluene	ug/l	ND	12/19/08	LBD	1.0		
1,2-Dibromo-3-Chloropropane	ug/l	ND	12/19/08	LBD	5.0		
1,2-Dibromoethane	ug/l	ND	12/19/08	LBD	0.50		
Dibromomethane	ug/l	ND	12/19/08	LBD	1.0		
1,2-Dichlorobenzene	ug/l	ND	12/19/08	LBD	1.0		
1,3-Dichlorobenzene	ug/l	ND	12/19/08	LBD	1.0		

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SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

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Purchase Order No.:

Project Location: BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-22130

Date Received: 12/17/2008

Job Number: 2700.DC21.01

Field Sample #: MW-03 QC

Sample ID: 08B50006

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,4-Dichlorobenzene	ug/l	ND	12/19/08	LBD	1.0		
trans-1,4-Dichloro-2-Butene	ug/l	ND	12/19/08	LBD	2.0		
Dichlorodifluoromethane	ug/l	ND	12/19/08	LBD	2.0		
1,1-Dichloroethane	ug/l	ND	12/19/08	LBD	1.0		
1,2-Dichloroethane	ug/l	ND	12/19/08	LBD	1.0		
1,1-Dichloroethylene	ug/l	ND	12/19/08	LBD	1.0		
cis-1,2-Dichloroethylene	ug/l	ND	12/19/08	LBD	1.0		
trans-1,2-Dichloroethylene	ug/l	ND	12/19/08	LBD	1.0		
1,2-Dichloropropane	ug/l	ND	12/19/08	LBD	1.0		
1,3-Dichloropropane	ug/l	ND	12/19/08	LBD	0.5		
2,2-Dichloropropane	ug/l	ND	12/19/08	LBD	1.0		
1,1-Dichloropropene	ug/l	ND	12/19/08	LBD	2.0		
cis-1,3-Dichloropropene	ug/l	ND	12/19/08	LBD	1.0		
trans-1,3-Dichloropropene	ug/l	ND	12/19/08	LBD	0.5		
Diethyl Ether	ug/l	ND	12/19/08	LBD	2.0		
Diisopropyl Ether	ug/l	ND	12/19/08	LBD	0.5		
1,4-Dioxane	ug/l	ND	12/19/08	LBD	50.0		
Ethyl Benzene	ug/l	ND	12/19/08	LBD	1.0		
Hexachlorobutadiene	ug/l	ND	12/19/08	LBD	3.0		
2-Hexanone	ug/l	ND	12/19/08	LBD	10.0		
Isopropylbenzene	ug/l	ND	12/19/08	LBD	1.0		
p-Isopropyltoluene	ug/l	ND	12/19/08	LBD	1.0		
MTBE	ug/l	ND	12/19/08	LBD	1.0		
Methylene Chloride	ug/l	ND	12/19/08	LBD	5.0		
MIBK	ug/l	ND	12/19/08	LBD	10.0		
Naphthalene	ug/l	ND	12/19/08	LBD	7.0		
n-Propylbenzene	ug/l	ND	12/19/08	LBD	1.0		
Styrene	ug/l	ND	12/19/08	LBD	1.0		
1,1,1,2-Tetrachloroethane	ug/l	ND	12/19/08	LBD	1.0		

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Purchase Order No.:

Project Location: BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-22130

Date Received: 12/17/2008

Job Number: 2700.DC21.01

Field Sample #: MW-03 QC

Sample ID: 08B50006

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,1,2,2-Tetrachloroethane	ug/l	ND	12/19/08	LBD	0.5		
Tetrachloroethylene	ug/l	ND	12/19/08	LBD	1.0		
Tetrahydrofuran	ug/l	ND	12/19/08	LBD	10.0		
Toluene	ug/l	ND	12/19/08	LBD	1.0		
1,2,3-Trichlorobenzene	ug/l	ND	12/19/08	LBD	6.0		
1,2,4-Trichlorobenzene	ug/l	ND	12/19/08	LBD	4.0		
1,1,1-Trichloroethane	ug/l	2.0	12/19/08	LBD	1.0		
1,1,2-Trichloroethane	ug/l	ND	12/19/08	LBD	1.0		
Trichloroethylene	ug/l	2.4	12/19/08	LBD	1.0		
Trichlorofluoromethane	ug/l	ND	12/19/08	LBD	2.0		
1,2,3-Trichloropropane	ug/l	ND	12/19/08	LBD	2.0		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	ND	12/19/08	LBD	1.0		
1,2,4-Trimethylbenzene	ug/l	ND	12/19/08	LBD	1.0		
1,3,5-Trimethylbenzene	ug/l	ND	12/19/08	LBD	1.0		
Vinyl Chloride	ug/l	ND	12/19/08	LBD	2.0		
m + p Xylene	ug/l	ND	12/19/08	LBD	2.0		
o-Xylene	ug/l	ND	12/19/08	LBD	1.0		

Analytical Method:

SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS. REPORTED RESULTS AND REPORTING LIMITS FOR 1,4-DIOXANE AND TERT-BUTYLALCOHOL ARE ESTIMATED SINCE RESPONSE FACTORS FOR THESE COMPOUNDS ARE BELOW METHOD SPECIFICATIONS.

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Purchase Order No.:

Project Location: BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-22130

Date Received: 12/17/2008

Job Number: 2700.DC21.01

Field Sample #: MW-04

Sample ID: 08B50007

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	ug/l	ND	12/18/08	LBD	50.0		
Acrylonitrile	ug/l	ND	12/18/08	LBD	5.0		
tert-Amylmethyl Ether	ug/l	ND	12/18/08	LBD	0.5		
Benzene	ug/l	ND	12/18/08	LBD	1.0		
Bromobenzene	ug/l	ND	12/18/08	LBD	1.0		
Bromochloromethane	ug/l	ND	12/18/08	LBD	1.0		
Bromodichloromethane	ug/l	ND	12/18/08	LBD	1.0		
Bromoform	ug/l	ND	12/18/08	LBD	4.0		
Bromomethane	ug/l	ND	12/18/08	LBD	2.0		
2-Butanone (MEK)	ug/l	ND	12/18/08	LBD	20.0		
tert-Butyl Alcohol	ug/l	ND	12/18/08	LBD	20.0		
n-Butylbenzene	ug/l	ND	12/18/08	LBD	1.0		
sec-Butylbenzene	ug/l	ND	12/18/08	LBD	1.0		
tert-Butylbenzene	ug/l	ND	12/18/08	LBD	1.0		
tert-Butylethyl Ether	ug/l	ND	12/18/08	LBD	0.5		
Carbon Disulfide	ug/l	ND	12/18/08	LBD	3.0		
Carbon Tetrachloride	ug/l	ND	12/18/08	LBD	1.0		
Chlorobenzene	ug/l	ND	12/18/08	LBD	1.0		
Chlorodibromomethane	ug/l	ND	12/18/08	LBD	0.5		
Chloroethane	ug/l	ND	12/18/08	LBD	2.0		
Chloroform	ug/l	ND	12/18/08	LBD	2.0		
Chloromethane	ug/l	ND	12/18/08	LBD	2.0		
2-Chlorotoluene	ug/l	ND	12/18/08	LBD	1.0		
4-Chlorotoluene	ug/l	ND	12/18/08	LBD	1.0		
1,2-Dibromo-3-Chloropropane	ug/l	ND	12/18/08	LBD	5.0		
1,2-Dibromoethane	ug/l	ND	12/18/08	LBD	0.50		
Dibromomethane	ug/l	ND	12/18/08	LBD	1.0		
1,2-Dichlorobenzene	ug/l	ND	12/18/08	LBD	1.0		
1,3-Dichlorobenzene	ug/l	ND	12/18/08	LBD	1.0		

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Purchase Order No.:

Project Location: BRIGHT OUTDOORS
Date Received: 12/17/2008

LIMS-BAT #: LIMIT-22130
Job Number: 2700.DC21.01

Field Sample #: MW-04

Sample ID: 08B50007

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,4-Dichlorobenzene	ug/l	ND	12/18/08	LBD	1.0		
trans-1,4-Dichloro-2-Butene	ug/l	ND	12/18/08	LBD	2.0		
Dichlorodifluoromethane	ug/l	ND	12/18/08	LBD	2.0		
1,1-Dichloroethane	ug/l	ND	12/18/08	LBD	1.0		
1,2-Dichloroethane	ug/l	ND	12/18/08	LBD	1.0		
1,1-Dichloroethylene	ug/l	ND	12/18/08	LBD	1.0		
cis-1,2-Dichloroethylene	ug/l	ND	12/18/08	LBD	1.0		
trans-1,2-Dichloroethylene	ug/l	ND	12/18/08	LBD	1.0		
1,2-Dichloropropane	ug/l	ND	12/18/08	LBD	1.0		
1,3-Dichloropropane	ug/l	ND	12/18/08	LBD	0.5		
2,2-Dichloropropane	ug/l	ND	12/18/08	LBD	1.0		
1,1-Dichloropropene	ug/l	ND	12/18/08	LBD	2.0		
cis-1,3-Dichloropropene	ug/l	ND	12/18/08	LBD	1.0		
trans-1,3-Dichloropropene	ug/l	ND	12/18/08	LBD	0.5		
Diethyl Ether	ug/l	ND	12/18/08	LBD	2.0		
Diisopropyl Ether	ug/l	ND	12/18/08	LBD	0.5		
1,4-Dioxane	ug/l	ND	12/18/08	LBD	50.0		
Ethyl Benzene	ug/l	ND	12/18/08	LBD	1.0		
Hexachlorobutadiene	ug/l	ND	12/18/08	LBD	3.0		
2-Hexanone	ug/l	ND	12/18/08	LBD	10.0		
Isopropylbenzene	ug/l	ND	12/18/08	LBD	1.0		
p-Isopropyltoluene	ug/l	ND	12/18/08	LBD	1.0		
MTBE	ug/l	ND	12/18/08	LBD	1.0		
Methylene Chloride	ug/l	ND	12/18/08	LBD	5.0		
MIBK	ug/l	ND	12/18/08	LBD	10.0		
Naphthalene	ug/l	ND	12/18/08	LBD	7.0		
n-Propylbenzene	ug/l	ND	12/18/08	LBD	1.0		
Styrene	ug/l	ND	12/18/08	LBD	1.0		
1,1,1,2-Tetrachloroethane	ug/l	ND	12/18/08	LBD	1.0		

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Purchase Order No.:

Project Location: BRIGHT OUTDOORS
 Date Received: 12/17/2008

LIMS-BAT #: LIMIT-22130
 Job Number: 2700.DC21.01

Field Sample #: MW-04

Sample ID: 08B50007

‡Sampled: 12/16/2008
 Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,1,2,2-Tetrachloroethane	ug/l	ND	12/18/08	LBD	0.5		
Tetrachloroethylene	ug/l	ND	12/18/08	LBD	1.0		
Tetrahydrofuran	ug/l	ND	12/18/08	LBD	10.0		
Toluene	ug/l	ND	12/18/08	LBD	1.0		
1,2,3-Trichlorobenzene	ug/l	ND	12/18/08	LBD	6.0		
1,2,4-Trichlorobenzene	ug/l	ND	12/18/08	LBD	4.0		
1,1,1-Trichloroethane	ug/l	1.7	12/18/08	LBD	1.0		
1,1,2-Trichloroethane	ug/l	ND	12/18/08	LBD	1.0		
Trichloroethylene	ug/l	3.4	12/18/08	LBD	1.0		
Trichlorofluoromethane	ug/l	ND	12/18/08	LBD	2.0		
1,2,3-Trichloropropane	ug/l	ND	12/18/08	LBD	2.0		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	ND	12/18/08	LBD	1.0		
1,2,4-Trimethylbenzene	ug/l	ND	12/18/08	LBD	1.0		
1,3,5-Trimethylbenzene	ug/l	ND	12/18/08	LBD	1.0		
Vinyl Chloride	ug/l	ND	12/18/08	LBD	2.0		
m + p Xylene	ug/l	ND	12/18/08	LBD	2.0		
o-Xylene	ug/l	ND	12/18/08	LBD	1.0		

Analytical Method:

SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS. REPORTED RESULTS AND REPORTING LIMITS FOR 1,4-DIOXANE AND TERT-BUTYLALCOHOL ARE ESTIMATED SINCE RESPONSE FACTORS FOR THESE COMPOUNDS ARE BELOW METHOD SPECIFICATIONS.

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Project Location: BRIGHT OUTDOORS
Date Received: 12/17/2008

Field Sample #: MW-05

Sample ID: 08B50008

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

Purchase Order No.:

LIMS-BAT #: LIMIT-22130
Job Number: 2700.DC21.01

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	ug/l	ND	12/18/08	LBD	50.0		
Acrylonitrile	ug/l	ND	12/18/08	LBD	5.0		
tert-Amylmethyl Ether	ug/l	ND	12/18/08	LBD	0.5		
Benzene	ug/l	ND	12/18/08	LBD	1.0		
Bromobenzene	ug/l	ND	12/18/08	LBD	1.0		
Bromochloromethane	ug/l	ND	12/18/08	LBD	1.0		
Bromodichloromethane	ug/l	ND	12/18/08	LBD	1.0		
Bromoform	ug/l	ND	12/18/08	LBD	4.0		
Bromomethane	ug/l	ND	12/18/08	LBD	2.0		
2-Butanone (MEK)	ug/l	ND	12/18/08	LBD	20.0		
tert-Butyl Alcohol	ug/l	ND	12/18/08	LBD	20.0		
n-Butylbenzene	ug/l	ND	12/18/08	LBD	1.0		
sec-Butylbenzene	ug/l	ND	12/18/08	LBD	1.0		
tert-Butylbenzene	ug/l	ND	12/18/08	LBD	1.0		
tert-Butylethyl Ether	ug/l	ND	12/18/08	LBD	0.5		
Carbon Disulfide	ug/l	ND	12/18/08	LBD	3.0		
Carbon Tetrachloride	ug/l	ND	12/18/08	LBD	1.0		
Chlorobenzene	ug/l	ND	12/18/08	LBD	1.0		
Chlorodibromomethane	ug/l	ND	12/18/08	LBD	0.5		
Chloroethane	ug/l	ND	12/18/08	LBD	2.0		
Chloroform	ug/l	ND	12/18/08	LBD	2.0		
Chloromethane	ug/l	ND	12/18/08	LBD	2.0		
2-Chlorotoluene	ug/l	ND	12/18/08	LBD	1.0		
4-Chlorotoluene	ug/l	ND	12/18/08	LBD	1.0		
1,2-Dibromo-3-Chloropropane	ug/l	ND	12/18/08	LBD	5.0		
1,2-Dibromoethane	ug/l	ND	12/18/08	LBD	0.50		
Dibromomethane	ug/l	ND	12/18/08	LBD	1.0		
1,2-Dichlorobenzene	ug/l	ND	12/18/08	LBD	1.0		
1,3-Dichlorobenzene	ug/l	ND	12/18/08	LBD	1.0		

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Project Location: BRIGHT OUTDOORS
Date Received: 12/17/2008

Field Sample #: MW-05

Sample ID: 08B50008

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

Purchase Order No.:

LIMS-BAT #: LIMIT-22130
Job Number: 2700.DC21.01

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,4-Dichlorobenzene	ug/l	ND	12/18/08	LBD	1.0		
trans-1,4-Dichloro-2-Butene	ug/l	ND	12/18/08	LBD	2.0		
Dichlorodifluoromethane	ug/l	ND	12/18/08	LBD	2.0		
1,1-Dichloroethane	ug/l	ND	12/18/08	LBD	1.0		
1,2-Dichloroethane	ug/l	ND	12/18/08	LBD	1.0		
1,1-Dichloroethylene	ug/l	7.4	12/18/08	LBD	1.0		
cis-1,2-Dichloroethylene	ug/l	ND	12/18/08	LBD	1.0		
trans-1,2-Dichloroethylene	ug/l	ND	12/18/08	LBD	1.0		
1,2-Dichloropropane	ug/l	ND	12/18/08	LBD	1.0		
1,3-Dichloropropane	ug/l	ND	12/18/08	LBD	0.5		
2,2-Dichloropropane	ug/l	ND	12/18/08	LBD	1.0		
1,1-Dichloropropene	ug/l	ND	12/18/08	LBD	2.0		
cis-1,3-Dichloropropene	ug/l	ND	12/18/08	LBD	1.0		
trans-1,3-Dichloropropene	ug/l	ND	12/18/08	LBD	0.5		
Diethyl Ether	ug/l	ND	12/18/08	LBD	2.0		
Diisopropyl Ether	ug/l	ND	12/18/08	LBD	0.5		
1,4-Dioxane	ug/l	ND	12/18/08	LBD	50.0		
Ethyl Benzene	ug/l	ND	12/18/08	LBD	1.0		
Hexachlorobutadiene	ug/l	ND	12/18/08	LBD	3.0		
2-Hexanone	ug/l	ND	12/18/08	LBD	10.0		
Isopropylbenzene	ug/l	ND	12/18/08	LBD	1.0		
p-Isopropyltoluene	ug/l	ND	12/18/08	LBD	1.0		
MTBE	ug/l	ND	12/18/08	LBD	1.0		
Methylene Chloride	ug/l	ND	12/18/08	LBD	5.0		
MIBK	ug/l	ND	12/18/08	LBD	10.0		
Naphthalene	ug/l	ND	12/18/08	LBD	7.0		
n-Propylbenzene	ug/l	ND	12/18/08	LBD	1.0		
Styrene	ug/l	ND	12/18/08	LBD	1.0		
1,1,1,2-Tetrachloroethane	ug/l	ND	12/18/08	LBD	1.0		

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Purchase Order No.:

Project Location: BRIGHT OUTDOORS
Date Received: 12/17/2008

LIMS-BAT #: LIMIT-22130
Job Number: 2700.DC21.01

Field Sample #: MW-05

Sample ID: 08B50008

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,1,2,2-Tetrachloroethane	ug/l	ND	12/18/08	LBD	0.5		
Tetrachloroethylene	ug/l	ND	12/18/08	LBD	1.0		
Tetrahydrofuran	ug/l	ND	12/18/08	LBD	10.0		
Toluene	ug/l	ND	12/18/08	LBD	1.0		
1,2,3-Trichlorobenzene	ug/l	ND	12/18/08	LBD	6.0		
1,2,4-Trichlorobenzene	ug/l	ND	12/18/08	LBD	4.0		
1,1,1-Trichloroethane	ug/l	30.9	12/18/08	LBD	1.0		
1,1,2-Trichloroethane	ug/l	ND	12/18/08	LBD	1.0		
Trichloroethylene	ug/l	13.9	12/18/08	LBD	1.0		
Trichlorofluoromethane	ug/l	ND	12/18/08	LBD	2.0		
1,2,3-Trichloropropane	ug/l	ND	12/18/08	LBD	2.0		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	ND	12/18/08	LBD	1.0		
1,2,4-Trimethylbenzene	ug/l	ND	12/18/08	LBD	1.0		
1,3,5-Trimethylbenzene	ug/l	ND	12/18/08	LBD	1.0		
Vinyl Chloride	ug/l	ND	12/18/08	LBD	2.0		
m + p Xylene	ug/l	ND	12/18/08	LBD	2.0		
o-Xylene	ug/l	ND	12/18/08	LBD	1.0		

Analytical Method:

SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS. REPORTED RESULTS AND REPORTING LIMITS FOR 1,4-DIOXANE AND TERT-BUTYLALCOHOL ARE ESTIMATED SINCE RESPONSE FACTORS FOR THESE COMPOUNDS ARE BELOW METHOD SPECIFICATIONS.

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Project Location: BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-22130

Date Received: 12/17/2008

Job Number: 2700.DC21.01

Field Sample #: MW-06

Sample ID: 08B50009

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	ug/l	ND	12/19/08	LBD	50.0		
Acrylonitrile	ug/l	ND	12/19/08	LBD	5.0		
tert-Amylmethyl Ether	ug/l	ND	12/19/08	LBD	0.5		
Benzene	ug/l	ND	12/19/08	LBD	1.0		
Bromobenzene	ug/l	ND	12/19/08	LBD	1.0		
Bromochloromethane	ug/l	ND	12/19/08	LBD	1.0		
Bromodichloromethane	ug/l	ND	12/19/08	LBD	1.0		
Bromoform	ug/l	ND	12/19/08	LBD	4.0		
Bromomethane	ug/l	ND	12/19/08	LBD	2.0		
2-Butanone (MEK)	ug/l	ND	12/19/08	LBD	20.0		
tert-Butyl Alcohol	ug/l	ND	12/19/08	LBD	20.0		
n-Butylbenzene	ug/l	ND	12/19/08	LBD	1.0		
sec-Butylbenzene	ug/l	ND	12/19/08	LBD	1.0		
tert-Butylbenzene	ug/l	ND	12/19/08	LBD	1.0		
tert-Butylethyl Ether	ug/l	ND	12/19/08	LBD	0.5		
Carbon Disulfide	ug/l	ND	12/19/08	LBD	3.0		
Carbon Tetrachloride	ug/l	ND	12/19/08	LBD	1.0		
Chlorobenzene	ug/l	ND	12/19/08	LBD	1.0		
Chlorodibromomethane	ug/l	ND	12/19/08	LBD	0.5		
Chloroethane	ug/l	ND	12/19/08	LBD	2.0		
Chloroform	ug/l	ND	12/19/08	LBD	2.0		
Chloromethane	ug/l	ND	12/19/08	LBD	2.0		
2-Chlorotoluene	ug/l	ND	12/19/08	LBD	1.0		
4-Chlorotoluene	ug/l	ND	12/19/08	LBD	1.0		
1,2-Dibromo-3-Chloropropane	ug/l	ND	12/19/08	LBD	5.0		
1,2-Dibromoethane	ug/l	ND	12/19/08	LBD	0.50		
Dibromomethane	ug/l	ND	12/19/08	LBD	1.0		
1,2-Dichlorobenzene	ug/l	ND	12/19/08	LBD	1.0		
1,3-Dichlorobenzene	ug/l	ND	12/19/08	LBD	1.0		

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Purchase Order No.:

Project Location: BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-22130

Date Received: 12/17/2008

Job Number: 2700.DC21.01

Field Sample #: MW-06

Sample ID: 08B50009

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,4-Dichlorobenzene	ug/l	ND	12/19/08	LBD	1.0		
trans-1,4-Dichloro-2-Butene	ug/l	ND	12/19/08	LBD	2.0		
Dichlorodifluoromethane	ug/l	ND	12/19/08	LBD	2.0		
1,1-Dichloroethane	ug/l	ND	12/19/08	LBD	1.0		
1,2-Dichloroethane	ug/l	ND	12/19/08	LBD	1.0		
1,1-Dichloroethylene	ug/l	4.1	12/19/08	LBD	1.0		
cis-1,2-Dichloroethylene	ug/l	ND	12/19/08	LBD	1.0		
trans-1,2-Dichloroethylene	ug/l	ND	12/19/08	LBD	1.0		
1,2-Dichloropropane	ug/l	ND	12/19/08	LBD	1.0		
1,3-Dichloropropane	ug/l	ND	12/19/08	LBD	0.5		
2,2-Dichloropropane	ug/l	ND	12/19/08	LBD	1.0		
1,1-Dichloropropene	ug/l	ND	12/19/08	LBD	2.0		
cis-1,3-Dichloropropene	ug/l	ND	12/19/08	LBD	1.0		
trans-1,3-Dichloropropene	ug/l	ND	12/19/08	LBD	0.5		
Diethyl Ether	ug/l	ND	12/19/08	LBD	2.0		
Diisopropyl Ether	ug/l	ND	12/19/08	LBD	0.5		
1,4-Dioxane	ug/l	ND	12/19/08	LBD	50.0		
Ethyl Benzene	ug/l	ND	12/19/08	LBD	1.0		
Hexachlorobutadiene	ug/l	ND	12/19/08	LBD	3.0		
2-Hexanone	ug/l	ND	12/19/08	LBD	10.0		
Isopropylbenzene	ug/l	ND	12/19/08	LBD	1.0		
p-Isopropyltoluene	ug/l	ND	12/19/08	LBD	1.0		
MTBE	ug/l	ND	12/19/08	LBD	1.0		
Methylene Chloride	ug/l	ND	12/19/08	LBD	5.0		
MIBK	ug/l	ND	12/19/08	LBD	10.0		
Naphthalene	ug/l	ND	12/19/08	LBD	7.0		
n-Propylbenzene	ug/l	ND	12/19/08	LBD	1.0		
Styrene	ug/l	ND	12/19/08	LBD	1.0		
1,1,1,2-Tetrachloroethane	ug/l	ND	12/19/08	LBD	1.0		

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Purchase Order No.:

Project Location: BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-22130

Date Received: 12/17/2008

Job Number: 2700.DC21.01

Field Sample #: MW-06

Sample ID: 08B50009

‡Sampled: 12/16/2008
 Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,1,2,2-Tetrachloroethane	ug/l	ND	12/19/08	LBD	0.5		
Tetrachloroethylene	ug/l	ND	12/19/08	LBD	1.0		
Tetrahydrofuran	ug/l	ND	12/19/08	LBD	10.0		
Toluene	ug/l	ND	12/19/08	LBD	1.0		
1,2,3-Trichlorobenzene	ug/l	ND	12/19/08	LBD	6.0		
1,2,4-Trichlorobenzene	ug/l	ND	12/19/08	LBD	4.0		
1,1,1-Trichloroethane	ug/l	15.4	12/19/08	LBD	1.0		
1,1,2-Trichloroethane	ug/l	ND	12/19/08	LBD	1.0		
Trichloroethylene	ug/l	11.4	12/19/08	LBD	1.0		
Trichlorofluoromethane	ug/l	ND	12/19/08	LBD	2.0		
1,2,3-Trichloropropane	ug/l	ND	12/19/08	LBD	2.0		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	ND	12/19/08	LBD	1.0		
1,2,4-Trimethylbenzene	ug/l	ND	12/19/08	LBD	1.0		
1,3,5-Trimethylbenzene	ug/l	ND	12/19/08	LBD	1.0		
Vinyl Chloride	ug/l	ND	12/19/08	LBD	2.0		
m + p Xylene	ug/l	ND	12/19/08	LBD	2.0		
o-Xylene	ug/l	ND	12/19/08	LBD	1.0		

Analytical Method:

SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS. REPORTED RESULTS AND REPORTING LIMITS FOR 1,4-DIOXANE AND TERT-BUTYLALCOHOL ARE ESTIMATED SINCE RESPONSE FACTORS FOR THESE COMPOUNDS ARE BELOW METHOD SPECIFICATIONS.

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Project Location: BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-22130

Date Received: 12/17/2008

Job Number: 2700.DC21.01

Field Sample #: MW-07

Sample ID: 08B50010

‡Sampled: 12/16/2008
 Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	ug/l	ND	12/19/08	LBD	50.0		
Acrylonitrile	ug/l	ND	12/19/08	LBD	5.0		
tert-Amylmethyl Ether	ug/l	ND	12/19/08	LBD	0.5		
Benzene	ug/l	ND	12/19/08	LBD	1.0		
Bromobenzene	ug/l	ND	12/19/08	LBD	1.0		
Bromochloromethane	ug/l	ND	12/19/08	LBD	1.0		
Bromodichloromethane	ug/l	ND	12/19/08	LBD	1.0		
Bromoform	ug/l	ND	12/19/08	LBD	4.0		
Bromomethane	ug/l	ND	12/19/08	LBD	2.0		
2-Butanone (MEK)	ug/l	ND	12/19/08	LBD	20.0		
tert-Butyl Alcohol	ug/l	ND	12/19/08	LBD	20.0		
n-Butylbenzene	ug/l	ND	12/19/08	LBD	1.0		
sec-Butylbenzene	ug/l	ND	12/19/08	LBD	1.0		
tert-Butylbenzene	ug/l	ND	12/19/08	LBD	1.0		
tert-Butylethyl Ether	ug/l	ND	12/19/08	LBD	0.5		
Carbon Disulfide	ug/l	ND	12/19/08	LBD	3.0		
Carbon Tetrachloride	ug/l	ND	12/19/08	LBD	1.0		
Chlorobenzene	ug/l	ND	12/19/08	LBD	1.0		
Chlorodibromomethane	ug/l	ND	12/19/08	LBD	0.5		
Chloroethane	ug/l	ND	12/19/08	LBD	2.0		
Chloroform	ug/l	ND	12/19/08	LBD	2.0		
Chloromethane	ug/l	ND	12/19/08	LBD	2.0		
2-Chlorotoluene	ug/l	ND	12/19/08	LBD	1.0		
4-Chlorotoluene	ug/l	ND	12/19/08	LBD	1.0		
1,2-Dibromo-3-Chloropropane	ug/l	ND	12/19/08	LBD	5.0		
1,2-Dibromoethane	ug/l	ND	12/19/08	LBD	0.50		
Dibromomethane	ug/l	ND	12/19/08	LBD	1.0		
1,2-Dichlorobenzene	ug/l	ND	12/19/08	LBD	1.0		
1,3-Dichlorobenzene	ug/l	ND	12/19/08	LBD	1.0		

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Project Location: BRIGHT OUTDOORS
Date Received: 12/17/2008

Field Sample #: MW-07

Sample ID: 08B50010

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

Purchase Order No.:

LIMS-BAT #: LIMIT-22130
Job Number: 2700.DC21.01

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,4-Dichlorobenzene	ug/l	ND	12/19/08	LBD	1.0		
trans-1,4-Dichloro-2-Butene	ug/l	ND	12/19/08	LBD	2.0		
Dichlorodifluoromethane	ug/l	ND	12/19/08	LBD	2.0		
1,1-Dichloroethane	ug/l	ND	12/19/08	LBD	1.0		
1,2-Dichloroethane	ug/l	ND	12/19/08	LBD	1.0		
1,1-Dichloroethylene	ug/l	ND	12/19/08	LBD	1.0		
cis-1,2-Dichloroethylene	ug/l	ND	12/19/08	LBD	1.0		
trans-1,2-Dichloroethylene	ug/l	ND	12/19/08	LBD	1.0		
1,2-Dichloropropane	ug/l	ND	12/19/08	LBD	1.0		
1,3-Dichloropropane	ug/l	ND	12/19/08	LBD	0.5		
2,2-Dichloropropane	ug/l	ND	12/19/08	LBD	1.0		
1,1-Dichloropropene	ug/l	ND	12/19/08	LBD	2.0		
cis-1,3-Dichloropropene	ug/l	ND	12/19/08	LBD	1.0		
trans-1,3-Dichloropropene	ug/l	ND	12/19/08	LBD	0.5		
Diethyl Ether	ug/l	ND	12/19/08	LBD	2.0		
Diisopropyl Ether	ug/l	ND	12/19/08	LBD	0.5		
1,4-Dioxane	ug/l	ND	12/19/08	LBD	50.0		
Ethyl Benzene	ug/l	ND	12/19/08	LBD	1.0		
Hexachlorobutadiene	ug/l	ND	12/19/08	LBD	3.0		
2-Hexanone	ug/l	ND	12/19/08	LBD	10.0		
Isopropylbenzene	ug/l	ND	12/19/08	LBD	1.0		
p-Isopropyltoluene	ug/l	ND	12/19/08	LBD	1.0		
MTBE	ug/l	ND	12/19/08	LBD	1.0		
Methylene Chloride	ug/l	ND	12/19/08	LBD	5.0		
MIBK	ug/l	ND	12/19/08	LBD	10.0		
Naphthalene	ug/l	ND	12/19/08	LBD	7.0		
n-Propylbenzene	ug/l	ND	12/19/08	LBD	1.0		
Styrene	ug/l	ND	12/19/08	LBD	1.0		
1,1,1,2-Tetrachloroethane	ug/l	ND	12/19/08	LBD	1.0		

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Purchase Order No.:

Project Location: BRIGHT OUTDOORS
Date Received: 12/17/2008

LIMS-BAT #: LIMIT-22130
Job Number: 2700.DC21.01

Field Sample #: MW-07

Sample ID: 08B50010

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,1,2,2-Tetrachloroethane	ug/l	ND	12/19/08	LBD	0.5		
Tetrachloroethylene	ug/l	ND	12/19/08	LBD	1.0		
Tetrahydrofuran	ug/l	ND	12/19/08	LBD	10.0		
Toluene	ug/l	ND	12/19/08	LBD	1.0		
1,2,3-Trichlorobenzene	ug/l	ND	12/19/08	LBD	6.0		
1,2,4-Trichlorobenzene	ug/l	ND	12/19/08	LBD	4.0		
1,1,1-Trichloroethane	ug/l	3.9	12/19/08	LBD	1.0		
1,1,2-Trichloroethane	ug/l	ND	12/19/08	LBD	1.0		
Trichloroethylene	ug/l	1.3	12/19/08	LBD	1.0		
Trichlorofluoromethane	ug/l	ND	12/19/08	LBD	2.0		
1,2,3-Trichloropropane	ug/l	ND	12/19/08	LBD	2.0		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	ND	12/19/08	LBD	1.0		
1,2,4-Trimethylbenzene	ug/l	ND	12/19/08	LBD	1.0		
1,3,5-Trimethylbenzene	ug/l	ND	12/19/08	LBD	1.0		
Vinyl Chloride	ug/l	ND	12/19/08	LBD	2.0		
m + p Xylene	ug/l	ND	12/19/08	LBD	2.0		
o-Xylene	ug/l	ND	12/19/08	LBD	1.0		

Analytical Method:

SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS. REPORTED RESULTS AND REPORTING LIMITS FOR 1,4-DIOXANE AND TERT-BUTYLALCOHOL ARE ESTIMATED SINCE RESPONSE FACTORS FOR THESE COMPOUNDS ARE BELOW METHOD SPECIFICATIONS.

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Project Location: BRIGHT OUTDOORS

Date Received: 12/17/2008

Field Sample #: MW-08

Purchase Order No.:

LIMS-BAT #: LIMIT-22130

Job Number: 2700.DC21.01

Sample ID: 08B50011

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	ug/l	ND	12/19/08	LBD	50.0		
Acrylonitrile	ug/l	ND	12/19/08	LBD	5.0		
tert-Amylmethyl Ether	ug/l	ND	12/19/08	LBD	0.5		
Benzene	ug/l	ND	12/19/08	LBD	1.0		
Bromobenzene	ug/l	ND	12/19/08	LBD	1.0		
Bromochloromethane	ug/l	ND	12/19/08	LBD	1.0		
Bromodichloromethane	ug/l	ND	12/19/08	LBD	1.0		
Bromoform	ug/l	ND	12/19/08	LBD	4.0		
Bromomethane	ug/l	ND	12/19/08	LBD	2.0		
2-Butanone (MEK)	ug/l	ND	12/19/08	LBD	20.0		
tert-Butyl Alcohol	ug/l	ND	12/19/08	LBD	20.0		
n-Butylbenzene	ug/l	ND	12/19/08	LBD	1.0		
sec-Butylbenzene	ug/l	ND	12/19/08	LBD	1.0		
tert-Butylbenzene	ug/l	ND	12/19/08	LBD	1.0		
tert-Butylethyl Ether	ug/l	ND	12/19/08	LBD	0.5		
Carbon Disulfide	ug/l	ND	12/19/08	LBD	3.0		
Carbon Tetrachloride	ug/l	ND	12/19/08	LBD	1.0		
Chlorobenzene	ug/l	ND	12/19/08	LBD	1.0		
Chlorodibromomethane	ug/l	ND	12/19/08	LBD	0.5		
Chloroethane	ug/l	ND	12/19/08	LBD	2.0		
Chloroform	ug/l	ND	12/19/08	LBD	2.0		
Chloromethane	ug/l	ND	12/19/08	LBD	2.0		
2-Chlorotoluene	ug/l	ND	12/19/08	LBD	1.0		
4-Chlorotoluene	ug/l	ND	12/19/08	LBD	1.0		
1,2-Dibromo-3-Chloropropane	ug/l	ND	12/19/08	LBD	5.0		
1,2-Dibromoethane	ug/l	ND	12/19/08	LBD	0.50		
Dibromomethane	ug/l	ND	12/19/08	LBD	1.0		
1,2-Dichlorobenzene	ug/l	ND	12/19/08	LBD	1.0		
1,3-Dichlorobenzene	ug/l	ND	12/19/08	LBD	1.0		

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Project Location: BRIGHT OUTDOORS
Date Received: 12/17/2008
Field Sample #: MW-08

Purchase Order No.:

LIMS-BAT #: LIMIT-22130
Job Number: 2700.DC21.01

Sample ID: 08B50011

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,4-Dichlorobenzene	ug/l	ND	12/19/08	LBD	1.0		
trans-1,4-Dichloro-2-Butene	ug/l	ND	12/19/08	LBD	2.0		
Dichlorodifluoromethane	ug/l	ND	12/19/08	LBD	2.0		
1,1-Dichloroethane	ug/l	ND	12/19/08	LBD	1.0		
1,2-Dichloroethane	ug/l	ND	12/19/08	LBD	1.0		
1,1-Dichloroethylene	ug/l	ND	12/19/08	LBD	1.0		
cis-1,2-Dichloroethylene	ug/l	ND	12/19/08	LBD	1.0		
trans-1,2-Dichloroethylene	ug/l	ND	12/19/08	LBD	1.0		
1,2-Dichloropropane	ug/l	ND	12/19/08	LBD	1.0		
1,3-Dichloropropane	ug/l	ND	12/19/08	LBD	0.5		
2,2-Dichloropropane	ug/l	ND	12/19/08	LBD	1.0		
1,1-Dichloropropene	ug/l	ND	12/19/08	LBD	2.0		
cis-1,3-Dichloropropene	ug/l	ND	12/19/08	LBD	1.0		
trans-1,3-Dichloropropene	ug/l	ND	12/19/08	LBD	0.5		
Diethyl Ether	ug/l	ND	12/19/08	LBD	2.0		
Diisopropyl Ether	ug/l	ND	12/19/08	LBD	0.5		
1,4-Dioxane	ug/l	ND	12/19/08	LBD	50.0		
Ethyl Benzene	ug/l	ND	12/19/08	LBD	1.0		
Hexachlorobutadiene	ug/l	ND	12/19/08	LBD	3.0		
2-Hexanone	ug/l	ND	12/19/08	LBD	10.0		
Isopropylbenzene	ug/l	ND	12/19/08	LBD	1.0		
p-Isopropyltoluene	ug/l	ND	12/19/08	LBD	1.0		
MTBE	ug/l	ND	12/19/08	LBD	1.0		
Methylene Chloride	ug/l	ND	12/19/08	LBD	5.0		
MIBK	ug/l	ND	12/19/08	LBD	10.0		
Naphthalene	ug/l	ND	12/19/08	LBD	7.0		
n-Propylbenzene	ug/l	ND	12/19/08	LBD	1.0		
Styrene	ug/l	ND	12/19/08	LBD	1.0		
1,1,1,2-Tetrachloroethane	ug/l	ND	12/19/08	LBD	1.0		

RL = Reporting Limit

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NM = Not Measured

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

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Purchase Order No.:

Project Location: BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-22130

Date Received: 12/17/2008

Job Number: 2700.DC21.01

Field Sample #: MW-08

Sample ID: 08B50011

‡Sampled: 12/16/2008
 Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,1,2,2-Tetrachloroethane	ug/l	ND	12/19/08	LBD	0.5		
Tetrachloroethylene	ug/l	ND	12/19/08	LBD	1.0		
Tetrahydrofuran	ug/l	ND	12/19/08	LBD	10.0		
Toluene	ug/l	ND	12/19/08	LBD	1.0		
1,2,3-Trichlorobenzene	ug/l	ND	12/19/08	LBD	6.0		
1,2,4-Trichlorobenzene	ug/l	ND	12/19/08	LBD	4.0		
1,1,1-Trichloroethane	ug/l	3.9	12/19/08	LBD	1.0		
1,1,2-Trichloroethane	ug/l	ND	12/19/08	LBD	1.0		
Trichloroethylene	ug/l	13.7	12/19/08	LBD	1.0		
Trichlorofluoromethane	ug/l	ND	12/19/08	LBD	2.0		
1,2,3-Trichloropropane	ug/l	ND	12/19/08	LBD	2.0		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	ND	12/19/08	LBD	1.0		
1,2,4-Trimethylbenzene	ug/l	ND	12/19/08	LBD	1.0		
1,3,5-Trimethylbenzene	ug/l	ND	12/19/08	LBD	1.0		
Vinyl Chloride	ug/l	ND	12/19/08	LBD	2.0		
m + p Xylene	ug/l	ND	12/19/08	LBD	2.0		
o-Xylene	ug/l	ND	12/19/08	LBD	1.0		

Analytical Method:

SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS. REPORTED RESULTS AND REPORTING LIMITS FOR 1,4-DIOXANE AND TERT-BUTYLALCOHOL ARE ESTIMATED SINCE RESPONSE FACTORS FOR THESE COMPOUNDS ARE BELOW METHOD SPECIFICATIONS.

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Purchase Order No.:

Project Location: BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-22130

Date Received: 12/17/2008

Job Number: 2700.DC21.01

Field Sample #: MW-08/Q

Sample ID: 08B50012

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	ug/l	ND	12/19/08	LBD	50.0		
Acrylonitrile	ug/l	ND	12/19/08	LBD	5.0		
tert-Amylmethyl Ether	ug/l	ND	12/19/08	LBD	0.5		
Benzene	ug/l	ND	12/19/08	LBD	1.0		
Bromobenzene	ug/l	ND	12/19/08	LBD	1.0		
Bromochloromethane	ug/l	ND	12/19/08	LBD	1.0		
Bromodichloromethane	ug/l	ND	12/19/08	LBD	1.0		
Bromoform	ug/l	ND	12/19/08	LBD	4.0		
Bromomethane	ug/l	ND	12/19/08	LBD	2.0		
2-Butanone (MEK)	ug/l	ND	12/19/08	LBD	20.0		
tert-Butyl Alcohol	ug/l	ND	12/19/08	LBD	20.0		
n-Butylbenzene	ug/l	ND	12/19/08	LBD	1.0		
sec-Butylbenzene	ug/l	ND	12/19/08	LBD	1.0		
tert-Butylbenzene	ug/l	ND	12/19/08	LBD	1.0		
tert-Butylethyl Ether	ug/l	ND	12/19/08	LBD	0.5		
Carbon Disulfide	ug/l	ND	12/19/08	LBD	3.0		
Carbon Tetrachloride	ug/l	ND	12/19/08	LBD	1.0		
Chlorobenzene	ug/l	ND	12/19/08	LBD	1.0		
Chlorodibromomethane	ug/l	ND	12/19/08	LBD	0.5		
Chloroethane	ug/l	ND	12/19/08	LBD	2.0		
Chloroform	ug/l	ND	12/19/08	LBD	2.0		
Chloromethane	ug/l	ND	12/19/08	LBD	2.0		
2-Chlorotoluene	ug/l	ND	12/19/08	LBD	1.0		
4-Chlorotoluene	ug/l	ND	12/19/08	LBD	1.0		
1,2-Dibromo-3-Chloropropane	ug/l	ND	12/19/08	LBD	5.0		
1,2-Dibromoethane	ug/l	ND	12/19/08	LBD	0.50		
Dibromomethane	ug/l	ND	12/19/08	LBD	1.0		
1,2-Dichlorobenzene	ug/l	ND	12/19/08	LBD	1.0		
1,3-Dichlorobenzene	ug/l	ND	12/19/08	LBD	1.0		

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Project Location: BRIGHT OUTDOORS
Date Received: 12/17/2008
Field Sample #: MW-08/Q

LIMS-BAT #: LIMIT-22130
Job Number: 2700.DC21.01

Sample ID: 08B50012

Purchase Order No.:
‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,4-Dichlorobenzene	ug/l	ND	12/19/08	LBD	1.0		
trans-1,4-Dichloro-2-Butene	ug/l	ND	12/19/08	LBD	2.0		
Dichlorodifluoromethane	ug/l	ND	12/19/08	LBD	2.0		
1,1-Dichloroethane	ug/l	ND	12/19/08	LBD	1.0		
1,2-Dichloroethane	ug/l	ND	12/19/08	LBD	1.0		
1,1-Dichloroethylene	ug/l	ND	12/19/08	LBD	1.0		
cis-1,2-Dichloroethylene	ug/l	ND	12/19/08	LBD	1.0		
trans-1,2-Dichloroethylene	ug/l	ND	12/19/08	LBD	1.0		
1,2-Dichloropropane	ug/l	ND	12/19/08	LBD	1.0		
1,3-Dichloropropane	ug/l	ND	12/19/08	LBD	0.5		
2,2-Dichloropropane	ug/l	ND	12/19/08	LBD	1.0		
1,1-Dichloropropene	ug/l	ND	12/19/08	LBD	2.0		
cis-1,3-Dichloropropene	ug/l	ND	12/19/08	LBD	1.0		
trans-1,3-Dichloropropene	ug/l	ND	12/19/08	LBD	0.5		
Diethyl Ether	ug/l	ND	12/19/08	LBD	2.0		
Diisopropyl Ether	ug/l	ND	12/19/08	LBD	0.5		
1,4-Dioxane	ug/l	ND	12/19/08	LBD	50.0		
Ethyl Benzene	ug/l	ND	12/19/08	LBD	1.0		
Hexachlorobutadiene	ug/l	ND	12/19/08	LBD	3.0		
2-Hexanone	ug/l	ND	12/19/08	LBD	10.0		
Isopropylbenzene	ug/l	ND	12/19/08	LBD	1.0		
p-Isopropyltoluene	ug/l	ND	12/19/08	LBD	1.0		
MTBE	ug/l	ND	12/19/08	LBD	1.0		
Methylene Chloride	ug/l	ND	12/19/08	LBD	5.0		
MIBK	ug/l	ND	12/19/08	LBD	10.0		
Naphthalene	ug/l	ND	12/19/08	LBD	7.0		
n-Propylbenzene	ug/l	ND	12/19/08	LBD	1.0		
Styrene	ug/l	ND	12/19/08	LBD	1.0		
1,1,1,2-Tetrachloroethane	ug/l	ND	12/19/08	LBD	1.0		

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Purchase Order No.:

Project Location: BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-22130

Date Received: 12/17/2008

Job Number: 2700.DC21.01

Field Sample #: MW-08/Q

Sample ID: 08B50012

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,1,2,2-Tetrachloroethane	ug/l	ND	12/19/08	LBD	0.5		
Tetrachloroethylene	ug/l	ND	12/19/08	LBD	1.0		
Tetrahydrofuran	ug/l	ND	12/19/08	LBD	10.0		
Toluene	ug/l	ND	12/19/08	LBD	1.0		
1,2,3-Trichlorobenzene	ug/l	ND	12/19/08	LBD	6.0		
1,2,4-Trichlorobenzene	ug/l	ND	12/19/08	LBD	4.0		
1,1,1-Trichloroethane	ug/l	3.9	12/19/08	LBD	1.0		
1,1,2-Trichloroethane	ug/l	ND	12/19/08	LBD	1.0		
Trichloroethylene	ug/l	13.6	12/19/08	LBD	1.0		
Trichlorofluoromethane	ug/l	ND	12/19/08	LBD	2.0		
1,2,3-Trichloropropane	ug/l	ND	12/19/08	LBD	2.0		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	ND	12/19/08	LBD	1.0		
1,2,4-Trimethylbenzene	ug/l	ND	12/19/08	LBD	1.0		
1,3,5-Trimethylbenzene	ug/l	ND	12/19/08	LBD	1.0		
Vinyl Chloride	ug/l	ND	12/19/08	LBD	2.0		
m + p Xylene	ug/l	ND	12/19/08	LBD	2.0		
o-Xylene	ug/l	ND	12/19/08	LBD	1.0		

Analytical Method:

SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS. REPORTED RESULTS AND REPORTING LIMITS FOR 1,4-DIOXANE AND TERT-BUTYLALCOHOL ARE ESTIMATED SINCE RESPONSE FACTORS FOR THESE COMPOUNDS ARE BELOW METHOD SPECIFICATIONS.

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Purchase Order No.:

Project Location: BRIGHT OUTDOORS
Date Received: 12/17/2008

LIMS-BAT #: LIMIT-22130
Job Number: 2700.DC21.01

Field Sample #: TB121608

Sample ID: 08B50013

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: WATER OTHER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	ug/l	ND	12/18/08	LBD	50.0		
Acrylonitrile	ug/l	ND	12/18/08	LBD	5.0		
tert-Amylmethyl Ether	ug/l	ND	12/18/08	LBD	0.5		
Benzene	ug/l	ND	12/18/08	LBD	1.0		
Bromobenzene	ug/l	ND	12/18/08	LBD	1.0		
Bromochloromethane	ug/l	ND	12/18/08	LBD	1.0		
Bromodichloromethane	ug/l	ND	12/18/08	LBD	1.0		
Bromoform	ug/l	ND	12/18/08	LBD	4.0		
Bromomethane	ug/l	ND	12/18/08	LBD	2.0		
2-Butanone (MEK)	ug/l	ND	12/18/08	LBD	20.0		
tert-Butyl Alcohol	ug/l	ND	12/18/08	LBD	20.0		
n-Butylbenzene	ug/l	ND	12/18/08	LBD	1.0		
sec-Butylbenzene	ug/l	ND	12/18/08	LBD	1.0		
tert-Butylbenzene	ug/l	ND	12/18/08	LBD	1.0		
tert-Butylethyl Ether	ug/l	ND	12/18/08	LBD	0.5		
Carbon Disulfide	ug/l	ND	12/18/08	LBD	3.0		
Carbon Tetrachloride	ug/l	ND	12/18/08	LBD	1.0		
Chlorobenzene	ug/l	ND	12/18/08	LBD	1.0		
Chlorodibromomethane	ug/l	ND	12/18/08	LBD	0.5		
Chloroethane	ug/l	ND	12/18/08	LBD	2.0		
Chloroform	ug/l	ND	12/18/08	LBD	2.0		
Chloromethane	ug/l	ND	12/18/08	LBD	2.0		
2-Chlorotoluene	ug/l	ND	12/18/08	LBD	1.0		
4-Chlorotoluene	ug/l	ND	12/18/08	LBD	1.0		
1,2-Dibromo-3-Chloropropane	ug/l	ND	12/18/08	LBD	5.0		
1,2-Dibromoethane	ug/l	ND	12/18/08	LBD	0.50		
Dibromomethane	ug/l	ND	12/18/08	LBD	1.0		
1,2-Dichlorobenzene	ug/l	ND	12/18/08	LBD	1.0		
1,3-Dichlorobenzene	ug/l	ND	12/18/08	LBD	1.0		

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Project Location: BRIGHT OUTDOORS

Date Received: 12/17/2008

Field Sample #: TB121608

Sample ID: 08B50013

Purchase Order No.:

‡Sampled: 12/16/2008
Not Specified

LIMS-BAT #: LIMIT-22130

Job Number: 2700.DC21.01

Sample Matrix: WATER OTHER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,4-Dichlorobenzene	ug/l	ND	12/18/08	LBD	1.0		
trans-1,4-Dichloro-2-Butene	ug/l	ND	12/18/08	LBD	2.0		
Dichlorodifluoromethane	ug/l	ND	12/18/08	LBD	2.0		
1,1-Dichloroethane	ug/l	ND	12/18/08	LBD	1.0		
1,2-Dichloroethane	ug/l	ND	12/18/08	LBD	1.0		
1,1-Dichloroethylene	ug/l	ND	12/18/08	LBD	1.0		
cis-1,2-Dichloroethylene	ug/l	ND	12/18/08	LBD	1.0		
trans-1,2-Dichloroethylene	ug/l	ND	12/18/08	LBD	1.0		
1,2-Dichloropropane	ug/l	ND	12/18/08	LBD	1.0		
1,3-Dichloropropane	ug/l	ND	12/18/08	LBD	0.5		
2,2-Dichloropropane	ug/l	ND	12/18/08	LBD	1.0		
1,1-Dichloropropene	ug/l	ND	12/18/08	LBD	2.0		
cis-1,3-Dichloropropene	ug/l	ND	12/18/08	LBD	1.0		
trans-1,3-Dichloropropene	ug/l	ND	12/18/08	LBD	0.5		
Diethyl Ether	ug/l	ND	12/18/08	LBD	2.0		
Diisopropyl Ether	ug/l	ND	12/18/08	LBD	0.5		
1,4-Dioxane	ug/l	ND	12/18/08	LBD	50.0		
Ethyl Benzene	ug/l	ND	12/18/08	LBD	1.0		
Hexachlorobutadiene	ug/l	ND	12/18/08	LBD	3.0		
2-Hexanone	ug/l	ND	12/18/08	LBD	10.0		
Isopropylbenzene	ug/l	ND	12/18/08	LBD	1.0		
p-Isopropyltoluene	ug/l	ND	12/18/08	LBD	1.0		
MTBE	ug/l	ND	12/18/08	LBD	1.0		
Methylene Chloride	ug/l	ND	12/18/08	LBD	5.0		
MIBK	ug/l	ND	12/18/08	LBD	10.0		
Naphthalene	ug/l	ND	12/18/08	LBD	7.0		
n-Propylbenzene	ug/l	ND	12/18/08	LBD	1.0		
Styrene	ug/l	ND	12/18/08	LBD	1.0		
1,1,1,2-Tetrachloroethane	ug/l	ND	12/18/08	LBD	1.0		

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Purchase Order No.:

Project Location: BRIGHT OUTDOORS

LIMS-BAT #: LIMIT-22130

Date Received: 12/17/2008

Job Number: 2700.DC21.01

Field Sample #: TB121608

Sample ID: 08B50013

‡Sampled: 12/16/2008
Not Specified

Sample Matrix: WATER OTHER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,1,2,2-Tetrachloroethane	ug/l	ND	12/18/08	LBD	0.5		
Tetrachloroethylene	ug/l	ND	12/18/08	LBD	1.0		
Tetrahydrofuran	ug/l	ND	12/18/08	LBD	10.0		
Toluene	ug/l	ND	12/18/08	LBD	1.0		
1,2,3-Trichlorobenzene	ug/l	ND	12/18/08	LBD	6.0		
1,2,4-Trichlorobenzene	ug/l	ND	12/18/08	LBD	4.0		
1,1,1-Trichloroethane	ug/l	ND	12/18/08	LBD	1.0		
1,1,2-Trichloroethane	ug/l	ND	12/18/08	LBD	1.0		
Trichloroethylene	ug/l	ND	12/18/08	LBD	1.0		
Trichlorofluoromethane	ug/l	ND	12/18/08	LBD	2.0		
1,2,3-Trichloropropane	ug/l	ND	12/18/08	LBD	2.0		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	ND	12/18/08	LBD	1.0		
1,2,4-Trimethylbenzene	ug/l	ND	12/18/08	LBD	1.0		
1,3,5-Trimethylbenzene	ug/l	ND	12/18/08	LBD	1.0		
Vinyl Chloride	ug/l	ND	12/18/08	LBD	2.0		
m + p Xylene	ug/l	ND	12/18/08	LBD	2.0		
o-Xylene	ug/l	ND	12/18/08	LBD	1.0		

Analytical Method:

SW846 8260

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Project Location: BRIGHT OUTDOORS

Date Received: 12/17/2008

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Purchase Order No.:

LIMS-BAT #: LIMIT-22130

Job Number: 2700.DC21.01

** END OF REPORT **

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QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 12/26/2008

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Sample Id	Analysis	QC Analysis	Values	Units	Limits
08B50004	1,2-Dichloroethane-d4	Surrogate Recovery	104.1	%	70-130
	Toluene-d8	Surrogate Recovery	101.8	%	70-130
	Bromofluorobenzene	Surrogate Recovery	92.0	%	70-130
08B50005	1,2-Dichloroethane-d4	Surrogate Recovery	107.6	%	70-130
	Toluene-d8	Surrogate Recovery	101.1	%	70-130
	Bromofluorobenzene	Surrogate Recovery	90.0	%	70-130
08B50006	Acetone	Sample Amount	<50.0	ug/l	
		Matrix Spk Amt Added	100.0	ug/l	
		MS Amt Measured	85.7	ug/l	
		Matrix Spike % Rec.	85.7	%	70-130
		MSD Amount Added	100.0	ug/l	
		MSD Amt Measured	82.0	ug/l	
		MSD % Recovery	82.0	%	
		MSD Range	3.6	units	
	Benzene	MS Duplicate RPD	4.3	%	0-30
		Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	11.9	ug/l	
		Matrix Spike % Rec.	119.6	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	12.7	ug/l	
		MSD % Recovery	127.6	%	
	Carbon Tetrachloride	MSD Range	8.0	units	
		MS Duplicate RPD	6.4	%	0-30
		Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	6.6	ug/l	
		Matrix Spike % Rec.	66.3	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	7.6	ug/l	
	Chloroform	MSD % Recovery	76.8	%	
		MSD Range	10.5	units	
		MS Duplicate RPD	14.6	%	0-30
		Sample Amount	<2.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	11.3	ug/l	
		Matrix Spike % Rec.	113.3	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	12.2	ug/l	
		MSD % Recovery	122.7	%	
		MSD Range	9.3	units	

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SAMPLE QC: Sample Results with Duplicates

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08B50006	Chloroform	MS Duplicate RPD	7.9	%	0-30
		Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
	1,2-Dichloroethane	MS Amt Measured	11.3	ug/l	
		Matrix Spike % Rec.	113.9	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	12.2	ug/l	
		MSD % Recovery	122.9	%	
		MSD Range	9.0	units	
	1,4-Dichlorobenzene	MS Duplicate RPD	7.6	%	0-30
		Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	10.3	ug/l	
		Matrix Spike % Rec.	103.8	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.6	ug/l	
		MSD % Recovery	116.1	%	
		MSD Range	12.3	units	
	Ethyl Benzene	MS Duplicate RPD	11.1	%	0-30
		Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	10.7	ug/l	
		Matrix Spike % Rec.	107.5	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.6	ug/l	
		MSD % Recovery	116.2	%	
		MSD Range	8.7	units	
	2-Butanone (MEK)	MS Duplicate RPD	7.7	%	0-30
		Sample Amount	<20.0	ug/l	
		Matrix Spk Amt Added	100.0	ug/l	
		MS Amt Measured	103.8	ug/l	
		Matrix Spike % Rec.	103.8	%	70-130
		MSD Amount Added	100.0	ug/l	
		MSD Amt Measured	95.0	ug/l	
		MSD % Recovery	95.0	%	
		MSD Range	8.7	units	
	MIBK	MS Duplicate RPD	8.8	%	0-30
		Sample Amount	<10.0	ug/l	
		Matrix Spk Amt Added	100.0	ug/l	
		MS Amt Measured	99.8	ug/l	
		Matrix Spike % Rec.	99.8	%	70-130
		MSD Amount Added	100.0	ug/l	
		MSD Amt Measured	94.7	ug/l	

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08B50006	MIBK	MSD % Recovery	94.7	%	
		MSD Range	5.1	units	
		MS Duplicate RPD	5.2	%	0-30
		Sample Amount	<7.0	ug/l	
	Naphthalene	Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	9.2	ug/l	
		Matrix Spike % Rec.	92.6	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	8.9	ug/l	
		MSD % Recovery	89.8	%	
		MSD Range	2.7	units	
		MS Duplicate RPD	3.0	%	0-30
	Styrene	Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	10.6	ug/l	
		Matrix Spike % Rec.	106.3	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.2	ug/l	
		MSD % Recovery	112.0	%	
		MSD Range	5.6	units	
	Tetrachloroethylene	MS Duplicate RPD	5.2	%	0-30
		Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	10.5	ug/l	
		Matrix Spike % Rec.	105.4	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.8	ug/l	
		MSD % Recovery	118.2	%	
	Toluene	MSD Range	12.8	units	
		MS Duplicate RPD	11.4	%	0-30
		Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	11.0	ug/l	
		Matrix Spike % Rec.	110.3	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.8	ug/l	
	1,1,1-Trichloroethane	MSD % Recovery	118.5	%	
		MSD Range	8.2	units	
		MS Duplicate RPD	7.1	%	0-30
		Sample Amount	1.9	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	9.3	ug/l	
		Matrix Spike % Rec.	73.3	%	70-130

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Sample Id	Analysis	QC Analysis	Values	Units	Limits
08B50006	1,1,1-Trichloroethane	MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	10.3	ug/l	
		MSD % Recovery	83.5	%	
		MSD Range	10.2	units	
		MS Duplicate RPD	10.3	%	0-30
	Trichloroethylene	Sample Amount	2.4	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	12.6	ug/l	
		Matrix Spike % Rec.	101.9	%	70-130
		MSD Amount Added	10.0	ug/l	
	1,1,2-Trichloro-1,2,2-Trifluoroethane	MSD Amt Measured	13.3	ug/l	
		MSD % Recovery	108.9	%	
		MSD Range	7.0	units	
		MS Duplicate RPD	5.3	%	0-30
		Sample Amount	<1.0	ug/l	
	Trichlorofluoromethane	Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	10.8	ug/l	
		Matrix Spike % Rec.	108.6	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.9	ug/l	
	o-Xylene	MSD % Recovery	119.2	%	
		MSD Range	10.6	units	
		MS Duplicate RPD	9.3	%	0-30
		Sample Amount	<2.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
	m + p Xylene	MS Amt Measured	10.4	ug/l	
		Matrix Spike % Rec.	104.7	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.5	ug/l	
		MSD % Recovery	115.9	%	
		MSD Range	11.2	units	
		MS Duplicate RPD	10.1	%	0-30
		Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	10.3	ug/l	
		Matrix Spike % Rec.	103.8	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.1	ug/l	
		MSD % Recovery	111.4	%	
		MSD Range	7.6	units	
		MS Duplicate RPD	7.0	%	0-30
		Sample Amount	<2.0	ug/l	
		Matrix Spk Amt Added	20.0	ug/l	

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08B50006	m + p Xylene	MS Amt Measured	21.6	ug/l	
		Matrix Spike % Rec.	108.3	%	70-130
		MSD Amount Added	20.0	ug/l	
		MSD Amt Measured	22.8	ug/l	
		MSD % Recovery	114.2	%	
		MSD Range	5.9	units	
	1,2-Dichlorobenzene	MS Duplicate RPD	5.3	%	0-30
		Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	11.3	ug/l	
		Matrix Spike % Rec.	113.3	%	70-130
		MSD Amount Added	10.0	ug/l	
	1,3-Dichlorobenzene	MSD Amt Measured	12.0	ug/l	
		MSD % Recovery	120.8	%	
		MSD Range	7.5	units	
		MS Duplicate RPD	6.4	%	0-30
		Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
	1,1-Dichloroethane	MS Amt Measured	11.1	ug/l	
		Matrix Spike % Rec.	111.6	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.7	ug/l	
		MSD % Recovery	117.3	%	
		MSD Range	5.6	units	
	1,1-Dichloroethylene	MS Duplicate RPD	4.9	%	0-30
		Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	11.9	ug/l	
		Matrix Spike % Rec.	119.5	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	13.0	ug/l	
		MSD % Recovery	130.5	%	
		MSD Range	11.0	units	
		MS Duplicate RPD	8.8	%	0-30
		Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	10.7	ug/l	
		Matrix Spike % Rec.	107.9	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	12.3	ug/l	
		MSD % Recovery	123.3	%	
		MSD Range	15.4	units	
		MS Duplicate RPD	13.3	%	0-30

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Sample Id	Analysis	QC Analysis	Values	Units	Limits
08B50006	1,4-Dioxane	Sample Amount	<50.0	ug/l	
		Matrix Spk Amt Added	100.0	ug/l	
		MS Amt Measured	84.0	ug/l	
		Matrix Spike % Rec.	84.0	%	70-130
		MSD Amount Added	100.0	ug/l	
		MSD Amt Measured	96.7	ug/l	
		MSD % Recovery	96.7	%	
		MSD Range	12.6	units	
		MS Duplicate RPD	14.0	%	0-30
		Sample Amount	<1.0	ug/l	
	MTBE	Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	8.7	ug/l	
		Matrix Spike % Rec.	87.8	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	9.1	ug/l	
		MSD % Recovery	91.4	%	
		MSD Range	3.6	units	
		MS Duplicate RPD	4.0	%	0-30
		Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
	trans-1,2-Dichloroethylene	MS Amt Measured	11.7	ug/l	
		Matrix Spike % Rec.	117.8	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	13.0	ug/l	
		MSD % Recovery	130.8	%	
		MSD Range	13.0	units	
		MS Duplicate RPD	10.4	%	0-30
		Sample Amount	<2.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	10.5	ug/l	
	Vinyl Chloride	Matrix Spike % Rec.	105.6	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.8	ug/l	
		MSD % Recovery	118.0	%	
		MSD Range	12.4	units	
		MS Duplicate RPD	11.0	%	0-30
		Sample Amount	<5.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	8.1	ug/l	
		Matrix Spike % Rec.	81.0	%	70-130
	Methylene Chloride	MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	8.8	ug/l	
		MSD % Recovery	88.2	%	

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Sample Id	Analysis	QC Analysis	Values	Units	Limits
08B50006	Methylene Chloride	MSD Range	7.2	units	
		MS Duplicate RPD	8.5	%	0-30
		Sample Amount	<1.0	ug/l	
	Chlorobenzene	Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	10.9	ug/l	
		Matrix Spike % Rec.	109.2	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.7	ug/l	
		MSD % Recovery	117.5	%	
		MSD Range	8.3	units	
		MS Duplicate RPD	7.3	%	0-30
		Sample Amount	<2.0	ug/l	
	Chloromethane	Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	8.5	ug/l	
		Matrix Spike % Rec.	85.5	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	9.4	ug/l	
		MSD % Recovery	94.1	%	
		MSD Range	8.6	units	
		MS Duplicate RPD	9.5	%	0-30
		Sample Amount	<2.0	ug/l	
	Bromomethane	Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	7.0	ug/l	
		Matrix Spike % Rec.	70.9	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	8.4	ug/l	
		MSD % Recovery	84.3	%	
		MSD Range	13.4	units	
		MS Duplicate RPD	17.2	%	0-30
		Sample Amount	<2.0	ug/l	
	Chloroethane	Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	10.0	ug/l	
		Matrix Spike % Rec.	100.1	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.5	ug/l	
		MSD % Recovery	115.5	%	
		MSD Range	15.4	units	
		MS Duplicate RPD	14.2	%	0-30
		Sample Amount	<1.0	ug/l	
	cis-1,3-Dichloropropene	Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	6.6	ug/l	
		Matrix Spike % Rec.	66.0	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	10.0	ug/l	

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08B50006	cis-1,3-Dichloropropene	MSD Amt Measured	7.3	ug/l	
		MSD % Recovery	73.5	%	
		MSD Range	7.5	units	
		MS Duplicate RPD	10.7	%	0-30
	trans-1,3-Dichloropropene	Sample Amount	<0.5	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	4.6	ug/l	
		Matrix Spike % Rec.	46.9	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	5.1	ug/l	
		MSD % Recovery	51.8	%	
		MSD Range	4.9	units	
	Chlorodibromomethane	MS Duplicate RPD	9.9	%	0-30
		Sample Amount	<0.5	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	10.5	ug/l	
		Matrix Spike % Rec.	105.2	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.6	ug/l	
		MSD % Recovery	116.2	%	
	1,1,2-Trichloroethane	MSD Range	11.0	units	
		MS Duplicate RPD	9.9	%	0-30
		Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	10.6	ug/l	
		Matrix Spike % Rec.	106.9	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.6	ug/l	
	Bromoform	MSD % Recovery	116.2	%	
		MSD Range	9.3	units	
		MS Duplicate RPD	8.3	%	0-30
		Sample Amount	<4.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	9.0	ug/l	
		Matrix Spike % Rec.	90.8	%	70-130
		MSD Amount Added	10.0	ug/l	
	1,1,2,2-Tetrachloroethane	MSD Amt Measured	9.4	ug/l	
		MSD % Recovery	94.6	%	
		MSD Range	3.7	units	
		MS Duplicate RPD	4.0	%	0-30
		Sample Amount	<0.5	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	12.5	ug/l	

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08B50006	1,1,2,2-Tetrachloroethane	Matrix Spike % Rec.	125.9	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	12.0	ug/l	
		MSD % Recovery	120.4	%	
		MSD Range	5.4	units	
		MS Duplicate RPD	4.4	%	0-30
	2-Chlorotoluene	Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	10.6	ug/l	
		Matrix Spike % Rec.	106.1	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.3	ug/l	
	Hexachlorobutadiene	MSD % Recovery	113.0	%	
		MSD Range	6.9	units	
		MS Duplicate RPD	6.2	%	0-30
		Sample Amount	<3.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	9.3	ug/l	
	Isopropylbenzene	Matrix Spike % Rec.	93.0	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	10.3	ug/l	
		MSD % Recovery	103.0	%	
		MSD Range	10.0	units	
		MS Duplicate RPD	10.2	%	0-30
	p-Isopropyltoluene	Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	12.0	ug/l	
		Matrix Spike % Rec.	120.4	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	12.8	ug/l	
	n-Propylbenzene	MSD % Recovery	128.9	%	
		MSD Range	8.5	units	
		MS Duplicate RPD	6.8	%	0-30
		Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	10.9	ug/l	
	n-Propylbenzene	Matrix Spike % Rec.	109.5	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.6	ug/l	
		MSD % Recovery	116.3	%	
		MSD Range	6.7	units	
		MS Duplicate RPD	6.0	%	0-30
	n-Propylbenzene	Sample Amount	<1.0	ug/l	

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Sample Id	Analysis	QC Analysis	Values	Units	Limits
08B50006	n-Propylbenzene	Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	10.5	ug/l	
		Matrix Spike % Rec.	105.6	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.4	ug/l	
		MSD % Recovery	114.6	%	
	sec-Butylbenzene	MSD Range	9.0	units	
		MS Duplicate RPD	8.1	%	0-30
		Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	11.2	ug/l	
		Matrix Spike % Rec.	112.4	%	70-130
	tert-Butylbenzene	MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	12.2	ug/l	
		MSD % Recovery	122.7	%	
		MSD Range	10.3	units	
		MS Duplicate RPD	8.7	%	0-30
		Sample Amount	<1.0	ug/l	
	1,2,3-Trichlorobenzene	Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	10.6	ug/l	
		Matrix Spike % Rec.	106.8	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.8	ug/l	
		MSD % Recovery	118.7	%	
	1,2,4-Trichlorobenzene	MSD Range	11.9	units	
		MS Duplicate RPD	10.5	%	0-30
		Sample Amount	<6.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	9.6	ug/l	
		Matrix Spike % Rec.	96.9	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	9.2	ug/l	
		MSD % Recovery	92.8	%	
		MSD Range	4.1	units	
		MS Duplicate RPD	4.3	%	0-30
		Sample Amount	<4.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	8.6	ug/l	
		Matrix Spike % Rec.	86.6	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	8.2	ug/l	
		MSD % Recovery	82.6	%	
		MSD Range	4.0	units	

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08B50006	1,2,4-Trichlorobenzene	MS Duplicate RPD	4.7	%	0-30
		Sample Amount	<1.0	ug/l	
	1,2,4-Trimethylbenzene	Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	11.0	ug/l	
		Matrix Spike % Rec.	110.0	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	12.0	ug/l	
		MSD % Recovery	120.6	%	
		MSD Range	10.6	units	
		MS Duplicate RPD	9.1	%	0-30
	1,3,5-Trimethylbenzene	Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	10.5	ug/l	
		Matrix Spike % Rec.	105.4	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.2	ug/l	
		MSD % Recovery	112.5	%	
		MSD Range	7.1	units	
		MS Duplicate RPD	6.5	%	0-30
		Sample Amount	<1.0	ug/l	
	Dibromomethane	Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	11.0	ug/l	
		Matrix Spike % Rec.	110.3	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.9	ug/l	
		MSD % Recovery	119.8	%	
		MSD Range	9.5	units	
		MS Duplicate RPD	8.2	%	0-30
	cis-1,2-Dichloroethylene	Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	10.8	ug/l	
		Matrix Spike % Rec.	108.4	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.8	ug/l	
		MSD % Recovery	118.1	%	
		MSD Range	9.6	units	
		MS Duplicate RPD	8.5	%	0-30
		Sample Amount	<1.0	ug/l	
	4-Chlorotoluene	Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	10.3	ug/l	
		Matrix Spike % Rec.	103.4	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	10.9	ug/l	

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08B50006	4-Chlorotoluene	MSD % Recovery	109.0	%	
		MSD Range	5.6	units	
		MS Duplicate RPD	5.2	%	0-30
	1,1-Dichloropropene	Sample Amount	<2.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	11.5	ug/l	
		Matrix Spike % Rec.	115.0	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	12.6	ug/l	
		MSD % Recovery	126.3	%	
		MSD Range	11.3	units	
		MS Duplicate RPD	9.3	%	0-30
	1,2-Dichloropropane	Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	11.1	ug/l	
		Matrix Spike % Rec.	111.6	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	12.1	ug/l	
		MSD % Recovery	121.9	%	
		MSD Range	10.3	units	
		MS Duplicate RPD	8.8	%	0-30
	1,3-Dichloropropane	Sample Amount	<0.5	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	11.2	ug/l	
		Matrix Spike % Rec.	112.3	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.8	ug/l	
		MSD % Recovery	118.1	%	
		MSD Range	5.7	units	
		MS Duplicate RPD	5.0	%	0-30
	2,2-Dichloropropane	Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	2.7	ug/l	
		Matrix Spike % Rec.	27.5	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	2.9	ug/l	
		MSD % Recovery	29.9	%	
		MSD Range	2.4	units	
		MS Duplicate RPD	8.3	%	0-30
	1,1,1,2-Tetrachloroethane	Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	7.2	ug/l	
		Matrix Spike % Rec.	72.7	%	70-130

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08B50006	1,1,1,2-Tetrachloroethane	MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	8.3	ug/l	
		MSD % Recovery	83.6	%	
		MSD Range	10.9	units	
		MS Duplicate RPD	13.9	%	0-30
		Sample Amount	<2.0	ug/l	
	1,2,3-Trichloropropane	Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	10.3	ug/l	
		Matrix Spike % Rec.	103.1	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	10.1	ug/l	
		MSD % Recovery	101.4	%	
	n-Butylbenzene	MSD Range	1.6	units	
		MS Duplicate RPD	1.6	%	0-30
		Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	9.9	ug/l	
		Matrix Spike % Rec.	99.8	%	70-130
	Dichlorodifluoromethane	MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	10.9	ug/l	
		MSD % Recovery	109.6	%	
		MSD Range	9.7	units	
		MS Duplicate RPD	9.3	%	0-30
		Sample Amount	<2.0	ug/l	
	Bromochloromethane	Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	9.9	ug/l	
		Matrix Spike % Rec.	99.5	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	10.9	ug/l	
		MSD % Recovery	109.0	%	
	Bromobenzene	MSD Range	9.5	units	
		MS Duplicate RPD	9.1	%	0-30
		Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	9.4	ug/l	
		Matrix Spike % Rec.	94.1	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	10.1	ug/l	
		MSD % Recovery	101.9	%	
		MSD Range	7.8	units	
		MS Duplicate RPD	7.9	%	0-30
		Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	

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08B50006	Bromobenzene	MS Amt Measured	11.2	ug/l	
		Matrix Spike % Rec.	112.7	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.9	ug/l	
		MSD % Recovery	119.4	%	
		MSD Range	6.7	units	
	Acrylonitrile	MS Duplicate RPD	5.7	%	0-30
		Sample Amount	<5.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	9.5	ug/l	
		Matrix Spike % Rec.	95.2	%	70-130
		MSD Amount Added	10.0	ug/l	
	Carbon Disulfide	MSD Amt Measured	9.4	ug/l	
		MSD % Recovery	94.6	%	
		MSD Range	0.6	units	
		MS Duplicate RPD	0.6	%	0-30
		Sample Amount	<3.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
	2-Hexanone	MS Amt Measured	10.3	ug/l	
		Matrix Spike % Rec.	103.9	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.8	ug/l	
		MSD % Recovery	118.8	%	
		MSD Range	14.9	units	
	trans-1,4-Dichloro-2-Butene	MS Duplicate RPD	13.3	%	0-30
		Sample Amount	<10.0	ug/l	
		Matrix Spk Amt Added	100.0	ug/l	
		MS Amt Measured	95.3	ug/l	
		Matrix Spike % Rec.	95.3	%	70-130
		MSD Amount Added	100.0	ug/l	
		MSD Amt Measured	87.4	ug/l	
		MSD % Recovery	87.4	%	
		MSD Range	7.8	units	
		MS Duplicate RPD	8.6	%	0-30
		Sample Amount	<2.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	6.3	ug/l	
		Matrix Spike % Rec.	63.4	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	6.0	ug/l	
		MSD % Recovery	60.4	%	
		MSD Range	3.0	units	
		MS Duplicate RPD	4.8	%	0-30

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Sample Id	Analysis	QC Analysis	Values	Units	Limits
08B50006	Diethyl Ether	Sample Amount	<2.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	10.3	ug/l	
		Matrix Spike % Rec.	103.0	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	11.1	ug/l	
		MSD % Recovery	111.5	%	
		MSD Range	8.5	units	
		MS Duplicate RPD	7.9	%	0-30
	Bromodichloromethane	Sample Amount	<1.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	9.5	ug/l	
		Matrix Spike % Rec.	95.0	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	10.4	ug/l	
		MSD % Recovery	104.5	%	
		MSD Range	9.5	units	
		MS Duplicate RPD	9.5	%	0-30
	1,2-Dichloroethane-d4	Surrogate Recovery	106.8	%	70-130
	Toluene-d8	Surrogate Recovery	100.3	%	70-130
	Bromofluorobenzene	Surrogate Recovery	88.3	%	70-130
	1,2-Dibromo-3-Chloropropane	Sample Amount	<5.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	6.5	ug/l	
		Matrix Spike % Rec.	65.0	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	7.3	ug/l	
		MSD % Recovery	73.5	%	
		MSD Range	8.5	units	
		MS Duplicate RPD	12.2	%	0-30
	1,2-Dibromoethane	Sample Amount	<0.50	ug/l	
		Matrix Spk Amt Added	10.00	ug/l	
		MS Amt Measured	8.39	ug/l	
		Matrix Spike % Rec.	83.90	%	70-130
		MSD Amount Added	10.00	ug/l	
		MSD Amt Measured	9.13	ug/l	
		MSD % Recovery	91.30	%	
		MSD Range	7.39	units	
		MS Duplicate RPD	8.44	%	0-30
	Tetrahydrofuran	Sample Amount	<10.0	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	9.4	ug/l	
		Matrix Spike % Rec.	94.3	%	70-130

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08B50006	Tetrahydrofuran	MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	9.0	ug/l	
		MSD % Recovery	90.4	%	
		MSD Range	3.8	units	
		MS Duplicate RPD	4.2	%	0-30
	tert-Butyl Alcohol	Sample Amount	<20.0	ug/l	
		Matrix Spk Amt Added	100.0	ug/l	
		MS Amt Measured	27.4	ug/l	
		Matrix Spike % Rec.	27.4	%	70-130
		MSD Amount Added	100.0	ug/l	
	Diisopropyl Ether	MSD Amt Measured	28.1	ug/l	
		MSD % Recovery	28.1	%	
		MSD Range	0.6	units	
		MS Duplicate RPD	2.4	%	0-30
		Sample Amount	<0.5	ug/l	
	tert-Butylethyl Ether	Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	8.4	ug/l	
		Matrix Spike % Rec.	84.9	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	9.2	ug/l	
	tert-Amylmethyl Ether	MSD % Recovery	92.2	%	
		MSD Range	7.3	units	
		MS Duplicate RPD	8.2	%	0-30
		Sample Amount	<0.5	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
08B50007	1,2-Dichloroethane-d4	MS Amt Measured	5.1	ug/l	
		Matrix Spike % Rec.	51.7	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	5.7	ug/l	
		MSD % Recovery	57.6	%	
		MSD Range	5.8	units	
		MS Duplicate RPD	10.7	%	0-30
		Sample Amount	<0.5	ug/l	
		Matrix Spk Amt Added	10.0	ug/l	
		MS Amt Measured	5.5	ug/l	
		Matrix Spike % Rec.	55.3	%	70-130
		MSD Amount Added	10.0	ug/l	
		MSD Amt Measured	6.0	ug/l	
		MSD % Recovery	60.4	%	
		MSD Range	5.1	units	
		MS Duplicate RPD	8.8	%	0-30
		Surrogate Recovery	103.1	%	70-130

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08B50007	Toluene-d8	Surrogate Recovery	100.0	%	70-130
	Bromofluorobenzene	Surrogate Recovery	91.0	%	70-130
08B50008	1,2-Dichloroethane-d4	Surrogate Recovery	109.2	%	70-130
	Toluene-d8	Surrogate Recovery	100.8	%	70-130
	Bromofluorobenzene	Surrogate Recovery	90.9	%	70-130
08B50009	1,2-Dichloroethane-d4	Surrogate Recovery	104.6	%	70-130
	Toluene-d8	Surrogate Recovery	101.0	%	70-130
	Bromofluorobenzene	Surrogate Recovery	89.3	%	70-130
08B50010	1,2-Dichloroethane-d4	Surrogate Recovery	108.7	%	70-130
	Toluene-d8	Surrogate Recovery	101.8	%	70-130
	Bromofluorobenzene	Surrogate Recovery	91.0	%	70-130
08B50011	1,2-Dichloroethane-d4	Surrogate Recovery	105.6	%	70-130
	Toluene-d8	Surrogate Recovery	102.1	%	70-130
	Bromofluorobenzene	Surrogate Recovery	89.2	%	70-130
08B50012	1,2-Dichloroethane-d4	Surrogate Recovery	110.1	%	70-130
	Toluene-d8	Surrogate Recovery	100.1	%	70-130
	Bromofluorobenzene	Surrogate Recovery	91.5	%	70-130
08B50013	1,2-Dichloroethane-d4	Surrogate Recovery	105.6	%	70-130
	Toluene-d8	Surrogate Recovery	99.6	%	70-130
	Bromofluorobenzene	Surrogate Recovery	90.6	%	70-130
BLANK-127963	Acetone	Blank	<50.0	ug/l	
	Benzene	Blank	<1.0	ug/l	
	Carbon Tetrachloride	Blank	<1.0	ug/l	
	Chloroform	Blank	2.3	ug/l	
	1,2-Dichloroethane	Blank	<1.0	ug/l	
	1,4-Dichlorobenzene	Blank	<1.0	ug/l	
	Ethyl Benzene	Blank	<1.0	ug/l	
	2-Butanone (MEK)	Blank	<20.0	ug/l	
	MIBK	Blank	<10.0	ug/l	
	Naphthalene	Blank	<7.0	ug/l	
	Styrene	Blank	<1.0	ug/l	
	Tetrachloroethylene	Blank	<1.0	ug/l	
	Toluene	Blank	<1.0	ug/l	
	1,1,1-Trichloroethane	Blank	<1.0	ug/l	
	Trichloroethylene	Blank	<1.0	ug/l	
	1,1,2-Trichloro-1,2,2-Trifluoroethane	Blank	<1.0	ug/l	

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BLANK-127963					
	Trichlorofluoromethane	Blank	<2.0	ug/l	
	o-Xylene	Blank	<1.0	ug/l	
	m + p Xylene	Blank	<2.0	ug/l	
	1,2-Dichlorobenzene	Blank	<1.0	ug/l	
	1,3-Dichlorobenzene	Blank	<1.0	ug/l	
	1,1-Dichloroethane	Blank	<1.0	ug/l	
	1,1-Dichloroethylene	Blank	<1.0	ug/l	
	1,4-Dioxane	Blank	<50.0	ug/l	
	MTBE	Blank	<1.0	ug/l	
	trans-1,2-Dichloroethylene	Blank	<1.0	ug/l	
	Vinyl Chloride	Blank	<2.0	ug/l	
	Methylene Chloride	Blank	<5.0	ug/l	
	Chlorobenzene	Blank	<1.0	ug/l	
	Chloromethane	Blank	<2.0	ug/l	
	Bromomethane	Blank	<2.0	ug/l	
	Chloroethane	Blank	<2.0	ug/l	
	cis-1,3-Dichloropropene	Blank	<1.0	ug/l	
	trans-1,3-Dichloropropene	Blank	<0.5	ug/l	
	Chlorodibromomethane	Blank	<0.5	ug/l	
	1,1,2-Trichloroethane	Blank	<1.0	ug/l	
	Bromoform	Blank	<4.0	ug/l	
	1,1,2,2-Tetrachloroethane	Blank	<0.5	ug/l	
	2-Chlorotoluene	Blank	<1.0	ug/l	
	Hexachlorobutadiene	Blank	<3.0	ug/l	
	Isopropylbenzene	Blank	<1.0	ug/l	
	p-Isopropyltoluene	Blank	<1.0	ug/l	
	n-Propylbenzene	Blank	<1.0	ug/l	
	sec-Butylbenzene	Blank	<1.0	ug/l	
	tert-Butylbenzene	Blank	<1.0	ug/l	
	1,2,3-Trichlorobenzene	Blank	<6.0	ug/l	
	1,2,4-Trichlorobenzene	Blank	<4.0	ug/l	
	1,2,4-Trimethylbenzene	Blank	<1.0	ug/l	
	1,3,5-Trimethylbenzene	Blank	<1.0	ug/l	
	Dibromomethane	Blank	<1.0	ug/l	
	cis-1,2-Dichloroethylene	Blank	<1.0	ug/l	
	4-Chlorotoluene	Blank	<1.0	ug/l	
	1,1-Dichloropropene	Blank	<2.0	ug/l	
	1,2-Dichloropropane	Blank	<1.0	ug/l	
	1,3-Dichloropropane	Blank	<0.5	ug/l	
	2,2-Dichloropropane	Blank	<1.0	ug/l	
	1,1,1,2-Tetrachloroethane	Blank	<1.0	ug/l	
	1,2,3-Trichloropropane	Blank	<2.0	ug/l	
	n-Butylbenzene	Blank	<1.0	ug/l	

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

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QC Batch Number: GCMS/VOL-21190

Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-127963					
	Dichlorodifluoromethane	Blank	<2.0	ug/l	
	Bromochloromethane	Blank	<1.0	ug/l	
	Bromobenzene	Blank	<1.0	ug/l	
	Acrylonitrile	Blank	<5.0	ug/l	
	Carbon Disulfide	Blank	<3.0	ug/l	
	2-Hexanone	Blank	<10.0	ug/l	
	trans-1,4-Dichloro-2-Butene	Blank	<2.0	ug/l	
	Diethyl Ether	Blank	<2.0	ug/l	
	Bromodichloromethane	Blank	<1.0	ug/l	
	1,2-Dibromo-3-Chloropropane	Blank	<5.0	ug/l	
	1,2-Dibromoethane	Blank	<0.50	ug/l	
	Tetrahydrofuran	Blank	<10.0	ug/l	
	tert-Butyl Alcohol	Blank	<20.0	ug/l	
	Diisopropyl Ether	Blank	<0.5	ug/l	
	tert-Butylethyl Ether	Blank	<0.5	ug/l	
	tert-Amylmethyl Ether	Blank	<0.5	ug/l	
LFBLANK-89963					
	Acetone	Lab Fort Blank Amt.	100.0	ug/l	
		Lab Fort Blk. Found	65.7	ug/l	
		Lab Fort Blk. % Rec.	65.7	%	70-160
	Benzene	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	11.0	ug/l	
		Lab Fort Blk. % Rec.	110.6	%	70-130
	Carbon Tetrachloride	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	6.3	ug/l	
		Lab Fort Blk. % Rec.	63.9	%	70-130
	Chloroform	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	10.9	ug/l	
		Lab Fort Blk. % Rec.	109.1	%	70-130
	1,2-Dichloroethane	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	10.4	ug/l	
		Lab Fort Blk. % Rec.	104.1	%	70-130
	1,4-Dichlorobenzene	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	10.0	ug/l	
		Lab Fort Blk. % Rec.	100.9	%	70-130
	Ethyl Benzene	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	10.3	ug/l	
		Lab Fort Blk. % Rec.	103.1	%	70-130
	2-Butanone (MEK)	Lab Fort Blank Amt.	100.0	ug/l	
		Lab Fort Blk. Found	78.5	ug/l	
		Lab Fort Blk. % Rec.	78.5	%	40-160
	MIBK	Lab Fort Blank Amt.	100.0	ug/l	
		Lab Fort Blk. Found	81.6	ug/l	

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

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Method Blanks

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QC Batch Number: GCMS/VOL-21190

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-89963					
	MIBK	Lab Fort Blk. % Rec.	81.6	%	70-160
	Naphthalene	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	8.6	ug/l	
		Lab Fort Blk. % Rec.	86.8	%	40-130
	Styrene	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	10.1	ug/l	
		Lab Fort Blk. % Rec.	101.1	%	70-130
	Tetrachloroethylene	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	10.2	ug/l	
		Lab Fort Blk. % Rec.	102.3	%	70-160
	Toluene	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	10.1	ug/l	
		Lab Fort Blk. % Rec.	101.6	%	70-130
	1,1,1-Trichloroethane	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	6.4	ug/l	
		Lab Fort Blk. % Rec.	64.6	%	70-130
	Trichloroethylene	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	8.6	ug/l	
		Lab Fort Blk. % Rec.	86.7	%	70-130
	1,1,2-Trichloro-1,2,2-Trifluoroethane	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	9.9	ug/l	
		Lab Fort Blk. % Rec.	99.5	%	70-130
	Trichlorofluoromethane	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	9.4	ug/l	
		Lab Fort Blk. % Rec.	94.3	%	70-130
	o-Xylene	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	9.9	ug/l	
		Lab Fort Blk. % Rec.	99.3	%	70-130
	m + p Xylene	Lab Fort Blank Amt.	20.0	ug/l	
		Lab Fort Blk. Found	20.4	ug/l	
		Lab Fort Blk. % Rec.	102.0	%	70-130
	1,2-Dichlorobenzene	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	10.8	ug/l	
		Lab Fort Blk. % Rec.	108.4	%	70-130
	1,3-Dichlorobenzene	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	10.4	ug/l	
		Lab Fort Blk. % Rec.	104.9	%	70-130
	1,1-Dichloroethane	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	10.5	ug/l	
		Lab Fort Blk. % Rec.	105.5	%	70-130
	1,1-Dichloroethylene	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	9.7	ug/l	
		Lab Fort Blk. % Rec.	97.8	%	70-130

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

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QC Batch Number: GCMS/VOL-21190

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-89963					
1,4-Dioxane		Lab Fort Blank Amt.	100.0	ug/l	
		Lab Fort Blk. Found	23.4	ug/l	
		Lab Fort Blk. % Rec.	23.4	%	40-130
MTBE		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	8.5	ug/l	
		Lab Fort Blk. % Rec.	85.4	%	70-130
trans-1,2-Dichloroethylene		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	10.7	ug/l	
		Lab Fort Blk. % Rec.	107.3	%	70-130
Vinyl Chloride		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	9.5	ug/l	
		Lab Fort Blk. % Rec.	95.8	%	40-160
Methylene Chloride		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	8.7	ug/l	
		Lab Fort Blk. % Rec.	87.2	%	70-130
Chlorobenzene		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	10.4	ug/l	
		Lab Fort Blk. % Rec.	104.8	%	70-130
Chloromethane		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	7.8	ug/l	
		Lab Fort Blk. % Rec.	78.7	%	40-160
Bromomethane		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	4.9	ug/l	
		Lab Fort Blk. % Rec.	49.0	%	40-160
Chloroethane		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	9.8	ug/l	
		Lab Fort Blk. % Rec.	98.1	%	70-130
cis-1,3-Dichloropropene		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	6.5	ug/l	
		Lab Fort Blk. % Rec.	65.0	%	70-130
trans-1,3-Dichloropropene		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	4.7	ug/l	
		Lab Fort Blk. % Rec.	47.6	%	70-130
Chlorodibromomethane		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	9.7	ug/l	
		Lab Fort Blk. % Rec.	97.1	%	70-130
1,1,2-Trichloroethane		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	10.1	ug/l	
		Lab Fort Blk. % Rec.	101.7	%	70-130
Bromoform		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	8.6	ug/l	
		Lab Fort Blk. % Rec.	86.3	%	70-130
1,1,2,2-Tetrachloroethane		Lab Fort Blank Amt.	10.0	ug/l	

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

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Sample Matrix Spikes and Matrix Spike Duplicates

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QC Batch Number: GCMS/VOL-21190

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-89963					
1,1,2,2-Tetrachloroethane		Lab Fort Blk. Found	10.6	ug/l	70-130
		Lab Fort Blk. % Rec.	106.8	%	
2-Chlorotoluene		Lab Fort Blank Amt.	10.0	ug/l	70-130
		Lab Fort Blk. Found	10.0	ug/l	
Hexachlorobutadiene		Lab Fort Blk. % Rec.	100.1	%	70-130
		Lab Fort Blank Amt.	10.0	ug/l	
Isopropylbenzene		Lab Fort Blk. Found	8.7	ug/l	70-130
		Lab Fort Blk. % Rec.	87.3	%	
p-Isopropyltoluene		Lab Fort Blank Amt.	10.0	ug/l	70-130
		Lab Fort Blk. Found	11.3	ug/l	
n-Propylbenzene		Lab Fort Blk. % Rec.	113.7	%	70-130
		Lab Fort Blank Amt.	10.0	ug/l	
sec-Butylbenzene		Lab Fort Blk. Found	10.2	ug/l	70-130
		Lab Fort Blk. % Rec.	102.7	%	
tert-Butylbenzene		Lab Fort Blank Amt.	10.0	ug/l	70-130
		Lab Fort Blk. Found	10.1	ug/l	
1,2,3-Trichlorobenzene		Lab Fort Blk. % Rec.	101.1	%	70-130
		Lab Fort Blank Amt.	10.0	ug/l	
1,2,4-Trichlorobenzene		Lab Fort Blk. Found	10.0	ug/l	70-130
		Lab Fort Blk. % Rec.	10.5	ug/l	
1,2,4-Trimethylbenzene		Lab Fort Blk. % Rec.	105.1	%	70-130
		Lab Fort Blank Amt.	10.0	ug/l	
1,3,5-Trimethylbenzene		Lab Fort Blk. Found	10.0	ug/l	70-130
		Lab Fort Blk. % Rec.	10.2	ug/l	
Dibromomethane		Lab Fort Blk. % Rec.	102.3	%	70-130
		Lab Fort Blank Amt.	10.0	ug/l	
cis-1,2-Dichloroethylene		Lab Fort Blk. Found	8.8	ug/l	70-130
		Lab Fort Blk. % Rec.	88.7	%	
4-Chlorotoluene		Lab Fort Blank Amt.	10.0	ug/l	70-130
		Lab Fort Blk. Found	7.8	ug/l	
		Lab Fort Blk. % Rec.	78.0	%	70-130
		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	10.6	ug/l	70-130
		Lab Fort Blk. % Rec.	106.7	%	
		Lab Fort Blank Amt.	10.0	ug/l	70-130
		Lab Fort Blk. Found	10.1	ug/l	
		Lab Fort Blk. % Rec.	101.3	%	70-130
		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	10.4	ug/l	70-130
		Lab Fort Blk. % Rec.	104.3	%	
		Lab Fort Blank Amt.	10.0	ug/l	70-130
		Lab Fort Blk. Found	10.0	ug/l	
		Lab Fort Blk. % Rec.	100.1	%	70-130
		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	9.8	ug/l	

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QC Batch Number: GCMS/VOL-21190

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-89963					
	4-Chlorotoluene	Lab Fort Blk. % Rec.	98.5	%	70-130
	1,1-Dichloropropene	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	10.4	ug/l	
	1,2-Dichloropropane	Lab Fort Blk. % Rec.	104.5	%	70-130
		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	10.4	ug/l	
	1,3-Dichloropropane	Lab Fort Blk. % Rec.	104.4	%	70-130
		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	10.4	ug/l	
	2,2-Dichloropropane	Lab Fort Blk. % Rec.	104.1	%	70-130
		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	2.9	ug/l	
	1,1,1,2-Tetrachloroethane	Lab Fort Blk. % Rec.	29.1	%	40-130
		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	7.3	ug/l	
	1,2,3-Trichloropropane	Lab Fort Blk. % Rec.	73.4	%	70-130
		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	9.2	ug/l	
	n-Butylbenzene	Lab Fort Blk. % Rec.	92.3	%	70-130
		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	9.4	ug/l	
	Dichlorodifluoromethane	Lab Fort Blk. % Rec.	94.5	%	70-130
		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	9.5	ug/l	
	Bromochloromethane	Lab Fort Blk. % Rec.	95.0	%	40-160
		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	8.6	ug/l	
	Bromobenzene	Lab Fort Blk. % Rec.	86.7	%	70-130
		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	10.6	ug/l	
	Acrylonitrile	Lab Fort Blk. % Rec.	106.2	%	70-130
		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	8.1	ug/l	
	Carbon Disulfide	Lab Fort Blk. % Rec.	81.4	%	70-130
		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	10.0	ug/l	
	2-Hexanone	Lab Fort Blk. % Rec.	100.9	%	70-130
		Lab Fort Blank Amt.	100.0	ug/l	
		Lab Fort Blk. Found	73.3	ug/l	
	trans-1,4-Dichloro-2-Butene	Lab Fort Blk. % Rec.	73.3	%	70-160
		Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	5.7	ug/l	
		Lab Fort Blk. % Rec.	57.9	%	70-130

QC SUMMARY REPORT

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Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-89963					
	Diethyl Ether	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	9.3	ug/l	
		Lab Fort Blk. % Rec.	93.2	%	70-130
	Bromodichloromethane	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	9.1	ug/l	
		Lab Fort Blk. % Rec.	91.5	%	70-130
	1,2-Dibromo-3-Chloropropane	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	6.2	ug/l	
		Lab Fort Blk. % Rec.	62.2	%	70-130
	1,2-Dibromoethane	Lab Fort Blank Amt.	10.00	ug/l	
		Lab Fort Blk. Found	7.99	ug/l	
		Lab Fort Blk. % Rec.	79.90	%	70-130
	Tetrahydrofuran	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	7.6	ug/l	
		Lab Fort Blk. % Rec.	76.1	%	70-130
	tert-Butyl Alcohol	Lab Fort Blank Amt.	100.0	ug/l	
		Lab Fort Blk. Found	8.9	ug/l	
		Lab Fort Blk. % Rec.	8.9	%	40-160
	Diisopropyl Ether	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	8.1	ug/l	
		Lab Fort Blk. % Rec.	81.4	%	70-130
	tert-Butylethyl Ether	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	5.4	ug/l	
		Lab Fort Blk. % Rec.	54.6	%	70-160
	tert-Amylmethyl Ether	Lab Fort Blank Amt.	10.0	ug/l	
		Lab Fort Blk. Found	5.9	ug/l	
		Lab Fort Blk. % Rec.	59.6	%	70-130

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QUALITY CONTROL DEFINITIONS AND ABBREVIATIONS

QC BATCH NUMBER	This is the number assigned to all samples analyzed together that would be subject to comparison with a particular set of Quality Control Data.
LIMITS	Upper and Lower Control Limits for the QC ANALYSIS Reported. All values normally would fall within these statistically determined limits, unless there is an unusual circumstance that would be documented in a NOTE appearing on the last page of the QC SUMMARY REPORT. Not all QC results will have Limits defined.
Sample Amount	Amount of analyte found in a sample.
Blank	Method Blank that has been taken though all the steps of the analysis.
LFBLANK	Laboratory Fortified Blank (a control sample)
STDADD	Standard Added (a laboratory control sample)
Matrix Spk Amt Added	Amount of analyte spiked into a sample
MS Amt Measured	Amount of analyte found including amount that was spiked
Matrix Spike % Rec.	% Recovery of spiked amount in sample.
Duplicate Value	The result from the Duplicate analysis of the sample.
Duplicate RPD	The Relative Percent Difference between two Duplicate Analyses.
Surrogate Recovery	The % Recovery for non-environmental compounds (surrogates) spiked into samples to determine the performance of the analytical methods.
Sur. Recovery (ELCD)	Surrogate Recovery on the Electrolytic Conductivity Detector.
Sur. Recovery (PID)	Surrogate Recovery on the Photoionization Detector.
Standard Measured	Amount measured for a laboratory control sample
Standard Amt Added	Known value for a laboratory control sample
Standard % Recovery	% recovered for a laboratory control sample with a known value.
Lab Fort Blank Amt	Laboratory Fortified Blank Amount Added
Lab Fort Blk. Found	Laboratory Fortified Blank Amount Found
Lab Fort Blk % Rec	Laboratory Fortified Blank % Recovered
Dup Lab Fort Bl Amt	Duplicate Laboratory Fortified Blank Amount Added
Dup Lab Fort Bl Fnd	Duplicate Laboratory Fortified Blank Amount Found
Dup Lab Fort Bl % Rec	Duplicate Laboratory Fortified Blank % Recovery
Lab Fort Blank Range	Laboratory Fortified Blank Range (Absolute value of difference between recoveries for Lab Fortified Blank and Lab Fortified Blank Duplicate).
Lab Fort Bl. Av. Rec.	Laboratory Fortified Blank Average Recovery
Duplicate Sample Amt	Sample Value for Duplicate used with Matrix Spike Duplicate
MSD Amount Added	Matrix Spike Duplicate Amount Added (Spiked)
MSD Amt Measured	Matrix Spike Duplicate Amount Measured
MSD % Recovery	Matrix Spike Duplicate % Recovery
MSD Range	Absolute difference between Matrix Spike and Matrix Spike Duplicate Recoveries



Phone: 413-525-2332

Fax: 413-525-6405

Email: info@contestlabs.com

www.contestlabs.com

CHAIN OF CUSTODY RECORD

39 SPRUCE ST, 2ND FLOOR
EAST LONGMEADOW, MA 01028

Page 1 of 2

Company Name: ECOLOGY AND ENVIRONMENT ENGINEERING PCAddress: 365 PLEASANT VIEW DRLANCASTER, NY 14086Attention: RICK WATTProject Location: BRIGHT OUTDOORSSampled By: RICK WATT/KIM POWELL

Proposal Provided? (For Billing purposes)

☐ yes _____ proposal date

State Form Required?

☐ yes ☐ noTelephone: (716) 684-8060Project # 2700-DCZ1.01

Client PO # _____

DATA DELIVERY (check one):

☐ FAX ☐ EMAIL ☐ WEBSITE CLIENT

Fax # : _____

Email: _____

Format: ☐ EXCEL ☐ PDF ☐ GIS KEY☐ OTHER _____

Date Sampled

Field ID	Sample Description	Lab #	Start Date/Time	Stop Date/Time	Comp-osite	Grab	*Matrix Code	Conc. Code
MW-01		50004	12-16-08	1117		X	GW	L
MW-02		50005		1218		X	GW	L
MW-03		50006		1352		X	GW	L
MW-04		50007		1443		X	GW	L
MW-05		50008		1524		X	GW	L
MW-06		50009		1555		X	GW	L
MW-07		50010		0923		X	GW	L
MW-08		50011		1013		X	GW	L

Laboratory Comments:

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:

H - High; M - Medium; L - Low; C - Clean; U - Unknown

ANALYSIS REQUESTED

of containers

**Preservation

-Cont. Code

-Cont. Code:

A=amber glass

G=glass

P=plastic

ST=sterile

V= vial

S=summa can

T=tedlar bag

O=Other

Client
Comments:MW-03
triple
volume
MS/HSO

Relinquished by: (signature)

Date/Time:

Received by: (signature)

Date/Time:

Relinquished by: (signature)

Date/Time:

Received by: (signature)

Date/Time:

Turnaround **

- ☐
- 7-Day
-
- ☒
- 10-Day
-
- ☐
- Other _____

RUSH *

- ☐
- *24-Hr
- ☐
- *48-Hr
-
- ☐
- *72-Hr
- ☐
- *4-Day

* Require lab approval

Detection Limit Requirements

Regulations? _____

Data Enhancement Project/RCP? ☐ Y ☐ N

Special Requirements or DL's: _____

*Matrix Code:

GW= groundwater

WW= wastewater

DW= drinking water

A= air

S= soil/solid

SL= sludge

O= other

**Preservation Codes:

I= Iced

H= HCL

M= Methanol

N= Nitric Acid

S= Sulfuric Acid

B= Sodium bisulfate

O= Other

X= Na hydroxide

T= Na thiosulfate

** TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

AIHA, NELAC & WBE/DBE Certified



Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com

CHAIN OF CUSTODY RECORD

39 SPRUCE ST, 2ND FLOOR
EAST LONGMEADOW, MA 01028

Page 2 of 2

Company Name: ECOLOGY AND ENVIRONMENT ENGINEERS PC

Telephone: (714) 684-8060

Address: 368 PLEASANTVIEW DR

Project # 2700-DC21-01

LANCASTER NY 14086

Client PO #

Attention: RICK WATT

Project Location: BRIGHT OUTDOORS

Sampled By: RICK WATT/KIM POWELL

Proposal Provided? (For Billing purposes)

State Form Required?

☐ yes ☐ no

☐ yes ☐ no

☐ OTHER

Date Sampled

Field ID	Sample Description	Lab #	Start Date/Time	Stop Date/Time	Comp-osite	Grab	*Matrix Code	Conc. Code
<u>MW-08/Q</u>		<u>50012</u>	<u>12-16-08</u>	<u>1013</u>		<u>X</u>	<u>GW</u>	<u>L</u>
						<u>X</u>	<u>GW</u>	<u>L</u>
						<u>X</u>	<u>GW</u>	<u>L</u>
<u>TB121108</u>		<u>50013</u>	<u>12-16-08</u>	<u>0730</u>		<u>X</u>	<u>GW</u>	

ANALYSIS REQUESTED

of containers

**Preservation

-Cont.Code

-Cont.Code:

A=amber glass

G=glass

P=plastic

ST=sterile

V=vial

S=summa can

T=tedlar bag

O=Other

Client
Comments:

Laboratory Comments:

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:

H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)

Date/Time: 12-16-08/1700

Received by: (signature)

Date/Time:

Relinquished by: (signature)

Date/Time:

Received by: (signature)

Date/Time:

Turnaround **

- ☐ 7-Day
☒ 10-Day
☐ Other

RUSH *

- ☐ *24-Hr ☐ *48-Hr
☐ *72-Hr ☐ *4-Day

* Require lab approval

Detection Limit Requirements

Regulations? _____

Data Enhancement Project/RCP? ☐ Y ☐ N

Special Requirements or DL's: _____

*Matrix Code:

GW= groundwater

WW= wastewater

DW= drinking water

A = air

S = soil/solid

SL = sludge

O = other

**Preservation Codes:

I = Iced

H = HCL

M = Methanol

N = Nitric Acid

S = Sulfuric Acid

B = Sodium bisulfate

O = Other

X = Na hydroxide

T = Na thiosulfate

** TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

AIHA, NELAC & WBE/DBE Certified

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Tracking Summary

[Printer Friendly](#)**Tracking Number:** J217 9514 500[View package progress](#)**Type:** Package**Status:** **Delivered****Delivered On:** 12/17/2008
9:50 A.M.**Delivered To:** EAST LONGMEADOW, MA, US**Signed By:** MURPHY**Service:** NEXT DAY AIR

Tracking results provided by UPS: 12/17/2008 10:22 A.M. ET

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Sample Receipt Checklist

CLIENT NAME: Ecology & Env RECEIVED BY: KM DATE: 12/17/08

1) Was the chain(s) of custody relinquished and signed?

Yes No

2) Does the chain agree with the samples?

Yes No

If not, explain:

3) Are all the samples in good condition?

Yes No

If not, explain:

4) How were the samples received:

On Ice ☒

Direct from Sampling ☐

Ambient ☐

In Cooler(s) ☒

Were the samples received in Temperature Compliance of (2-6°C)?

Yes No

Temperature °C by Temp blank _____ Temperature °C by Temp gun 4.3

5) Are there Dissolved samples for the lab to filter?

Yes No

Who was notified _____ Date _____ Time _____

6) Are there any samples "On Hold"?

Yes No

Stored where: _____

7) Are there any RUSH or SHORT HOLDING TIME samples?

Yes No

Who was notified _____ Date _____ Time _____

8) Location where samples are stored:

19A

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved

Client Signature: _____

Containers sent in to Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz clear jar	
500 mL Amber		4 oz clear jar	
250 mL Amber (8oz amber)		2 oz clear jar	
1 Liter Plastic		Other glass jar	
500 mL Plastic		Plastic Bag / Ziploc	
250 mL plastic		Air Cassette	
40 mL Vial - type listed below	<u>35</u>	Brass Sleeves	
Colisure / bacteria bottle		Tubes	
Dissolved Oxygen bottle		Summa Cans	
Flashpoint bottle		Regulators	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl 35 # Methanol _____

Bisulfate _____ # DI Water _____

Thiosulfate _____ Unpreserved _____

Time and Date Frozen: _____

Do all samples have the proper pH: Yes No N/A

ECOLOGY & ENVIRONMENT

368 PLEASANT VIEW

LANCASTER, NY 14086

ATTN: RICK WATT

CONTRACT NUMBER:

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 2700.DC21

ANALYTICAL SUMMARY

LIMS BAT #: LIMIT-22131

JOB NUMBER: 2700.DC21

PROJECT LOCATION: BRIGHT OUTDOORS

FIELD SAMPLE #	LAB ID	MATRIX	SAMPLE DESCRIPTION	TEST	Subcontract Lab (if any) Cert. Nos.
AS-20	08B50014	AIR	Not Specified	to-15 ppbv	
AS-20	08B50014	AIR	Not Specified	to-15 ug/m3	
AS-60	08B50015	AIR	Not Specified	to-15 ppbv	
AS-60	08B50015	AIR	Not Specified	to-15 ug/m3	



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

REPORT DATE 12/19/2008

ECOLOGY & ENVIRONMENT

368 PLEASANT VIEW
LANCASTER, NY 14086
ATTN: RICK WATT

CONTRACT NUMBER:
PURCHASE ORDER NUMBER:

PROJECT NUMBER: 2700.DC21

ANALYTICAL SUMMARY

LIMS BAT #: LIMIT-22131
JOB NUMBER: 2700.DC21

Comments :

LIMS BATCH NO. : LIMIT-22131

CASE NARRATIVE

In method TO-15, any reported result for 1,2,4-Trimethylbenzene in sample is likely to be biased on the high side based on laboratory fortified blank recovery bias.

In method TO-15, method blank associated with sample contained acetone at 0.56 ppbv = 1.3 ug/m3, methylene chloride at 0.06 ppbv = 0.20 ug/m3, IPA at 0.03 ppbv = 0.08 ug/m3, 2-butanone at 0.06 ppbv = 0.19 ug/m3, 1,2,4-trichlorobenzene at 0.04 ppbv = 0.34 ug/m3 and hexachlorobutadiene at 0.02 ppbv = 0.27 ug/m3.

There are no (other) analytical issues that affect the usability of the data.

METHOD TO-15 - ADDITIONAL DETAILS

In method TO-15, data is not affected by laboratory fortified blank recovery outlier(s) for benzyl chloride since all results are "not detected" and recovery bias is on the high side.

All TO-15 samples were analyzed undiluted unless specified below:

Sample	Dilution	Compound(s)
08B50014	2X	most
	20X	1,1,1-trichloroethane, TCE
08B50015	2X	most
	20X	toluene

The results of analyses performed are based on samples as submitted to the laboratory and relate only to the items collected and tested.

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations. AIHA accreditations only apply to NIOSH methods and Environmental Lead Analyses.

AIHA 100033	AIHA ELLAP (LEAD) 100033	NORTH CAROLINA CERT. # 652
MASSACHUSETTS MA0100	NEW HAMPSHIRE NELAP 2516	NEW JERSEY NELAP NJ MA007 (AIR)
CONNECTICUT PH-0567	VERMONT DOH (LEAD) No. LL015036	FLORIDA DOH E871027 (AIR)
NEW YORK ELAP/NELAP 10899	RHODE ISLAND (LIC. No. 112)	

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Edward Denson 12/19/08

SIGNATURE

DATE

Tod Kopyscinski
Air Laboratory Manager

Michael Erickson
Assistant Laboratory Director

Edward Denson
Technical Director

Daren Damboragian
Organics Department Supervisor

ECOLOGY & ENVIRONMENT

368 PLEASANT VIEW

LANCASTER, NY 14086

ATTN: RICK WATT

CONTRACT NUMBER:

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 2700.DC21

ANALYTICAL SUMMARY

LIMS BAT #: LIMT-22131

JOB NUMBER: 2700.DC21

* See end of data tabulation for notes and comments pertaining to this sample

RICK WATT
ECOLOGY & ENVIRONMENT
368 PLEASANT VIEW
LANCASTER, NY 14086

Purchase Order No.:

Project Location: BRIGHT OUTDOORS
Date Received: 12/17/2008

Field Sample #: AS-20

Sample ID: 08B50014

Sample Matrix: AIR

‡Sampled: 12/16/2008

Not Specified

Sample Medium: SUMMA

12/19/2008

Page 1 of 13

Project Number: 2700.DC21

LIMS-BAT #: LIMIT-22131

Job Number: 2700.DC21

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	PPBv	1.8	12/18/08	TPH	0.10		
Benzene	PPBv	0.18	12/18/08	TPH	0.10		
Benzyl Chloride	PPBv	ND	12/18/08	TPH	0.10		
Bromodichloromethane	PPBv	ND	12/18/08	TPH	0.10		
Bromoform	PPBv	ND	12/18/08	TPH	0.10		
Bromomethane	PPBv	ND	12/18/08	TPH	0.10		
1,3-Butadiene	PPBv	ND	12/18/08	TPH	0.10		
2-Butanone (MEK)	PPBv	0.20	12/18/08	TPH	0.10		
Carbon Disulfide	PPBv	0.15	12/18/08	TPH	0.10		
Carbon Tetrachloride	PPBv	ND	12/18/08	TPH	0.10		
Chlorobenzene	PPBv	ND	12/18/08	TPH	0.10		
Chlorodibromomethane	PPBv	ND	12/18/08	TPH	0.10		
Chloroethane	PPBv	ND	12/18/08	TPH	0.10		
Chloroform	PPBv	3.0	12/18/08	TPH	0.10		
Chloromethane	PPBv	0.29	12/18/08	TPH	0.10		
Cyclohexane	PPBv	ND	12/18/08	TPH	0.10		
1,2-Dibromoethane	PPBv	ND	12/18/08	TPH	0.10		
1,2-Dichlorobenzene	PPBv	ND	12/18/08	TPH	0.10		
1,3-Dichlorobenzene	PPBv	ND	12/18/08	TPH	0.10		
1,4-Dichlorobenzene	PPBv	ND	12/18/08	TPH	0.10		
Dichlorodifluoromethane	PPBv	0.44	12/18/08	TPH	0.10		
1,1-Dichloroethane	PPBv	0.32	12/18/08	TPH	0.10		
1,2-Dichloroethane	PPBv	ND	12/18/08	TPH	0.10		
1,1-Dichloroethylene	PPBv	0.21	12/18/08	TPH	0.10		
cis-1,2-Dichloroethylene	PPBv	ND	12/18/08	TPH	0.10		
t-1,2-Dichloroethylene	PPBv	ND	12/18/08	TPH	0.10		
1,2-Dichloropropane	PPBv	ND	12/18/08	TPH	0.10		
cis-1,3-Dichloropropene	PPBv	ND	12/18/08	TPH	0.10		
trans-1,3-Dichloropropene	PPBv	ND	12/18/08	TPH	0.10		

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

RICK WATT
 ECOLOGY & ENVIRONMENT
 368 PLEASANT VIEW
 LANCASTER, NY 14086

Purchase Order No.:

Project Location: BRIGHT OUTDOORS
 Date Received: 12/17/2008

Field Sample #: AS-20

Sample ID: 08B50014

Sample Matrix: AIR

‡Sampled: 12/16/2008

Not Specified

Sample Medium: SUMMA

12/19/2008

Page 2 of 13

Project Number: 2700.DC21

LIMS-BAT #: LIMIT-22131

Job Number: 2700.DC21

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	12/18/08	TPH	0.10		
Ethanol	PPBv	2.2	12/18/08	TPH	0.10		
Ethyl Acetate	PPBv	ND	12/18/08	TPH	0.20		
Ethylbenzene	PPBv	ND	12/18/08	TPH	0.10		
4-Ethyl Toluene	PPBv	ND	12/18/08	TPH	0.10		
n-Heptane	PPBv	ND	12/18/08	TPH	0.10		
Hexachlorobutadiene	PPBv	ND	12/18/08	TPH	0.10		
Hexane	PPBv	0.28	12/18/08	TPH	0.10		
2-Hexanone	PPBv	ND	12/18/08	TPH	0.10		
Isopropanol	PPBv	0.61	12/18/08	TPH	0.10		
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	12/18/08	TPH	0.10		
Methylene Chloride	PPBv	1.5	12/18/08	TPH	0.10		
4-Methyl-2-Pentanone (MIBK)	PPBv	ND	12/18/08	TPH	0.10		
Propene	PPBv	ND	12/18/08	TPH	0.10		
Styrene	PPBv	ND	12/18/08	TPH	0.10		
1,1,2,2-Tetrachloroethane	PPBv	ND	12/18/08	TPH	0.10		
Tetrachloroethylene	PPBv	5.1	12/18/08	TPH	0.10		
Tetrahydrofuran	PPBv	0.12	12/18/08	TPH	0.10		
Toluene	PPBv	3.0	12/18/08	TPH	0.10		
1,2,4-Trichlorobenzene	PPBv	ND	12/18/08	TPH	0.10		
1,1,1-Trichloroethane	PPBv	81	12/18/08	TPH	0.10		
1,1,2-Trichloroethane	PPBv	ND	12/18/08	TPH	0.10		
Trichloroethylene	PPBv	150	12/18/08	TPH	0.10		
Trichlorofluoromethane (Freon 11)	PPBv	0.43	12/18/08	TPH	0.10		
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	0.15	12/18/08	TPH	0.10		
1,2,4-Trimethylbenzene	PPBv	ND	12/18/08	TPH	0.10		
1,3,5-Trimethylbenzene	PPBv	ND	12/18/08	TPH	0.10		
Vinyl Acetate	PPBv	ND	12/18/08	TPH	0.10		
Vinyl Chloride	PPBv	ND	12/18/08	TPH	0.10		

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RICK WATT

ECOLOGY & ENVIRONMENT

368 PLEASANT VIEW

LANCASTER, NY 14086

Project Location: BRIGHT OUTDOORS

Date Received: 12/17/2008

Field Sample #: AS-20

Sample ID: 08B50014

Sample Matrix: AIR

Purchase Order No.:

‡Sampled: 12/16/2008

Not Specified

Sample Medium: SUMMA

12/19/2008

Page 3 of 13

Project Number: 2700.DC21

LIMS-BAT #: LIMIT-22131

Job Number: 2700.DC21

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
m/p-Xylene	PPBv	ND	12/18/08	TPH	0.20		
o-Xylene	PPBv	ND	12/18/08	TPH	0.10		

Analytical Method:

EPA TO-15

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

RICK WATT
ECOLOGY & ENVIRONMENT
368 PLEASANT VIEW
LANCASTER, NY 14086

12/19/2008
Page 4 of 13

Project Location: BRIGHT OUTDOORS
Date Received: 12/17/2008

Purchase Order No.:

Project Number: 2700.DC21
LIMS-BAT #: LIMIT-22131
Job Number: 2700.DC21

Field Sample #: AS-60

Sample ID: 08B50015

‡Sampled: 12/16/2008

Not Specified

Sample Matrix: AIR

Sample Medium: SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	PPBv	9.1	12/18/08	TPH	0.10		
Benzene	PPBv	0.24	12/18/08	TPH	0.10		
Benzyl Chloride	PPBv	ND	12/18/08	TPH	0.10		
Bromodichloromethane	PPBv	ND	12/18/08	TPH	0.10		
Bromoform	PPBv	ND	12/18/08	TPH	0.10		
Bromomethane	PPBv	ND	12/18/08	TPH	0.10		
1,3-Butadiene	PPBv	ND	12/18/08	TPH	0.10		
2-Butanone (MEK)	PPBv	0.92	12/18/08	TPH	0.10		
Carbon Disulfide	PPBv	ND	12/18/08	TPH	0.10		
Carbon Tetrachloride	PPBv	ND	12/18/08	TPH	0.10		
Chlorobenzene	PPBv	ND	12/18/08	TPH	0.10		
Chlorodibromomethane	PPBv	ND	12/18/08	TPH	0.10		
Chloroethane	PPBv	ND	12/18/08	TPH	0.10		
Chloroform	PPBv	0.33	12/18/08	TPH	0.10		
Chloromethane	PPBv	0.70	12/18/08	TPH	0.10		
Cyclohexane	PPBv	ND	12/18/08	TPH	0.10		
1,2-Dibromoethane	PPBv	ND	12/18/08	TPH	0.10		
1,2-Dichlorobenzene	PPBv	ND	12/18/08	TPH	0.10		
1,3-Dichlorobenzene	PPBv	ND	12/18/08	TPH	0.10		
1,4-Dichlorobenzene	PPBv	ND	12/18/08	TPH	0.10		
Dichlorodifluoromethane	PPBv	0.32	12/18/08	TPH	0.10		
1,1-Dichloroethane	PPBv	ND	12/18/08	TPH	0.10		
1,2-Dichloroethane	PPBv	ND	12/18/08	TPH	0.10		
1,1-Dichloroethylene	PPBv	ND	12/18/08	TPH	0.10		
cis-1,2-Dichloroethylene	PPBv	ND	12/18/08	TPH	0.10		
t-1,2-Dichloroethylene	PPBv	ND	12/18/08	TPH	0.10		
1,2-Dichloropropane	PPBv	ND	12/18/08	TPH	0.10		
cis-1,3-Dichloropropene	PPBv	ND	12/18/08	TPH	0.10		
trans-1,3-Dichloropropene	PPBv	ND	12/18/08	TPH	0.10		

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RICK WATT
ECOLOGY & ENVIRONMENT
368 PLEASANT VIEW
LANCASTER, NY 14086

12/19/2008
Page 5 of 13

Project Location: BRIGHT OUTDOORS
Date Received: 12/17/2008

Purchase Order No.:

Project Number: 2700.DC21
LIMS-BAT #: LIMIT-22131
Job Number: 2700.DC21

Field Sample #: AS-60

Sample ID: 08B50015

‡Sampled: 12/16/2008

Not Specified

Sample Matrix: AIR

Sample Medium: SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	12/18/08	TPH	0.10		
Ethanol	PPBv	3.8	12/18/08	TPH	0.10		
Ethyl Acetate	PPBv	ND	12/18/08	TPH	0.20		
Ethylbenzene	PPBv	0.32	12/18/08	TPH	0.10		
4-Ethyl Toluene	PPBv	ND	12/18/08	TPH	0.10		
n-Heptane	PPBv	ND	12/18/08	TPH	0.10		
Hexachlorobutadiene	PPBv	ND	12/18/08	TPH	0.10		
Hexane	PPBv	0.73	12/18/08	TPH	0.10		
2-Hexanone	PPBv	ND	12/18/08	TPH	0.10		
Isopropanol	PPBv	2.4	12/18/08	TPH	0.10		
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	12/18/08	TPH	0.10		
Methylene Chloride	PPBv	3.8	12/18/08	TPH	0.10		
4-Methyl-2-Pentanone (MIBK)	PPBv	ND	12/18/08	TPH	0.10		
Propene	PPBv	1.0	12/18/08	TPH	0.10		
Styrene	PPBv	ND	12/18/08	TPH	0.10		
1,1,2,2-Tetrachloroethane	PPBv	ND	12/18/08	TPH	0.10		
Tetrachloroethylene	PPBv	0.27	12/18/08	TPH	0.10		
Tetrahydrofuran	PPBv	ND	12/18/08	TPH	0.10		
Toluene	PPBv	440	12/18/08	TPH	0.10		
1,2,4-Trichlorobenzene	PPBv	ND	12/18/08	TPH	0.10		
1,1,1-Trichloroethane	PPBv	4.3	12/18/08	TPH	0.10		
1,1,2-Trichloroethane	PPBv	ND	12/18/08	TPH	0.10		
Trichloroethylene	PPBv	38	12/18/08	TPH	0.10		
Trichlorofluoromethane (Freon 11)	PPBv	0.22	12/18/08	TPH	0.10		
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	ND	12/18/08	TPH	0.10		
1,2,4-Trimethylbenzene	PPBv	0.13	12/18/08	TPH	0.10		
1,3,5-Trimethylbenzene	PPBv	ND	12/18/08	TPH	0.10		
Vinyl Acetate	PPBv	ND	12/18/08	TPH	0.10		
Vinyl Chloride	PPBv	ND	12/18/08	TPH	0.10		

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‡ = See attached chain-of-custody record for time sampled

RICK WATT

ECOLOGY & ENVIRONMENT

368 PLEASANT VIEW

LANCASTER, NY 14086

Project Location: BRIGHT OUTDOORS

Date Received: 12/17/2008

Field Sample #: AS-60

Sample ID: 08B50015

Sample Matrix: AIR

Purchase Order No.:

‡Sampled: 12/16/2008

Not Specified

Sample Medium: SUMMA

12/19/2008

Page 6 of 13

Project Number: 2700.DC21

LIMS-BAT #: LIMIT-22131

Job Number: 2700.DC21

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
m/p-Xylene	PPBv	0.48	12/18/08	TPH	0.20		
o-Xylene	PPBv	0.19	12/18/08	TPH	0.10		

Analytical Method:

EPA TO-15

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

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RICK WATT
 ECOLOGY & ENVIRONMENT
 368 PLEASANT VIEW
 LANCASTER, NY 14086

Purchase Order No.:

Project Location: BRIGHT OUTDOORS
 Date Received: 12/17/2008

Field Sample #: AS-20

Sample ID: 08B50014

Sample Matrix: AIR

‡Sampled: 12/16/2008

Not Specified

Sample Medium: SUMMA

12/19/2008

Page 7 of 13

Project Number: 2700.DC21

LIMS-BAT #: LIMIT-22131

Job Number: 2700.DC21

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	ug/m3	4.4	12/18/08	TPH	0.24		
Benzene	ug/m3	0.57	12/18/08	TPH	0.32		
Benzyl Chloride	ug/m3	ND	12/18/08	TPH	0.52		
Bromodichloromethane	ug/m3	ND	12/18/08	TPH	0.66		
Bromoform	ug/m3	ND	12/18/08	TPH	1.1		
Bromomethane	ug/m3	ND	12/18/08	TPH	0.38		
1,3-Butadiene	ug/m3	ND	12/18/08	TPH	0.22		
2-Butanone (MEK)	ug/m3	0.60	12/18/08	TPH	0.30		
Carbon Disulfide	ug/m3	0.47	12/18/08	TPH	0.32		
Carbon Tetrachloride	ug/m3	ND	12/18/08	TPH	0.62		
Chlorobenzene	ug/m3	ND	12/18/08	TPH	0.46		
Chlorodibromomethane	ug/m3	ND	12/18/08	TPH	0.86		
Chloroethane	ug/m3	ND	12/18/08	TPH	0.26		
Chloroform	ug/m3	14	12/18/08	TPH	0.48		
Chloromethane	ug/m3	0.61	12/18/08	TPH	0.20		
Cyclohexane	ug/m3	ND	12/18/08	TPH	0.34		
1,2-Dibromoethane	ug/m3	ND	12/18/08	TPH	0.76		
1,2-Dichlorobenzene	ug/m3	ND	12/18/08	TPH	0.60		
1,3-Dichlorobenzene	ug/m3	ND	12/18/08	TPH	0.60		
1,4-Dichlorobenzene	ug/m3	ND	12/18/08	TPH	0.60		
Dichlorodifluoromethane	ug/m3	2.2	12/18/08	TPH	0.50		
1,1-Dichloroethane	ug/m3	1.3	12/18/08	TPH	0.40		
1,2-Dichloroethane	ug/m3	ND	12/18/08	TPH	0.40		
1,1-Dichloroethylene	ug/m3	0.84	12/18/08	TPH	0.40		
cis-1,2-Dichloroethylene	ug/m3	ND	12/18/08	TPH	0.40		
t-1,2-Dichloroethylene	ug/m3	ND	12/18/08	TPH	0.40		
1,2-Dichloropropane	ug/m3	ND	12/18/08	TPH	0.46		
cis-1,3-Dichloropropene	ug/m3	ND	12/18/08	TPH	0.44		
trans-1,3-Dichloropropene	ug/m3	ND	12/18/08	TPH	0.44		

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RICK WATT

ECOLOGY & ENVIRONMENT

368 PLEASANT VIEW

LANCASTER, NY 14086

Project Location: BRIGHT OUTDOORS

Date Received: 12/17/2008

Field Sample #: AS-20

Sample ID: 08B50014

Sample Matrix: AIR

Purchase Order No.:

‡Sampled: 12/16/2008

Not Specified

Sample Medium: SUMMA

12/19/2008

Page 8 of 13

Project Number: 2700.DC21

LIMS-BAT #: LIMIT-22131

Job Number: 2700.DC21

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	12/18/08	TPH	0.70		
Ethanol	ug/m3	4.1	12/18/08	TPH	0.18		
Ethyl Acetate	ug/m3	ND	12/18/08	TPH	0.73		
Ethylbenzene	ug/m3	ND	12/18/08	TPH	0.44		
4-Ethyl Toluene	ug/m3	ND	12/18/08	TPH	0.50		
n-Heptane	ug/m3	ND	12/18/08	TPH	0.40		
Hexachlorobutadiene	ug/m3	ND	12/18/08	TPH	1.1		
Hexane	ug/m3	0.97	12/18/08	TPH	0.36		
2-Hexanone	ug/m3	ND	12/18/08	TPH	0.40		
Isopropanol	ug/m3	1.5	12/18/08	TPH	0.24		
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	12/18/08	TPH	0.36		
Methylene Chloride	ug/m3	5.1	12/18/08	TPH	0.34		
4-Methyl-2-Pentanone (MIBK)	ug/m3	ND	12/18/08	TPH	0.40		
Propene	ug/m3	ND	12/18/08	TPH	0.18		
Styrene	ug/m3	ND	12/18/08	TPH	0.42		
1,1,2,2-Tetrachloroethane	ug/m3	ND	12/18/08	TPH	0.68		
Tetrachloroethylene	ug/m3	34	12/18/08	TPH	0.68		
Tetrahydrofuran	ug/m3	0.34	12/18/08	TPH	0.30		
Toluene	ug/m3	11	12/18/08	TPH	0.38		
1,2,4-Trichlorobenzene	ug/m3	ND	12/18/08	TPH	0.74		
1,1,1-Trichloroethane	ug/m3	440	12/18/08	TPH	0.54		
1,1,2-Trichloroethane	ug/m3	ND	12/18/08	TPH	0.54		
Trichloroethylene	ug/m3	830	12/18/08	TPH	0.54		
Trichlorofluoromethane	ug/m3	2.4	12/18/08	TPH	0.56		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.2	12/18/08	TPH	0.76		
1,2,4-Trimethylbenzene	ug/m3	ND	12/18/08	TPH	0.50		
1,3,5-Trimethylbenzene	ug/m3	ND	12/18/08	TPH	0.50		
Vinyl Acetate	ug/m3	ND	12/18/08	TPH	0.36		
Vinyl Chloride	ug/m3	ND	12/18/08	TPH	0.26		

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RICK WATT

ECOLOGY & ENVIRONMENT

368 PLEASANT VIEW

LANCASTER, NY 14086

Project Location: BRIGHT OUTDOORS

Date Received: 12/17/2008

Field Sample #: AS-20

Sample ID: 08B50014

Sample Matrix: AIR

Purchase Order No.:

‡Sampled: 12/16/2008

Not Specified

Sample Medium: SUMMA

12/19/2008

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Project Number: 2700.DC21

LIMS-BAT #: LIMIT-22131

Job Number: 2700.DC21

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
m/p-Xylene	ug/m3	ND	12/18/08	TPH	0.86		
o-Xylene	ug/m3	ND	12/18/08	TPH	0.44		

Analytical Method:

EPA TO-15

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

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RICK WATT
ECOLOGY & ENVIRONMENT
368 PLEASANT VIEW
LANCASTER, NY 14086

Purchase Order No.:

Project Location: BRIGHT OUTDOORS
Date Received: 12/17/2008

Field Sample #: AS-60

Sample ID: 08B50015

Sample Matrix: AIR

‡Sampled: 12/16/2008

Not Specified

Sample Medium: SUMMA

12/19/2008

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Project Number: 2700.DC21

LIMS-BAT #: LIMIT-22131

Job Number: 2700.DC21

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	ug/m3	22	12/18/08	TPH	0.24		
Benzene	ug/m3	0.77	12/18/08	TPH	0.32		
Benzyl Chloride	ug/m3	ND	12/18/08	TPH	0.52		
Bromodichloromethane	ug/m3	ND	12/18/08	TPH	0.66		
Bromoform	ug/m3	ND	12/18/08	TPH	1.1		
Bromomethane	ug/m3	ND	12/18/08	TPH	0.38		
1,3-Butadiene	ug/m3	ND	12/18/08	TPH	0.22		
2-Butanone (MEK)	ug/m3	2.7	12/18/08	TPH	0.30		
Carbon Disulfide	ug/m3	ND	12/18/08	TPH	0.32		
Carbon Tetrachloride	ug/m3	ND	12/18/08	TPH	0.62		
Chlorobenzene	ug/m3	ND	12/18/08	TPH	0.46		
Chlorodibromomethane	ug/m3	ND	12/18/08	TPH	0.86		
Chloroethane	ug/m3	ND	12/18/08	TPH	0.26		
Chloroform	ug/m3	1.6	12/18/08	TPH	0.48		
Chloromethane	ug/m3	1.5	12/18/08	TPH	0.20		
Cyclohexane	ug/m3	ND	12/18/08	TPH	0.34		
1,2-Dibromoethane	ug/m3	ND	12/18/08	TPH	0.76		
1,2-Dichlorobenzene	ug/m3	ND	12/18/08	TPH	0.60		
1,3-Dichlorobenzene	ug/m3	ND	12/18/08	TPH	0.60		
1,4-Dichlorobenzene	ug/m3	ND	12/18/08	TPH	0.60		
Dichlorodifluoromethane	ug/m3	1.6	12/18/08	TPH	0.50		
1,1-Dichloroethane	ug/m3	ND	12/18/08	TPH	0.40		
1,2-Dichloroethane	ug/m3	ND	12/18/08	TPH	0.40		
1,1-Dichloroethylene	ug/m3	ND	12/18/08	TPH	0.40		
cis-1,2-Dichloroethylene	ug/m3	ND	12/18/08	TPH	0.40		
t-1,2-Dichloroethylene	ug/m3	ND	12/18/08	TPH	0.40		
1,2-Dichloropropane	ug/m3	ND	12/18/08	TPH	0.46		
cis-1,3-Dichloropropene	ug/m3	ND	12/18/08	TPH	0.44		
trans-1,3-Dichloropropene	ug/m3	ND	12/18/08	TPH	0.44		

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RICK WATT
ECOLOGY & ENVIRONMENT
368 PLEASANT VIEW
LANCASTER, NY 14086

12/19/2008
Page 11 of 13

Project Location: BRIGHT OUTDOORS
Date Received: 12/17/2008

Purchase Order No.:

Project Number: 2700.DC21
LIMS-BAT #: LIMIT-22131
Job Number: 2700.DC21

Field Sample #: AS-60

Sample ID: 08B50015

‡Sampled: 12/16/2008

Not Specified

Sample Matrix: AIR

Sample Medium: SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	12/18/08	TPH	0.70		
Ethanol	ug/m3	7.2	12/18/08	TPH	0.18		
Ethyl Acetate	ug/m3	ND	12/18/08	TPH	0.73		
Ethylbenzene	ug/m3	1.4	12/18/08	TPH	0.44		
4-Ethyl Toluene	ug/m3	ND	12/18/08	TPH	0.50		
n-Heptane	ug/m3	ND	12/18/08	TPH	0.40		
Hexachlorobutadiene	ug/m3	ND	12/18/08	TPH	1.1		
Hexane	ug/m3	2.6	12/18/08	TPH	0.36		
2-Hexanone	ug/m3	ND	12/18/08	TPH	0.40		
Isopropanol	ug/m3	5.8	12/18/08	TPH	0.24		
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	12/18/08	TPH	0.36		
Methylene Chloride	ug/m3	13	12/18/08	TPH	0.34		
4-Methyl-2-Pentanone (MIBK)	ug/m3	ND	12/18/08	TPH	0.40		
Propene	ug/m3	1.8	12/18/08	TPH	0.18		
Styrene	ug/m3	ND	12/18/08	TPH	0.42		
1,1,2,2-Tetrachloroethane	ug/m3	ND	12/18/08	TPH	0.68		
Tetrachloroethylene	ug/m3	1.9	12/18/08	TPH	0.68		
Tetrahydrofuran	ug/m3	ND	12/18/08	TPH	0.30		
Toluene	ug/m3	1700	12/18/08	TPH	0.38		
1,2,4-Trichlorobenzene	ug/m3	ND	12/18/08	TPH	0.74		
1,1,1-Trichloroethane	ug/m3	23	12/18/08	TPH	0.54		
1,1,2-Trichloroethane	ug/m3	ND	12/18/08	TPH	0.54		
Trichloroethylene	ug/m3	210	12/18/08	TPH	0.54		
Trichlorofluoromethane	ug/m3	1.2	12/18/08	TPH	0.56		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	ND	12/18/08	TPH	0.76		
1,2,4-Trimethylbenzene	ug/m3	0.66	12/18/08	TPH	0.50		
1,3,5-Trimethylbenzene	ug/m3	ND	12/18/08	TPH	0.50		
Vinyl Acetate	ug/m3	ND	12/18/08	TPH	0.36		
Vinyl Chloride	ug/m3	ND	12/18/08	TPH	0.26		

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RICK WATT

ECOLOGY & ENVIRONMENT

368 PLEASANT VIEW

LANCASTER, NY 14086

Project Location: BRIGHT OUTDOORS

Date Received: 12/17/2008

Field Sample #: AS-60

Sample ID: 08B50015

Sample Matrix: AIR

Purchase Order No.:

‡Sampled: 12/16/2008

Not Specified

Sample Medium: SUMMA

12/19/2008

Page 12 of 13

Project Number: 2700.DC21

LIMS-BAT #: LIMIT-22131

Job Number: 2700.DC21

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
m/p-Xylene	ug/m3	2.1	12/18/08	TPH	0.86		
o-Xylene	ug/m3	0.83	12/18/08	TPH	0.44		

Analytical Method:

EPA TO-15

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

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RICK WATT

ECOLOGY & ENVIRONMENT

368 PLEASANT VIEW

LANCASTER, NY 14086

Project Location: BRIGHT OUTDOORS

Date Received: 12/17/2008

Purchase Order No.:

12/19/2008

Page 13 of 13

Project Number: 2700.DC21

LIMS-BAT #: LIMT-22131

Job Number: 2700.DC21

** END OF REPORT **

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SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 12/19/2008

Lims Bat #: LIMIT-22131

Page 1 of 8

QC Batch Number: BATCH-15724

Sample Id	Analysis	QC Analysis	Values	Units	Limits
08B50014	4-Bromofluorobenzene	Surrogate Recovery	98.50	%	70-130
08B50015	4-Bromofluorobenzene	Surrogate Recovery	99.37	%	70-130
BLANK-127841	Acetone	Blank	1.33	ug/m3	
	Benzene	Blank	<0.08	ug/m3	
	Carbon Tetrachloride	Blank	<0.16	ug/m3	
	Chloroform	Blank	<0.12	ug/m3	
	1,2-Dichloroethane	Blank	<0.10	ug/m3	
	1,4-Dichlorobenzene	Blank	<0.15	ug/m3	
	Ethyl Acetate	Blank	<0.19	ug/m3	
	Ethylbenzene	Blank	<0.11	ug/m3	
	Hexane	Blank	<0.09	ug/m3	
	Isopropanol	Blank	0.08	ug/m3	
	2-Butanone (MEK)	Blank	0.19	ug/m3	
	4-Methyl-2-Pentanone (MIBK)	Blank	<0.10	ug/m3	
	Styrene	Blank	<0.11	ug/m3	
	Tetrachloroethylene	Blank	<0.17	ug/m3	
	Toluene	Blank	<0.10	ug/m3	
	1,1,1-Trichloroethane	Blank	<0.14	ug/m3	
	Trichloroethylene	Blank	<0.14	ug/m3	
	1,1,2-Trichloro-1,2,2-Trifluoroethane	Blank	<0.19	ug/m3	
	Trichlorofluoromethane	Blank	<0.14	ug/m3	
	o-Xylene	Blank	<0.11	ug/m3	
	m/p-Xylene	Blank	<0.22	ug/m3	
	1,2-Dichlorobenzene	Blank	<0.15	ug/m3	
	1,3-Dichlorobenzene	Blank	<0.15	ug/m3	
	1,1-Dichloroethane	Blank	<0.10	ug/m3	
	1,1-Dichloroethylene	Blank	<0.10	ug/m3	
	Ethanol	Blank	<0.19	ug/m3	
	4-Ethyl Toluene	Blank	<0.13	ug/m3	
	Methyl tert-Butyl Ether (MTBE)	Blank	<0.09	ug/m3	
	t-1,2-Dichloroethylene	Blank	<0.10	ug/m3	
	Vinyl Chloride	Blank	<0.07	ug/m3	
	Methylene Chloride	Blank	0.20	ug/m3	
	Chlorobenzene	Blank	<0.12	ug/m3	
	Chloromethane	Blank	<0.05	ug/m3	
	Bromomethane	Blank	<0.10	ug/m3	
	Chloroethane	Blank	<0.07	ug/m3	
	cis-1,3-Dichloropropene	Blank	<0.11	ug/m3	
	trans-1,3-Dichloropropene	Blank	<0.11	ug/m3	
	Chlorodibromomethane	Blank	<0.22	ug/m3	
	1,1,2-Trichloroethane	Blank	<0.14	ug/m3	

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 12/19/2008

Lims Bat #: LIMIT-22131

Page 2 of 8

QC Batch Number: BATCH-15724

Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-127841					
	Bromoform	Blank	<0.26	ug/m3	
	1,1,2,2-Tetrachloroethane	Blank	<0.17	ug/m3	
	Hexachlorobutadiene	Blank	0.27	ug/m3	
	1,2,4-Trichlorobenzene	Blank	0.34	ug/m3	
	1,2,4-Trimethylbenzene	Blank	<0.13	ug/m3	
	1,3,5-Trimethylbenzene	Blank	<0.13	ug/m3	
	Cyclohexane	Blank	<0.09	ug/m3	
	cis-1,2-Dichloroethylene	Blank	<0.10	ug/m3	
	1,2-Dichloropropane	Blank	<0.12	ug/m3	
	Dichlorodifluoromethane	Blank	<0.13	ug/m3	
	Benzyl Chloride	Blank	<0.13	ug/m3	
	Carbon Disulfide	Blank	<0.08	ug/m3	
	Vinyl Acetate	Blank	<0.09	ug/m3	
	2-Hexanone	Blank	<0.10	ug/m3	
	Bromodichloromethane	Blank	<0.17	ug/m3	
	1,2-Dibromoethane	Blank	<0.19	ug/m3	
	n-Heptane	Blank	<0.10	ug/m3	
	1,2-Dichlorotetrafluoroethane (114)	Blank	<0.18	ug/m3	
	Tetrahydrofuran	Blank	<0.08	ug/m3	
	Propene	Blank	<0.05	ug/m3	
	1,3-Butadiene	Blank	<0.06	ug/m3	
LFBLANK-89832					
	Acetone	Lab Fort Blank Amt.	11.87	ug/m3	
		Lab Fort Blk. Found	12.73	ug/m3	
		Lab Fort Blk. % Rec.	107.22	%	50-150
	Benzene	Lab Fort Blank Amt.	15.95	ug/m3	
		Lab Fort Blk. Found	13.50	ug/m3	
		Lab Fort Blk. % Rec.	84.68	%	70-130
	Carbon Tetrachloride	Lab Fort Blank Amt.	31.45	ug/m3	
		Lab Fort Blk. Found	32.79	ug/m3	
		Lab Fort Blk. % Rec.	104.26	%	70-130
	Chloroform	Lab Fort Blank Amt.	24.33	ug/m3	
		Lab Fort Blk. Found	25.88	ug/m3	
		Lab Fort Blk. % Rec.	106.36	%	70-130
	1,2-Dichloroethane	Lab Fort Blank Amt.	20.24	ug/m3	
		Lab Fort Blk. Found	25.16	ug/m3	
		Lab Fort Blk. % Rec.	124.28	%	70-130
	1,4-Dichlorobenzene	Lab Fort Blank Amt.	30.06	ug/m3	
		Lab Fort Blk. Found	37.59	ug/m3	
		Lab Fort Blk. % Rec.	125.06	%	70-130
	Ethyl Acetate	Lab Fort Blank Amt.	18.01	ug/m3	
		Lab Fort Blk. Found	17.23	ug/m3	
		Lab Fort Blk. % Rec.	95.66	%	50-150

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 12/19/2008

Lims Bat # : LIMIT-22131

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QC Batch Number: BATCH-15724

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-89832					
Ethylbenzene		Lab Fort Blank Amt.	21.67	ug/m3	70-130
		Lab Fort Blk. Found	23.22	ug/m3	
		Lab Fort Blk. % Rec.	107.14	%	
Hexane		Lab Fort Blank Amt.	17.62	ug/m3	70-130
		Lab Fort Blk. Found	20.05	ug/m3	
		Lab Fort Blk. % Rec.	113.82	%	
Isopropanol		Lab Fort Blank Amt.	12.28	ug/m3	50-150
		Lab Fort Blk. Found	15.16	ug/m3	
		Lab Fort Blk. % Rec.	123.38	%	
2-Butanone (MEK)		Lab Fort Blank Amt.	14.74	ug/m3	70-130
		Lab Fort Blk. Found	14.17	ug/m3	
		Lab Fort Blk. % Rec.	96.12	%	
4-Methyl-2-Pentanone (MIBK)		Lab Fort Blank Amt.	20.48	ug/m3	70-130
		Lab Fort Blk. Found	19.85	ug/m3	
		Lab Fort Blk. % Rec.	96.95	%	
Styrene		Lab Fort Blank Amt.	21.26	ug/m3	70-130
		Lab Fort Blk. Found	25.77	ug/m3	
		Lab Fort Blk. % Rec.	121.18	%	
Tetrachloroethylene		Lab Fort Blank Amt.	33.90	ug/m3	70-130
		Lab Fort Blk. Found	34.38	ug/m3	
		Lab Fort Blk. % Rec.	101.40	%	
Toluene		Lab Fort Blank Amt.	18.81	ug/m3	70-130
		Lab Fort Blk. Found	18.82	ug/m3	
		Lab Fort Blk. % Rec.	100.04	%	
1,1,1-Trichloroethane		Lab Fort Blank Amt.	27.28	ug/m3	70-130
		Lab Fort Blk. Found	28.03	ug/m3	
		Lab Fort Blk. % Rec.	102.76	%	
Trichloroethylene		Lab Fort Blank Amt.	26.87	ug/m3	70-130
		Lab Fort Blk. Found	25.26	ug/m3	
		Lab Fort Blk. % Rec.	94.01	%	
1,1,2-Trichloro-1,2,2-Trifluoroethane		Lab Fort Blank Amt.	38.31	ug/m3	70-130
		Lab Fort Blk. Found	41.16	ug/m3	
		Lab Fort Blk. % Rec.	107.44	%	
Trichlorofluoromethane		Lab Fort Blank Amt.	28.09	ug/m3	70-130
		Lab Fort Blk. Found	32.94	ug/m3	
		Lab Fort Blk. % Rec.	117.26	%	
o-Xylene		Lab Fort Blank Amt.	21.71	ug/m3	70-130
		Lab Fort Blk. Found	24.22	ug/m3	
		Lab Fort Blk. % Rec.	111.54	%	
m/p-Xylene		Lab Fort Blank Amt.	43.43	ug/m3	70-130
		Lab Fort Blk. Found	52.37	ug/m3	
		Lab Fort Blk. % Rec.	120.58	%	
1,2-Dichlorobenzene		Lab Fort Blank Amt.	30.06	ug/m3	

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 12/19/2008

Lims Bat # : LIMIT-22131

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QC Batch Number: BATCH-15724

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-89832					
1,2-Dichlorobenzene		Lab Fort Blk. Found	38.29	ug/m3	70-130
		Lab Fort Blk. % Rec.	127.40	%	
1,3-Dichlorobenzene		Lab Fort Blank Amt.	30.06	ug/m3	70-130
		Lab Fort Blk. Found	37.10	ug/m3	
1,1-Dichloroethane		Lab Fort Blk. % Rec.	123.44	%	70-130
		Lab Fort Blank Amt.	20.24	ug/m3	
1,1-Dichloroethylene		Lab Fort Blk. Found	20.54	ug/m3	70-130
		Lab Fort Blk. % Rec.	101.46	%	
Ethanol		Lab Fort Blank Amt.	19.83	ug/m3	70-130
		Lab Fort Blk. Found	21.74	ug/m3	
4-Ethyl Toluene		Lab Fort Blk. % Rec.	109.62	%	70-130
		Lab Fort Blank Amt.	9.42	ug/m3	
Methyl tert-Butyl Ether (MTBE)		Lab Fort Blk. Found	11.26	ug/m3	50-150
		Lab Fort Blk. % Rec.	119.62	%	
t-1,2-Dichloroethylene		Lab Fort Blank Amt.	24.58	ug/m3	50-150
		Lab Fort Blk. Found	32.22	ug/m3	
Vinyl Chloride		Lab Fort Blk. % Rec.	131.08	%	70-130
		Lab Fort Blank Amt.	18.02	ug/m3	
Methylene Chloride		Lab Fort Blk. Found	21.36	ug/m3	70-130
		Lab Fort Blk. % Rec.	118.50	%	
Chlorobenzene		Lab Fort Blank Amt.	19.82	ug/m3	70-130
		Lab Fort Blk. Found	20.85	ug/m3	
Chloromethane		Lab Fort Blk. % Rec.	105.20	%	70-130
		Lab Fort Blank Amt.	12.78	ug/m3	
Bromomethane		Lab Fort Blk. Found	15.27	ug/m3	70-130
		Lab Fort Blk. % Rec.	119.52	%	
cis-1,3-Dichloropropene		Lab Fort Blank Amt.	17.36	ug/m3	70-130
		Lab Fort Blk. Found	16.41	ug/m3	
		Lab Fort Blk. % Rec.	94.54	%	70-130
		Lab Fort Blank Amt.	23.02	ug/m3	
		Lab Fort Blk. Found	23.67	ug/m3	70-130
		Lab Fort Blk. % Rec.	102.80	%	
		Lab Fort Blank Amt.	10.32	ug/m3	70-130
		Lab Fort Blk. Found	13.10	ug/m3	
		Lab Fort Blk. % Rec.	126.94	%	70-130
		Lab Fort Blank Amt.	19.40	ug/m3	
		Lab Fort Blk. Found	17.86	ug/m3	70-130
		Lab Fort Blk. % Rec.	92.08	%	
		Lab Fort Blank Amt.	13.19	ug/m3	70-130
		Lab Fort Blk. Found	15.36	ug/m3	
		Lab Fort Blk. % Rec.	116.48	%	70-130
		Lab Fort Blank Amt.	22.69	ug/m3	
		Lab Fort Blk. Found	21.13	ug/m3	

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 12/19/2008

Lims Bat # : LIMIT-22131

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QC Batch Number: BATCH-15724

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-89832					
	cis-1,3-Dichloropropene	Lab Fort Blk. % Rec.	93.12	%	70-130
	trans-1,3-Dichloropropene	Lab Fort Blank Amt.	22.69	ug/m3	
		Lab Fort Blk. Found	23.08	ug/m3	
		Lab Fort Blk. % Rec.	101.72	%	70-130
	Chlorodibromomethane	Lab Fort Blank Amt.	42.59	ug/m3	
		Lab Fort Blk. Found	44.95	ug/m3	
		Lab Fort Blk. % Rec.	105.54	%	70-130
	1,1,2-Trichloroethane	Lab Fort Blank Amt.	27.28	ug/m3	
		Lab Fort Blk. Found	23.11	ug/m3	
		Lab Fort Blk. % Rec.	84.73	%	70-130
	Bromoform	Lab Fort Blank Amt.	51.69	ug/m3	
		Lab Fort Blk. Found	53.98	ug/m3	
		Lab Fort Blk. % Rec.	104.42	%	70-130
	1,1,2,2-Tetrachloroethane	Lab Fort Blank Amt.	34.33	ug/m3	
		Lab Fort Blk. Found	31.15	ug/m3	
		Lab Fort Blk. % Rec.	90.74	%	70-130
	Hexachlorobutadiene	Lab Fort Blank Amt.	53.33	ug/m3	
		Lab Fort Blk. Found	54.04	ug/m3	
		Lab Fort Blk. % Rec.	101.34	%	70-130
	1,2,4-Trichlorobenzene	Lab Fort Blank Amt.	37.10	ug/m3	
		Lab Fort Blk. Found	43.71	ug/m3	
		Lab Fort Blk. % Rec.	117.80	%	70-130
	1,2,4-Trimethylbenzene	Lab Fort Blank Amt.	24.58	ug/m3	
		Lab Fort Blk. Found	32.20	ug/m3	
		Lab Fort Blk. % Rec.	131.00	%	70-130
	1,3,5-Trimethylbenzene	Lab Fort Blank Amt.	24.58	ug/m3	
		Lab Fort Blk. Found	31.70	ug/m3	
		Lab Fort Blk. % Rec.	129.00	%	70-130
	Cyclohexane	Lab Fort Blank Amt.	17.21	ug/m3	
		Lab Fort Blk. Found	15.14	ug/m3	
		Lab Fort Blk. % Rec.	88.01	%	50-150
	cis-1,2-Dichloroethylene	Lab Fort Blank Amt.	19.82	ug/m3	
		Lab Fort Blk. Found	21.52	ug/m3	
		Lab Fort Blk. % Rec.	108.58	%	70-130
	1,2-Dichloropropane	Lab Fort Blank Amt.	23.10	ug/m3	
		Lab Fort Blk. Found	18.00	ug/m3	
		Lab Fort Blk. % Rec.	77.93	%	70-130
	Dichlorodifluoromethane	Lab Fort Blank Amt.	24.72	ug/m3	
		Lab Fort Blk. Found	28.32	ug/m3	
		Lab Fort Blk. % Rec.	114.56	%	70-130
	Benzyl Chloride	Lab Fort Blank Amt.	25.88	ug/m3	
		Lab Fort Blk. Found	35.49	ug/m3	
		Lab Fort Blk. % Rec.	137.13	%	70-130

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 12/19/2008

Lims Bat # : LIMIT-22131

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QC Batch Number: BATCH-15724

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-89832					
	Carbon Disulfide	Lab Fort Blank Amt.	15.57	ug/m3	
		Lab Fort Blk. Found	13.30	ug/m3	
		Lab Fort Blk. % Rec.	85.43	%	70-130
	Vinyl Acetate	Lab Fort Blank Amt.	17.60	ug/m3	
		Lab Fort Blk. Found	16.07	ug/m3	
		Lab Fort Blk. % Rec.	91.28	%	70-130
	2-Hexanone	Lab Fort Blank Amt.	20.48	ug/m3	
		Lab Fort Blk. Found	20.65	ug/m3	
		Lab Fort Blk. % Rec.	100.86	%	50-150
	Bromodichloromethane	Lab Fort Blank Amt.	33.50	ug/m3	
		Lab Fort Blk. Found	33.59	ug/m3	
		Lab Fort Blk. % Rec.	100.26	%	70-130
	1,2-Dibromoethane	Lab Fort Blank Amt.	38.42	ug/m3	
		Lab Fort Blk. Found	35.72	ug/m3	
		Lab Fort Blk. % Rec.	92.98	%	70-130
	n-Heptane	Lab Fort Blank Amt.	20.49	ug/m3	
		Lab Fort Blk. Found	17.92	ug/m3	
		Lab Fort Blk. % Rec.	87.49	%	50-150
	1,2-Dichlorotetrafluoroethane (114)	Lab Fort Blank Amt.	34.95	ug/m3	
		Lab Fort Blk. Found	40.45	ug/m3	
		Lab Fort Blk. % Rec.	115.74	%	70-130
	Tetrahydrofuran	Lab Fort Blank Amt.	14.74	ug/m3	
		Lab Fort Blk. Found	15.01	ug/m3	
		Lab Fort Blk. % Rec.	101.82	%	50-150
	Propene	Lab Fort Blank Amt.	8.60	ug/m3	
		Lab Fort Blk. Found	7.48	ug/m3	
		Lab Fort Blk. % Rec.	87.00	%	50-150
	1,3-Butadiene	Lab Fort Blank Amt.	11.06	ug/m3	
		Lab Fort Blk. Found	12.20	ug/m3	
		Lab Fort Blk. % Rec.	110.36	%	70-130

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 12/19/2008

Lims Bat # : LIMIT-22131

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NOTES:

QC Batch No. : BATCH-15724

Sample ID : LFBLANK-89832

Analysis : 1,2,4-Trimethylbenzene

LABORATORY FORTIFIED BLANK RECOVERY IS OUTSIDE OF CONTROL LIMITS. ANY
REPORTED VALUE FOR THIS COMPOUND IS LIKELY TO BE BIASED ON THE HIGH SIDE.

QC Batch No. : BATCH-15724

Sample ID : LFBLANK-89832

Analysis : Benzyl Chloride

LABORATORY FORTIFIED BLANK RECOVERY OUTSIDE OF CONTROL LIMITS. DATA
VALIDATION IS NOT AFFECTED SINCE ALL RESULTS ARE "NOT DETECTED" FOR ALL
SAMPLES IN THIS BATCH FOR THIS COMPOUND AND BIAS IS ON THE HIGH SIDE.

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 12/19/2008

Lims Bat #: LIMIT-22131

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QUALITY CONTROL DEFINITIONS AND ABBREVIATIONS

QC BATCH NUMBER	This is the number assigned to all samples analyzed together that would be subject to comparison with a particular set of Quality Control Data.
LIMITS	Upper and Lower Control Limits for the QC ANALYSIS Reported. All values normally would fall within these statistically determined limits, unless there is an unusual circumstance that would be documented in a NOTE appearing on the last page of the QC SUMMARY REPORT. Not all QC results will have Limits defined.
Sample Amount	Amount of analyte found in a sample.
Blank	Method Blank that has been taken through all the steps of the analysis.
LFBLANK	Laboratory Fortified Blank (a control sample)
STDADD	Standard Added (a laboratory control sample)
Matrix Spk Amt Added	Amount of analyte spiked into a sample
MS Amt Measured	Amount of analyte found including amount that was spiked
Matrix Spike % Rec.	% Recovery of spiked amount in sample.
Duplicate Value	The result from the Duplicate analysis of the sample.
Duplicate RPD	The Relative Percent Difference between two Duplicate Analyses.
Surrogate Recovery	The % Recovery for non-environmental compounds (surrogates) spiked into samples to determine the performance of the analytical methods.
Sur. Recovery (ELCD)	Surrogate Recovery on the Electrolytic Conductivity Detector.
Sur. Recovery (PID)	Surrogate Recovery on the Photoionization Detector.
Standard Measured	Amount measured for a laboratory control sample
Standard Amt Added	Known value for a laboratory control sample
Standard % Recovery	% recovered for a laboratory control sample with a known value.
Lab Fort Blank Amt	Laboratory Fortified Blank Amount Added
Lab Fort Blk. Found	Laboratory Fortified Blank Amount Found
Lab Fort Blk % Rec	Laboratory Fortified Blank % Recovered
Dup Lab Fort Bl Amt	Duplicate Laboratory Fortified Blank Amount Added
Dup Lab Fort Bl Fnd	Duplicate Laboratory Fortified Blank Amount Found
Dup Lab Fort Bl % Rec	Duplicate Laboratory Fortified Blank % Recovery
Lab Fort Blank Range	Laboratory Fortified Blank Range (Absolute value of difference between recoveries for Lab Fortified Blank and Lab Fortified Blank Duplicate).
Lab Fort Bl. Av. Rec.	Laboratory Fortified Blank Average Recovery
Duplicate Sample Amt	Sample Value for Duplicate used with Matrix Spike Duplicate
MSD Amount Added	Matrix Spike Duplicate Amount Added (Spiked)
MSD Amt Measured	Matrix Spike Duplicate Amount Measured
MSD % Recovery	Matrix Spike Duplicate % Recovery
MSD Range	Absolute difference between Matrix Spike and Matrix Spike Duplicate Recoveries

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Status: [Delivered](#)

Delivered On: 12/17/2008
9:50 A.M.

Delivered To: EAST LONGMEADOW, MA, US

Signed By: MURPHY

Service: NEXT DAY AIR

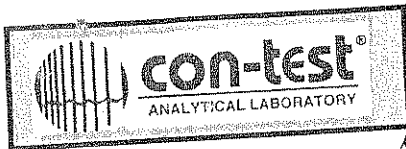
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www.contestlabs.com

39 Spruce Street
East Longmeadow, MA
Phone: 1-413-525-2332
Fax: 1-413-525-6405

AIR ONLY RECEIPT CHECKLIST

CLIENT NAME: Ecology & Env DATE: 12/17/08
RECEIVED BY: _____

Was chain of custody relinquished and signed? YES NO
Does Chain agree with samples? YES NO

If not, explain: _____

All Samples in good condition? YES NO

If not, explain: _____

Are there any on hold samples? YES NO STORED WHERE: _____

ARE THERE ANY RUSH OR SHORT HOLDING TIME SAMPLES? WHO WAS NOTIFIED? _____ DATE _____ TIME _____

Location where samples are stored: AIR

Permission to sub-contract samples? Yes No (circle)
(Walk in clients only) if not already approved.
Client Signature _____

CONTAINERS SENT TO CON-TEST		# of containers
Summa cans		2
Tedlar Bags		
Regulators		
Restrictors		
Tubes		
Other	filters	2

1. Was all media (used & unused) checked into the WASP asset management program? Y
2. Were all returned summa cans, restrictors, & regulators documented as returned in the AIR Lab Outbound excel sheet? Y
3. Were the Lab ID's documented in the Air Lab Outbound excel sheet? Y
4. Was the job documented in the Air Lab Log-In Access Database? Y

Laboratory comments:

F

Geotechnical Report



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

REPORT DATE 12/16/2008

ECOLOGY & ENVIRONMENT
368 PLEASANT VIEW
LANCASTER, NY 14086
ATTN: RICK WATT

CONTRACT NUMBER:
PURCHASE ORDER NUMBER: 2700.DC21.01

PROJECT NUMBER:

ANALYTICAL SUMMARY

LIMS BAT #: LIMIT-21841
JOB NUMBER: 2700.DC21.01

PROJECT LOCATION: FORMER BRIGHT OUTDOORS

FIELD SAMPLE #	LAB ID	MATRIX	SAMPLE DESCRIPTION	TEST	Subcontract Lab (if any) Cert. Nos.
VM-01-GT (8-9)	08B48595	SOIL	Not Specified	sub special test	Geo Testing Express
VM-04-GT (3-4)	08B48596	SOIL	Not Specified	sub special test	Geo Testing Express

The results of analyses performed are based on samples as submitted to the laboratory and relate only to the items collected and tested.

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations. AIHA accreditations only apply to NIOSH methods and Environmental Lead Analyses.

AIHA 100033	AIHA ELLAP (LEAD) 100033	NORTH CAROLINA CERT. # 652
MASSACHUSETTS MA0100	NEW HAMPSHIRE NELAP 2516	NEW JERSEY NELAP NJ MA007 (AIR)
CONNECTICUT PH-0567	VERMONT DOH (LEAD) No. LL015036	FLORIDA DOH E871027 (AIR)
NEW YORK ELAP/NELAP 10899	RHODE ISLAND (LIC. No. 112)	

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Edward Denson 12/16/08

SIGNATURE

DATE

Tod Kopyscinski
Air Laboratory Manager

Michael Erickson
Assistant Laboratory Director

Edward Denson
Technical Director

Daren Damboragian
Organics Department Supervisor

RICK WATT
 ECOLOGY & ENVIRONMENT
 368 PLEASANT VIEW
 LANCASTER, NY 14086

12/16/2008
 Page 1 of 2

Purchase Order No.: 2700.DC21.01

Project Location: FORMER BRIGHT OUTDOORS
 Date Received: 12/4/2008

LIMS-BAT #: LIMIT-21841
 Job Number: 2700.DC21.01

Field Sample # : VM-01-GT (8-9)

Sample ID : 08B48595 ‡Sampled : 12/3/2008
 Not Specified

Sample Matrix: SOIL

Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
SPECIAL TEST		12/15/08	GTE			

Subcontracted analysis for Particle Size by method ASTM D 422 - 63, Atterberg Limits by method ASTM D 4318 - 05 and USCS Classification by method ASTM D 2487 - 06.

Please see attached hard copy for results.

Field Sample # : VM-04-GT (3-4)

Sample ID : 08B48596 ‡Sampled : 12/3/2008
 Not Specified

Sample Matrix: SOIL

Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
SPECIAL TEST		12/15/08	GTE			

Subcontracted analysis for Particle Size by method ASTM D 422 - 63, Atterberg Limits by method ASTM D 4318 - 05 and USCS Classification by method ASTM D 2487 - 06.

Please see attached hard copy for results.

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

RICK WATT

ECOLOGY & ENVIRONMENT

368 PLEASANT VIEW

LANCASTER, NY 14086

Purchase Order No.: 2700.DC21.01

12/16/2008

Page 2 of 2

Project Location: FORMER BRIGHT OUTDOORS

LIMS-BAT #: LIMT-21841

Date Received: 12/4/2008

Job Number: 2700.DC21.01

** END OF REPORT **

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

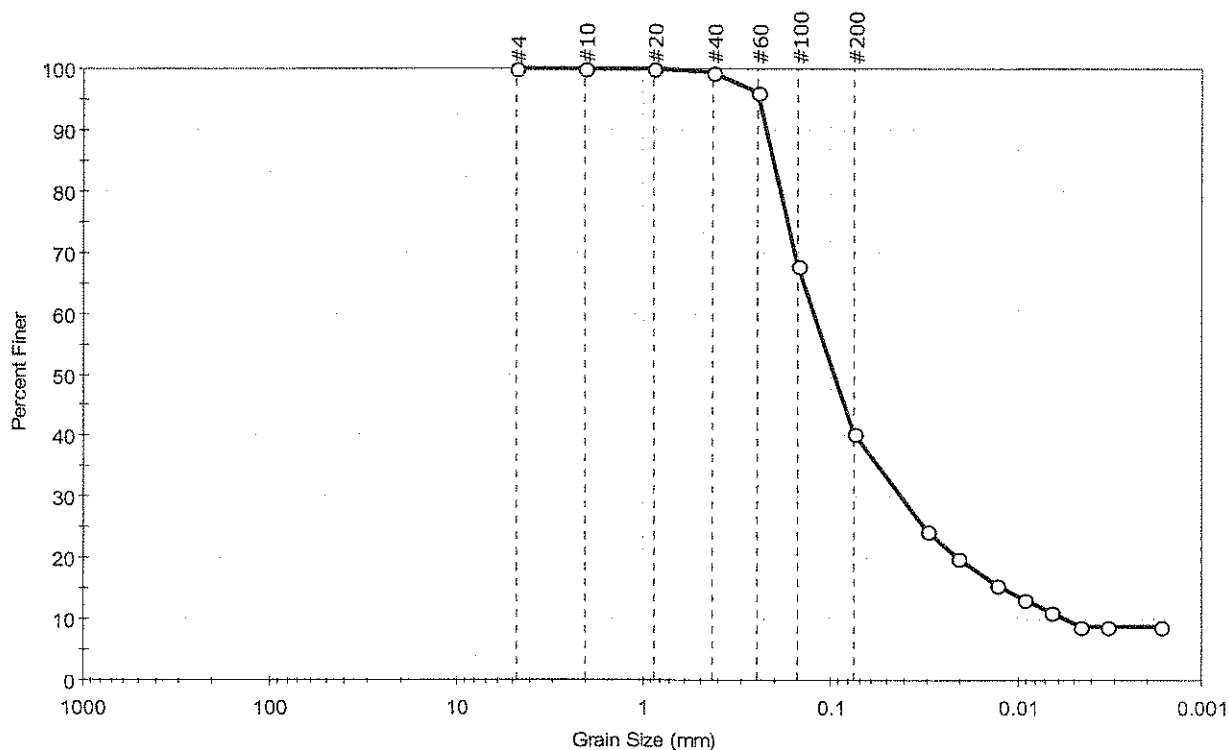
* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

Client: Con-Test Analytical Lab	Project No: GTX-8731
Project: LIMT: 21841	
Location: ---	
Boring ID: ---	Sample Type: bag
Sample ID: 08B48595	Test Date: 12/08/08
Depth: ---	Test Id: 143529
Test Comment: ---	Tested By: ap
Sample Description: Moist, dark olive brown silty sand	Checked By: jdt
Sample Comment: ---	

Particle Size Analysis - ASTM D 422-63 (reapproved 2002)



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	0.0	59.6	40.4

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
#4	4.75	100		
#10	2.00	100		
#20	0.85	100		
#40	0.42	99		
#60	0.25	96		
#100	0.15	68		
#200	0.075	40		
---	Particle Size (mm)	Percent Finer	Spec. Percent	Complies
---	0.0304	24		
---	0.0206	20		
---	0.0128	16		
---	0.0092	13		
---	0.0066	11		
---	0.0047	9		
---	0.0033	9		
---	0.0017	9		

Coefficients

D ₈₅ = 0.2041 mm	D ₃₀ = 0.0416 mm
D ₆₀ = 0.1227 mm	D ₁₅ = 0.0118 mm
D ₅₀ = 0.0954 mm	D ₁₀ = 0.0055 mm
C _u = N/A	C _c = N/A

Classification

ASTM Silty sand (SM)

AASHTO Silty Soils (A-4 (0))

Sample/Test Description

Sand/Gravel Particle Shape : ---

Sand/Gravel Hardness : ---

Client: Con-Test Analytical Lab		
Project: LIMT: 21841		
Location: ---	Project No: GTX-8731	
Boring ID: ---	Sample Type: bag	Tested By: ap
Sample ID: 08B48595	Test Date: 12/11/08	Checked By: jdt
Depth : ---	Test Id: 143531	
Test Comment: ---		
Sample Description: Moist, dark olive brown silty sand		
Sample Comment: ---		

Atterberg Limits - ASTM D 4318-05

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content, %	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
*	08B48595	---	---	12	n/a	n/a	n/a	n/a	Silty sand (SM)

1% Retained on #40 Sieve
 Dry Strength: LOW
 Dilatancy: RAPID
 Toughness: n/a
 The sample was determined to be Non-Plastic

Client: Con-Test Analytical Lab		
Project: LIMT: 21841		
Location: ---	Project No:	GTX-8731
Boring ID: ---	Sample Type: bag	Tested By: ap
Sample ID: 08B48595	Test Date: 12/15/08	Checked By: jdt
Depth : ---	Test Id: 143533	
Test Comment: ---		
Sample Description: Moist, dark olive brown silty sand		
Sample Comment: ---		

USCS Classification - ASTM D 2487-06

Boring ID	Sample ID	Depth	Group Name	Group Symbol	Gravel, %	Sand, %	Fines, %
---	08B48595	---	Silty sand	SM	0.0	59.6	40.4

Remarks: Grain Size analysis performed by ASTM D422, results enclosed
Atterbeg Limits performed by ASTM 4318, results enclosed

Client: Con-Test Analytical Lab

Project: LIMIT: 21841

Location: ---

Project No: GTX-8731

Boring ID: ---

Sample Type: bag

Tested By: ap

Sample ID: 08B48596

Test Date: 12/08/08

Checked By: jdt

Depth: ---

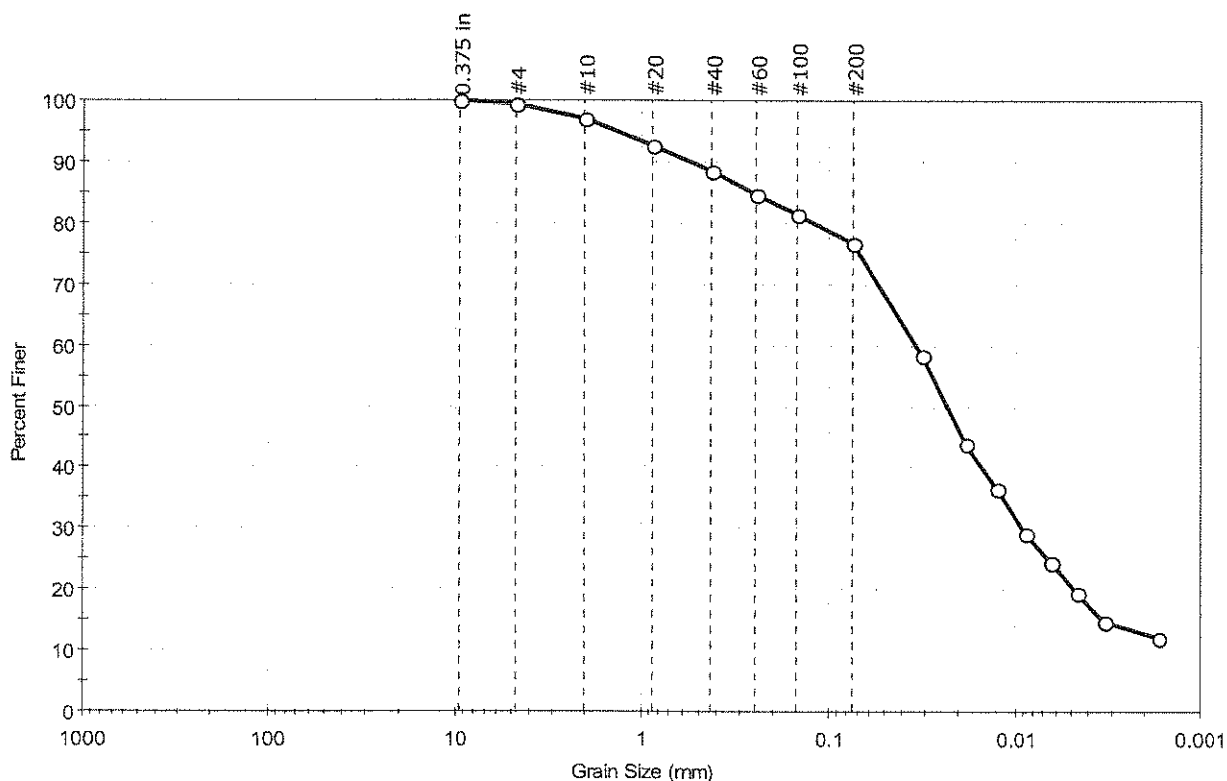
Test Id: 143530

Test Comment: ---

Sample Description: Moist, dark olive brown clay with sand

Sample Comment: ---

Particle Size Analysis - ASTM D 422-63 (reapproved 2002)



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	0.6	22.8	76.6

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.375 in	9.50	100		
#4	4.75	99		
#10	2.00	97		
#20	0.85	93		
#40	0.42	89		
#60	0.25	85		
#100	0.15	81		
#200	0.075	77		
Particle Size (mm)	Percent Finer	Spec. Percent	Complies	
0.0318	59			
0.0182	44			
0.0124	37			
0.0086	29			
0.0064	24			
0.0046	20			
0.0033	15			
0.0017	12			

Coefficients

D₈₅ = 0.2659 mm D₃₀ = 0.0091 mm

D₆₀ = 0.0341 mm D₁₅ = 0.0034 mm

D₅₀ = 0.0230 mm D₁₀ = 0.0009 mm

C_u = N/A C_c = N/A

Classification

ASTM lean clay with sand (CL)

AASHTO Silty Soils (A-4 (5))

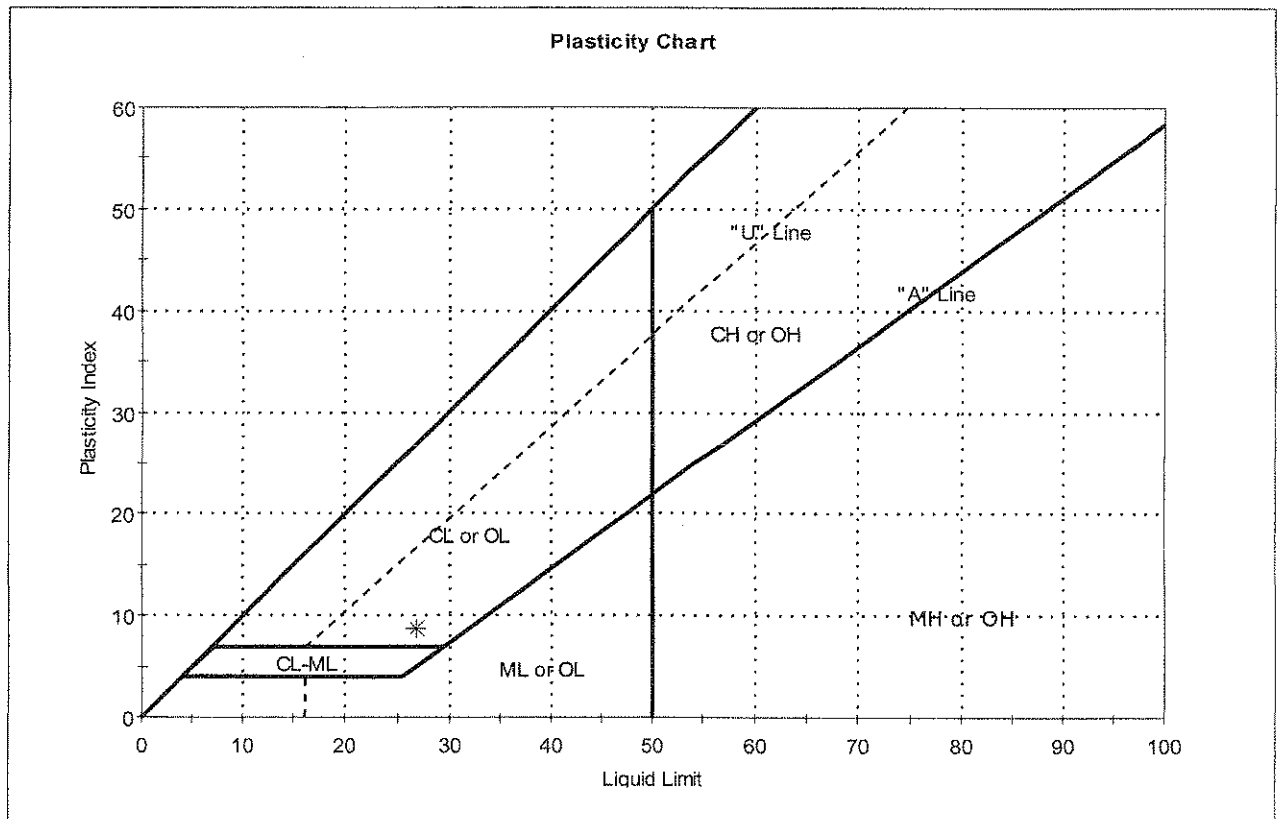
Sample/Test Description

Sand/Gravel Particle Shape: ---

Sand/Gravel Hardness: ---

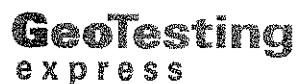
Client:	Con-Test Analytical Lab	Project No:	GTX-8731
Project:	LIMIT: 21841	Tested By:	ap
Location:	---	Checked By:	jdt
Boring ID:	---	Sample Type:	bag
Sample ID:	08B48596	Test Date:	12/11/08
Depth :	---	Test Id:	143532
Test Comment:	---		
Sample Description:	Moist, dark olive brown clay with sand		
Sample Comment:	---		

Atterberg Limits - ASTM D 4318-05



Symbol	Sample ID	Boring	Depth	Natural Moisture Content, %	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
*	08B48596	---	---	18	27	18	9	0	lean clay with sand (CL)

Sample Prepared using the WET method
 11% Retained on #40 Sieve
 Dry Strength: HIGH
 Dilatancy: SLOW
 Toughness: LOW



a subsidiary of Geocomp Corporation

Client:	Con-Test Analytical Lab		
Project:	LIMT: 21841		
Location:	---	Project No:	GTX-8731
Boring ID:	---	Sample Type:	bag
Sample ID:	08B48596	Test Date:	12/15/08
Depth :	---	Test Id:	143534
Test Comment:	---		
Sample Description:	Moist, dark olive brown clay with sand		
Sample Comment:	---		

USCS Classification - ASTM D 2487-06

Boring ID	Sample ID	Depth	Group Name	Group Symbol	Gravel, %	Sand, %	Fines, %
---	08B48596	---	lean clay with sand	CL	0.6	22.8	76.6

Remarks: Grain Size analysis performed by ASTM D422, results enclosed
Atterbeg Limits performed by ASTM 4318, results enclosed



CHAIN OF CUSTODY RECORD

Page _____ of _____ in Form 1041-SS (1-00)

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ECOLOGY and ENVIRONMENT

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LANCASTER NY 14086

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CON-TEST LAB

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1/25/97 HEP 7.0.6

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Tracking Summary

Tracking Numbers

Tracking Number:	J217 9514 260
Type:	Package
Status:	Delivered
Delivered On:	12/04/2008 9:33 A.M.
Delivered To:	EAST LONGMEADOW, MA, US
Signed By:	MURPHY
Service:	NEXT DAY AIR

Tracking results provided by UPS: 12/04/2008 2:33 P.M. ET

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Sample Receipt Checklist

 CLIENT NAME: Ecology Env. RECEIVED BY: KA DATE: 12/1/08

1) Was the chain(s) of custody relinquished and signed?

Yes No

2) Does the chain agree with the samples?

Yes No

If not, explain:

3) Are all the samples in good condition?

Yes No

If not, explain:

4) How were the samples received:

 On Ice ☐ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☒

Were the samples received in Temperature Compliance of (2-6°C)? Yes No

 Temperature °C by Temp blank _____ Temperature °C by Temp gun 19°C

5) Are there Dissolved samples for the lab to filter?

Yes No

Who was notified _____ Date _____ Time _____

6) Are there any samples "On Hold"?

Yes No

 Stored where:

7) Are there any RUSH or SHORT HOLDING TIME samples?

Yes No

Who was notified _____ Date _____ Time _____

8) Location where samples are stored:

19B

 Permission to subcontract samples? Yes No
 (Walk-in clients only) if not already approved

Client Signature: _____

Containers sent in to Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz clear jar	
500 mL Amber		4 oz clear jar	
250 mL Amber (8oz amber)		2 oz clear jar	
1 Liter Plastic		Other glass jar	
500 mL Plastic		Plastic Bag / Ziploc	<u>2</u>
250 mL plastic		Air Cassette	
40 mL Vial - type listed below		Brass Sleeves	
Colisure / bacteria bottle		Tubes	
Dissolved Oxygen bottle		Summa Cans	
Flashpoint bottle		Regulators	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol _____

Bisulfate _____ # DI Water _____

Thiosulfate _____ Unpreserved _____

Time and Date Frozen: _____

Do all samples have the proper pH: Yes No N/A



SVE Pilot Test Results

February 4, 2009

Mr. Rick Watt
Ecology & Environment, Inc.
368 Pleasant View Drive
Lancaster, NY 14086

**Re: Soil Vapor Extraction Pilot Test Data
Former Bright Outdoors Site
Johnson City, NY 13790**

Dear Mr. Watt:

Aztech Technologies, Inc., (Aztech), on behalf of Ecology & Environment, Inc. (E&E), performed soil vapor extraction (SVE) pilot testing at the former Bright Outdoors Site, Johnson City, Broome County, New York. The SVE Pilot testing was conducted on December 15, and 16, 2008.

INTRODUCTION

The purpose of the pilot testing was to determine the feasibility of installing an SVE system to assist in remediating soil vapor concentrations of 1,1,1-trichloroethane and trichloroethene previously identified in the vapor underneath the building at the site. The testing was conducted on one (1) pilot test well (well SVE-1) by applying a wellhead vacuum to the tested well and monitoring the induced vacuum within the vadose zone.

Site Description

The property is a light industrial facility that included (but may have not been limited to) tenants such as a manufacturer of outdoor furniture and equipment that uses PVC pipe and vinyl polyester, a soft drink bottling company, and a wire screen manufacturer. The site is primarily level and the majority of it is paved.

Site Geology and Current Conditions

According to documentation provided by E&E, Inc., the site is underlain by shale bedrock which in turn is overlain by relatively impermeable glacial till. Above the till are relatively permeable glacial kame and outwash deposits. The uppermost deposits consist mainly of a poorly sorted mixture of disturbed, highly compacted sand and silt with beds of silt and clay. These overburden deposits are estimated to extend to depths between 60 and 100 feet below ground surface (bgs), with groundwater present at depths of approximately 10 to 15 feet bgs.

SVE PILOT TESTING

SVE pilot testing was performed in order to evaluate the response of unsaturated soil to the extraction of soil vapor via the tested well. The data obtained from the pilot testing can be used to develop a design and layout for an SVE remedial system at the site.

Methodology

Pilot testing was conducted utilizing a SVE blower to facilitate soil vapor extraction. The pilot testing involved the withdrawal of soil vapors from the vadose zone, and monitoring the vacuum induced into the subsurface via nearby monitoring wells and/or monitoring points.

Pilot testing was conducted on December 15 and 16, 2008. The SVE pilot test was initiated first by connecting the blower to a two (2)-inch inside diameter (ID) test well, and connecting magnehelic gauges to selected monitoring wells/observation points. The maximum vacuum achieved at the tested well was determined (60-inches H₂O), and the test conducted in four (4) steps by adjusting the wellhead vacuum applied to the well. This was accomplished by the introduction of bleed air into the intake side of the SVE blower. During the first step of the test (10 inches H₂O), the vacuum induced into the subsurface was monitored at selected observation points until stabilization had occurred. Subsequent to stabilization, the vacuum at the test well was increased to 20 inches (H₂O), and the second step of the test conducted until stabilization had occurred. Subsequent to stabilization, the vacuum at the test well was increased to 35 inches (H₂O), and the third step of the test conducted until stabilization had occurred. Lastly, after stabilization, the vacuum at the test well was increased to 60 inches (H₂O), and the final step was conducted until stabilization had occurred.

Pilot Test Results

Upon completing the pilot testing, the data for the SVE test were reduced and graphically represented by plotting the vacuum recorded in the monitoring wells and/or monitoring points versus their distance from the test well. These Vacuum Distribution Plots are prepared for each step of the test. A best-fit line is drawn through the data in order to determine the effective radius of influence (ROI) at that wellhead vacuum. The effective ROI is considered to be that distance where 0.1-inches of vacuum (H₂O) can be induced into the subsurface at a particular wellhead vacuum.

The data collected from the first step of the test (**Figure 1**; wellhead vacuum of 10 inches H₂O) indicated that an induced vacuum of 0.1 inches H₂O was not recorded at any of the monitoring points (i.e., ROI less than five [5] feet).

The vacuum distribution plot presented as **Figure 2** (attached) represents data collected from the second step of the pilot test (wellhead vacuum of 20 inches H₂O). The vacuum distribution plot presented in Figure 2 indicates that a measurable induced vacuum in excess of 0.1 inches H₂O in well VM-04, located 30 feet from the tested well. This suggests an observed ROI of approximately 38 feet under this test configuration.

The vacuum distribution plot presented as **Figure 3** (attached) represents data collected from the third step (wellhead vacuum of 35 inches H₂O) of the pilot test. The data collected from this test configuration is similar to the distribution of vacuum observed in the second step of the SVE test. The vacuum distribution plot presented in Figure 3 indicates that a measurable induced vacuum of 0.07 inches H₂O at a distance of 80 feet from the tested well in VM-05 and 0.36 inches H₂O in well VM-04, 30 feet from the tested well. As such, the ROI is estimated at approximately 45 feet under this test configuration.

The vacuum distribution plot presented as **Figure 4** (attached) represents data collected from the fourth step (wellhead vacuum of 60 inches H₂O) of the test. The vacuum distribution plot presented in Figure 4 indicates that a measurable induced vacuum of 0.1 inches H₂O was recorded as far as 80 feet from the tested well in VM-05. However, the observed vacuum recorded in well VM-04 (0.065 inches H₂O), approximately 30 feet from the tested well, suggests a heterogeneous response at this wellhead vacuum. As such, the ROI is estimated at approximately 54 feet.

The field notes collected during the pilot testing are attached. Additionally, the field data has been compiled and reduced into the attached vacuum distribution plots.

If you have any questions or comments regarding the enclosed information, please feel free to contact the undersigned at (518) 885-5383.

Sincerely,
AZTECH TECHNOLOGIES, INC.



for

Paul M. Shannon
Senior Geologist

Reviewed By:



Randolph Hoose
Senior Hydrogeologist

Attachments:
FIGURES
PILOT TEST FIELD DATA SHEETS

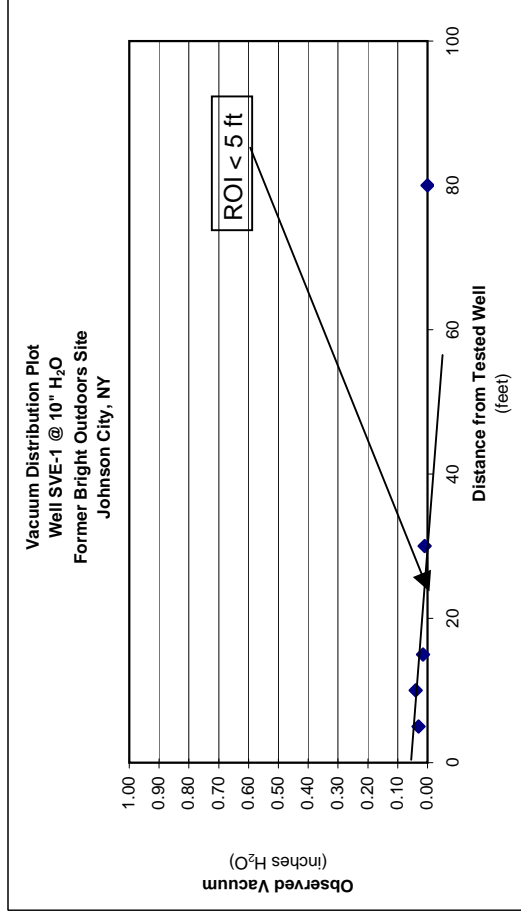
FIGURES

Step 1:

Tested Well: SVE-1
Vacuum @ Wellhead: 10 " H₂O
Flow Rate from well (2"): 501 fpm @ 44.5°F
Bleed Air (2"): 3,892 fpm
Humidity: 87.1%

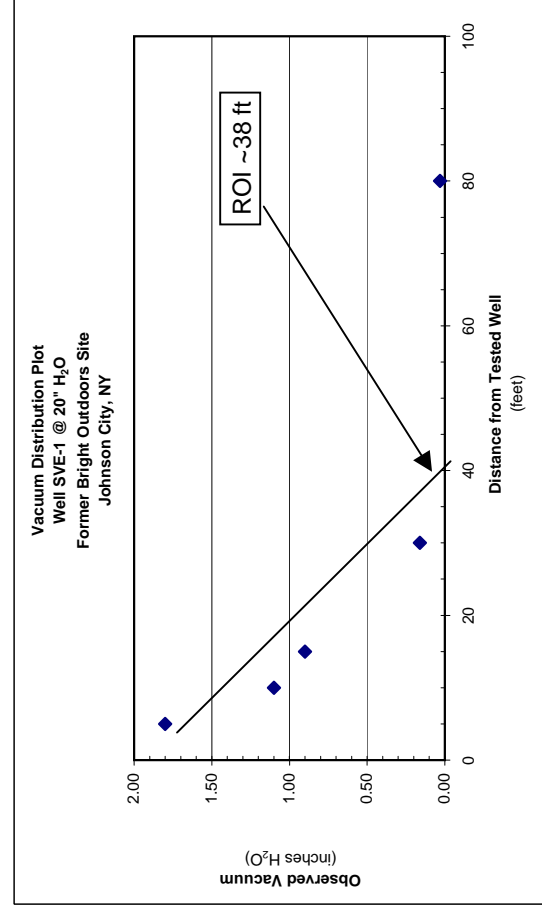
Observation Point	Distance	Observed Vacuum
VM-01	5.0	0.030
VM-02	10	0.040
VM-03	15	0.015
VM-04	30	0.010
VM-05	80	0.000

FIGURE 1



Test Date: December 15, 2008

FIGURE 2



Test Date: December 16, 2008

Step 2:

Tested Well: SVE-1
Vacuum @ Wellhead: 20 " H₂O
Flow Rate from well (2"): 1,061 fpm @ 39.5°F
Bleed Air (2"): 3,750 fpm
Humidity: 47.4%

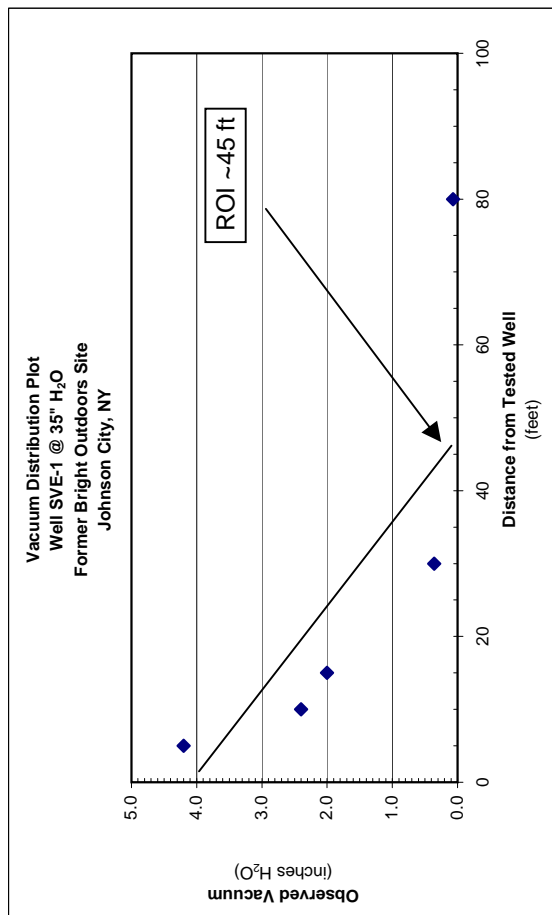
Observation Point	Distance	Observed Vacuum
VM-01	5.0	1.800
VM-02	10	1.100
VM-03	15	0.900
VM-04	30	0.160
VM-05	80	0.030

Step 3:

Tested Well: SVE-1
Vacuum @ Wellhead: 35 " H₂O
Flow Rate from well (2"): 1,657 fpm @ 39.5°F
Bleed Air (2"): 3,046 fpm
Humidity: 45.1%

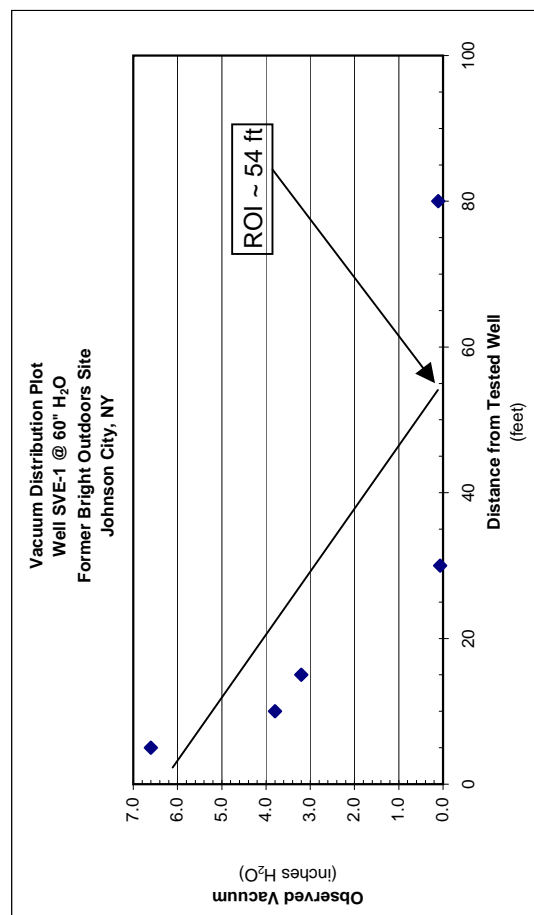
Observation Point	Distance	Observed Vacuum
VM-01	5.0	4.20
VM-02	10	2.40
VM-03	15	2.00
VM-04	30	0.36
VM-05	80	0.07

FIGURE 3



Test Date: December 16, 2008

FIGURE 4



Test Date: December 16, 2008

Step 4:

Tested Well: SVE-1
Vacuum @ Wellhead: 60 " H₂O
Flow Rate from well (2"): 5,732 fpm @ 43.1°F
Bleed Air (2"): 2,172 fpm
Humidity: 41.6%

Observation Point	Distance	Observed Vacuum
VM-01	5.0	6.60
VM-02	10	3.80
VM-03	15	3.20
VM-04	30	0.065
VM-05	80	0.105

PILOT TEST FIELD DATA SHEETS

Pilot Test Data Vapor Extraction

ART

Site: EBright Outdoors

Blower Make/Model: R61300-50

Pipe Diameter - Manifold: 2"

Date: 12/15/08

Max Vacuum @ Wellhead: 20" H₂O

Pipe Diameter - Bleed Air: 2"

Tested Well: _____

Well Diameter: 2"

Pipe Diameter - Effluent: 2"

Distance From Tested Well Well ID		5'	10'	15'	30'	60'	
		VM 01	VM 02	VM 03	VM 04	VM 05	
Step 1:	Start	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum
Vac @ Wellhead:	5" H ₂ O	3:30 .021	0	0	0	0	
Airspeed Manifold:	501	4:00 .04	0	0	0	0	
Air Speed:	44.5°F	4:30 .04	.025	.015	0	0	
Bleed Air:	3432						
Air Speed:		4:50 .03	.04	.015	.01	0	
Effluent:							
PHD Humidity:	87.1%	5:10 .02	0	0	0	0	
Step 1:	End	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum
Vac @ Wellhead:	10" H ₂ O						
Airspeed Manifold:	656						
Air Speed:	Temp 46.2°F						
Bleed Air:	3432						
Air Speed:							
Effluent:							
PHD Humidity:	87.5%						
Step 2:	Start	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum
Vac @ Wellhead:	20" H ₂ O	8:10 .85	.58	.43	.09	.02	
Airspeed Manifold:	921	8:30 1.40	.90	.70	.11	.02	
Air Speed:	Temp 37.2°F	8:40 2.0	1.25	1.0	.17	.035	
Bleed Air:	3435						
Air Speed:		8:50 2.0	1.24	.95	.17	.04	
Effluent:		9:10 1.80	1.10	.90	.16	.03	
PHD Humidity:	47.9%						
Step 2:	End	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum
Vac @ Wellhead:	20" H ₂ O	9:30 1.80	1.10	.90	.16	.03	
Airspeed Manifold:	1061						
Air Speed:	Temp 39.5°F						
Bleed Air:	3750						
Air Speed:							
Effluent:							
PHD Humidity:	47.4%						

Pilot Test Data Vapor Extraction

ART

Site: EBRIGHT OUTDOORS

Blower Make/Model: R61300-50

Pipe Diameter - Manifold: 2"

Date: 12/16/08

Max Vacuum @ Wellhead:

Pipe Diameter - Bleed Air: 2"

Tested Well:

Well Diameter: 2"

Pipe Diameter - Effluent: 2"

Time
Start
9:35

END
Time
11:13

Time
Start
11:25

End
Time

Distance From Tested Well Well ID		5'	10'	15'	30'	80'	
		VM 01	VM 02	VM 03	VM 04	VM 05	
Step 3:	Start	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum
Vac @ Wellhead:	35" H ₂ O	4.50	4.40	2.60	2.20	.37	.08
Airspeed Manifold:	1365	10:05	4.20	2.60	2.20	.37	.08
Air Speed:	Temp 40.2°F	10:20	4.20	2.60	2.00	.36	.075
Bleed Air:	2565	10:35	4.20	2.60	2.00	.36	.08
Air Speed:		10:50	4.20	2.40	2.00	.36	.070
Effluent:							
PID Humidity	46.5%						
Step 3:	End	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum
Vac @ Wellhead:	35" H ₂ O	11:05	4.20	2.40	2.00	.36	.070
Airspeed Manifold:	1657						
Air Speed:	Temp 59.5°F						
Bleed Air:	3076						
Air Speed:							
Effluent:							
PID Humidity	45.1%						
Step 4:	Start	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum
Vac @ Wellhead:	10.2" H ₂ O	11:40	7.40	4.20	3.50	.75	.13
Airspeed Manifold:		11:55					
Air Speed:	Temp	12:10					
Bleed Air:		12:25					
Air Speed:		12:40					
Effluent:		12:55					
PID Humidity		13:10					
Step 4:	End	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum
Vac @ Wellhead:		13:20					
Airspeed Manifold:							
Air Speed:	Temp						
Bleed Air:							
Air Speed:							
Effluent:							
PID Humidity							

Pilot Test Data Vapor Extraction

ART

Site: EBRIGHT OUTDOORS

Blower Make/Model: RG1300-50

Pipe Diameter - Manifold: 2"

Date: 12/16/04

Max Vacuum @ Wellhead: 60" H₂O

Pipe Diameter - Bleed Air: 2"

Tested Well: _____

Well Diameter: 2"

Pipe Diameter - Effluent: 2"

Time
Start
1:10

Time
End
2:42

Distance From Tested Well Well ID		5'	10'	15'	30'	80'	
		VM01	VM02	VM03	VM04	VM05	
Step 1: Start	1:35	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum
Vac @ Wellhead:	60" H ₂ O	1:25 8.40	5.20	4.40	.90	.14	
Airspeed Manifold:	5922	1:40 8.20	4.80	4.00	.85	.13	
Air Speed: Bleed Air:	TEMP 39.1°F 1746	1:55 7.80	4.40	3.80	.80	.13	
Air Speed: Effluent:		2:10 7.40	4.20	3.60	.75	.115	
PID Humidity:	44.2%	2:25 6.80	4.00	3.40	.70	.115	
Step 1: End	2:35	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum
Vac @ Wellhead:	60" H ₂ O	2:40 6.60	3.80	3.20	.65	.105	
Airspeed Manifold:	5732						
Air Speed: Bleed Air:	TEMP 43.1°F 2172						
Air Speed: Effluent:							
PID Humidity:	41.6%						
Step 2: Start		Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum	Observed Vacuum
Vac @ Wellhead:							
Airspeed Manifold:							
Air Speed: Bleed Air:							
Air Speed: Effluent:							
PID							
Step 2: End							
Vac @ Wellhead:							
Airspeed Manifold:							
Air Speed: Bleed Air:							
Air Speed: Effluent:							
PID							