

New York State Department of Environmental Conservation

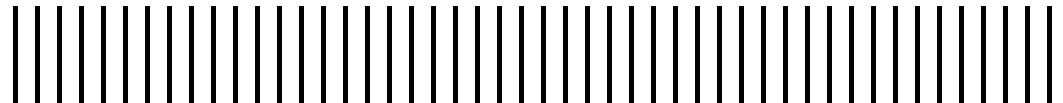
Department of Environmental Remediation • 625 Broadway • Albany, New York 12233

Site Number 7-54-012

Investigation Report Tioga Castings Site

New York State Department of Environmental
Conservation Work Assignment D004443-8

August 2008



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**MALCOLM
PIRNIE**

Contents

1. Introduction	1-1
1.1. Introduction	1-1
1.2. Site Description	1-1
2. Site Investigation Activities	2-1
2.1. Drilling	2-1
2.1.1. Foundry Area Drilling and Sampling	2-1
2.1.2. Landfill Area Drilling and Sampling	2-2
2.2. Landfill Cap Repair	2-3
2.3. Soil Vapor Intrusion Sampling.....	2-4
2.4. Groundwater Sampling	2-5
3. Analytical Results	3-1
3.1. Groundwater	3-1
3.1.1. VOCs	3-1
3.1.2. Metals	3-1
3.2. Soil	3-1
3.2.1. VOCs	3-1
3.2.2. Metals	3-1
3.2.3. PCBs	3-1
3.3. Soil Vapor Intrusion.....	3-2
4. Summary	4-1

Figures

1-1	Site Location
2-1	Sampling Locations

Tables

Table 1	Summary of Groundwater Sampling Results – VOCs
Table 2	Summary of Groundwater Sampling Results – Metals

Table 3	Summary of Soil Sampling Results – VOCs
Table 4	Summary of Soil Sampling Results – Metals and PCBs
Table 5	Summary of Soil Vapor Intrusion Sampling Results

Appendices

Appendix A.....	Soil Boring Logs
Appendix B.....	Analytical Reporting Forms

1. Introduction

1.1. Introduction

The New York State Department of Environmental Conservation (NYSDEC) has issued a Work Assignment (# D004443-8) to Malcolm Pirnie, Inc. (Malcolm Pirnie) for Operation, Maintenance, and Monitoring at the Tioga Casting Site in Owego, New York (Figure 1-1). Malcolm Pirnie has prepared this Preliminary Assessment Report to summarize additional site investigation activities conducted between July 15 and 17, 2008, at the request of the NYSDEC.

1.2. Site Description

The Tioga Casting site is located on Foundry Street, Owego, Broome County, New York (Figure 2-1). The former foundry buildings have been razed, leaving the concrete slabs in-place. A capped, closed landfill is present at the western end of the site.

2. Site Investigation Activities

2.1. Drilling

Subsurface soil samples were collected to evaluate the horizontal and vertical distribution of site-related contaminants within the vicinity of the former foundry building and the on-site closed, capped landfill cell. Figure 2-1 shows the drilling locations. Soil boring logs are provided in Appendix A.

2.1.1. Foundry Area Drilling and Sampling

Eighteen borings were advanced using a track-mounted direct-push (Geoprobe®) drilling rig (A). Continuous soil cores (MacroCore®) were collected from ground surface to the total depth of each boring. Upon collection, the core was screened for VOCs using a photoionization detector (PID) and visually inspected for signs of contaminants (e.g., staining and/or sheens) and buried debris, and classified by the on-site geologist. Each boring was advanced to the water table (approximately 15 feet below ground surface (bgs)). In general, two samples were collected from each boring. One sample was collected from the zone with the greatest evidence of contaminants, and one sample was collected from the zone immediately above the water table. However, due to limited soil recovery in some soil cores, several sampling locations could not be sampled at both intervals. Following sample collection, drill cuttings were returned to their respective bore holes. The remainder of each bore hole was backfilled with bentonite.

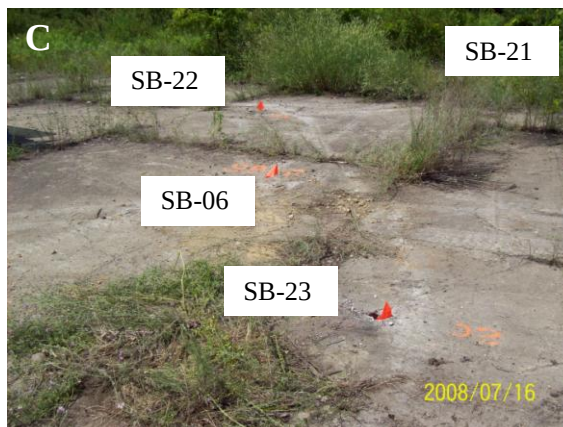


Subsurface soil beneath the site generally consisted of fill materials containing a multitude of colored sands including, black fine sand with a “greasy” texture, reddish-brown fine sand, and tan, brown, pink, and yellow sands (B). Metal fragments, slag, glass, ash, concrete, and wood were also commonly present in the fill materials. If present, the thickness of the fill materials ranged from 0.5 feet (SB-20) in the south east area of the former foundry building to



14.5 feet (SB-08) in the southwest area of the former foundry building. The thickness of the fill materials generally decreased from west to east across the site. Some borings (SB-10, SB-17, and SB-18) did not contain any of the above-mentioned fill materials.

Two soil borings (SB-06 and SB-14) contained evidence of VOCs in the fill materials. The soil samples from SB-06 produced a PID reading of 225 parts per million (ppm) at 7.5 feet bgs. The PID reading in SB-14 was 108 ppm at 7.5 feet bgs. The water table in both of these borings was approximately 15 feet bgs. Additional soil borings (SB-21, SB-22, and SB-23) were advanced in the vicinity of SB-06 to evaluate the vertical and horizontal extent of the VOC-containing soil (C). However, no field evidence of VOCs was found in these borings.



Soil beneath the fill materials generally consisted of light brown silty sand and gravel. No evidence of VOCs (staining and/or sheens) was observed in any of the samples collected beneath the fill material.

Soil samples were submitted to Test America in Shelton, Connecticut following chain-of-custody procedures for analysis of Target Compound List (TCL) VOCs by USEPA Method ILM0.4.3, Target Analyte List (TAL) metals by USEPA Method ILM05.3, and polychlorinated biphenyls (PCBs) by USEPA Method 8082.

2.1.2. Landfill Area Drilling and Sampling

Five borings were advanced at the landfill to evaluate the concentrations of VOCs, metals, and PCBs in the landfill cell. Figure 2-1 shows the drilling locations. Soil borings were advanced through the engineered cap and liner, landfill cell, and to the water table. No liner was observed at the base of the landfill cell in any of the soil borings.

One composite sample was collected from each boring for analysis of metals and PCBs. A sample for VOCs analysis was also collected from the zone with the greatest evidence of contamination. Following sample collection, each borehole was backfilled with bentonite.

Drill cuttings were placed in a United Nations (UN)-approved 55-gallon steel drum. One composite soil sample was collected from the drum and is being held by the laboratory pending the waste characterization analysis required by the disposal facility.

Based on soil core samples, the average thickness of the engineered liner system was approximately three feet. The landfill cell material generally consisted of black fine sand with a “greasy” texture and the multitude of other colored sand and debris similar to those observed in the fill material from soil borings advanced in the vicinity of the former foundry. The total landfill thickness (liner membrane to the bottom of landfill cell material) was approximately 12 feet in soil borings SB-04 and SB-05; approximately 13 feet in SB-01 and SB-02; and approximately 16 feet in SB-03.

Soil beneath the landfill cell generally consisted of brown and light brown silty sand and gravel. No evidence of VOCs (staining and/or sheens) was observed in any of the soil cores from beneath the landfill cell.

2.2. Landfill Cap Repair

Holes in the landfill cap resulting from the soil boring activities were repaired by excavating to the top of the HDPE cap liner material to expose each borehole. The landfill cap material (topsoil and liner cover) was segregated during excavation for later restoration (D). The liner was repaired by cleaning the area of the borehole and placing an approximately 18 inch x 18 inch patch of 60 mil HDPE material over the perforation in the liner (E). A two-inch strip of double-sided butyl rubber tape was used to secure the patch to the landfill liner and a roller was used to improve the contact between the patch and liner (F).



Adhesive caulk was used to seal the perimeter seam of the patch (G).



The excavation was then backfilled with the previously excavated soil. The soil was compacted with bucket of the excavator and the cap surface was restored with grass seed (H).



2.3. Soil Vapor Intrusion Sampling

Five sub-slab soil vapor intrusion sampling points were installed in the foundry slab to evaluate the potential soil vapor intrusion pathways in the event the site is redeveloped. The locations of the vapor points were based PID readings in soil cores, field observations from soil borings, and to provide even spatial distribution across the site. Figure 2-1 shows the locations of the locations of the sub-slab vapor points.

Sub-slab soil vapor sampling points were installed using a hammer drill equipped with a one-inch diameter drill bit. The drill bit was advanced approximately six-inches below the bottom of the concrete slab. A six-inch long 3/8-inch diameter stainless-steel screen with 1/4-inch Teflon tubing was then lowered to the bottom of the hole (I). The screened interval was then backfilled with sand. The remainder of the drill hole was backfilled with bentonite and



hydrated with potable water.

Prior to collecting the samples, three volumes of air were purged from each sub-slab vapor point using a syringe. The purged air was vented into a Tedlar bag and screened with a PID for the presence of VOCs. However, the PID malfunctioned before all of the sample points could be evaluated. The sample location that was tested with the PID (SV-2) contained no measureable concentrations of VOCs.

Vapor points were sampled using 6-liter Summa canisters equipped with two-hour flow controllers (J). One ambient air sample was collected concurrently with the sub-slab samples to provide information on ambient air quality at the time of sampling. Sub-slab and ambient air samples were sent to Con-Test Analytical Laboratories, East Longmeadow, Massachusetts following chain-of-custody procedures for analysis of VOCs by Method TO-15.



2.4. Groundwater Sampling

Groundwater samples were collected from the monitoring well network in accordance with the Tioga Castings Site Work Plan (K). Water levels were measured in each well prior to sampling. No light non-aqueous phase liquid (LNAPL) or sheens were present in any of the purged groundwater. As in previous sampling events, groundwater monitoring wells MW-1 and MW-3 purged dry and could not be sampled. Groundwater samples were sent to Test America in Shelton, Connecticut following chain-of-custody procedures for analysis of TCL VOCs (USEPA Method ILM04.3) and total TAL Metals (USEPA Method ILM05.3).



3. Analytical Results

Analytical results for the investigation are summarized in Table 1 (Groundwater VOCs), Table 2 (Groundwater Metals), Table 3 (Soil VOCs), Table 4 (Soil Metals and PCBs), and Table 5 (Soil Vapor Intrusion). Analytical reporting forms (Form I) are provided in Appendix B.

3.1. Groundwater

3.1.1. VOCs

Table 1 shows that VOCs were not detected in any of the groundwater samples collected during the investigation.

3.1.2. Metals

Table 2 shows that none of the groundwater samples contained concentrations of metals greater than the applicable NYSDEC Class GA Standards. As shown in Table 2, the sodium concentration in the sample from MW-2 decreased from 36,100 micrograms per liter (ug/L) in the sample from the previous sampling event (August 2007) to 18,700 ug/L, which is less than the NYSDEC Class GA Standard of 20,000 ug/L.

3.2. Soil

3.2.1. VOCs

Table 3 shows that VOCs were not detected in any of the soil samples at concentrations greater than the corresponding 6NYCRR Part 375 Commercial Soil Cleanup Objectives (SCOs).

3.2.2. Metals

As shown in Table 4, only three of the soil borings contained concentrations of metals greater than the applicable 6NYCRR Part 375 Commercial SCOs. The sample from SB-09(4-5) contained manganese at an estimated concentration (based on “E” qualifier) of 12,700 milligrams per kilogram (mg/kg) or parts per million (ppm) which is greater than 6NYCRR Part 375 Commercial SCO of 10,000 ppm. The concentration of copper in the sample from SB-14(7-8) was 528 ppm which exceeds the 6NYCRR Part 375 Commercial SCO of 270 ppm. The lead concentration in the sample from SB-19 (3.5-4.5) was 2,330 ppm. The 6NYCRR Part 375 Commercial SCO for lead is 1,000 ppm.

3.2.3. PCBs

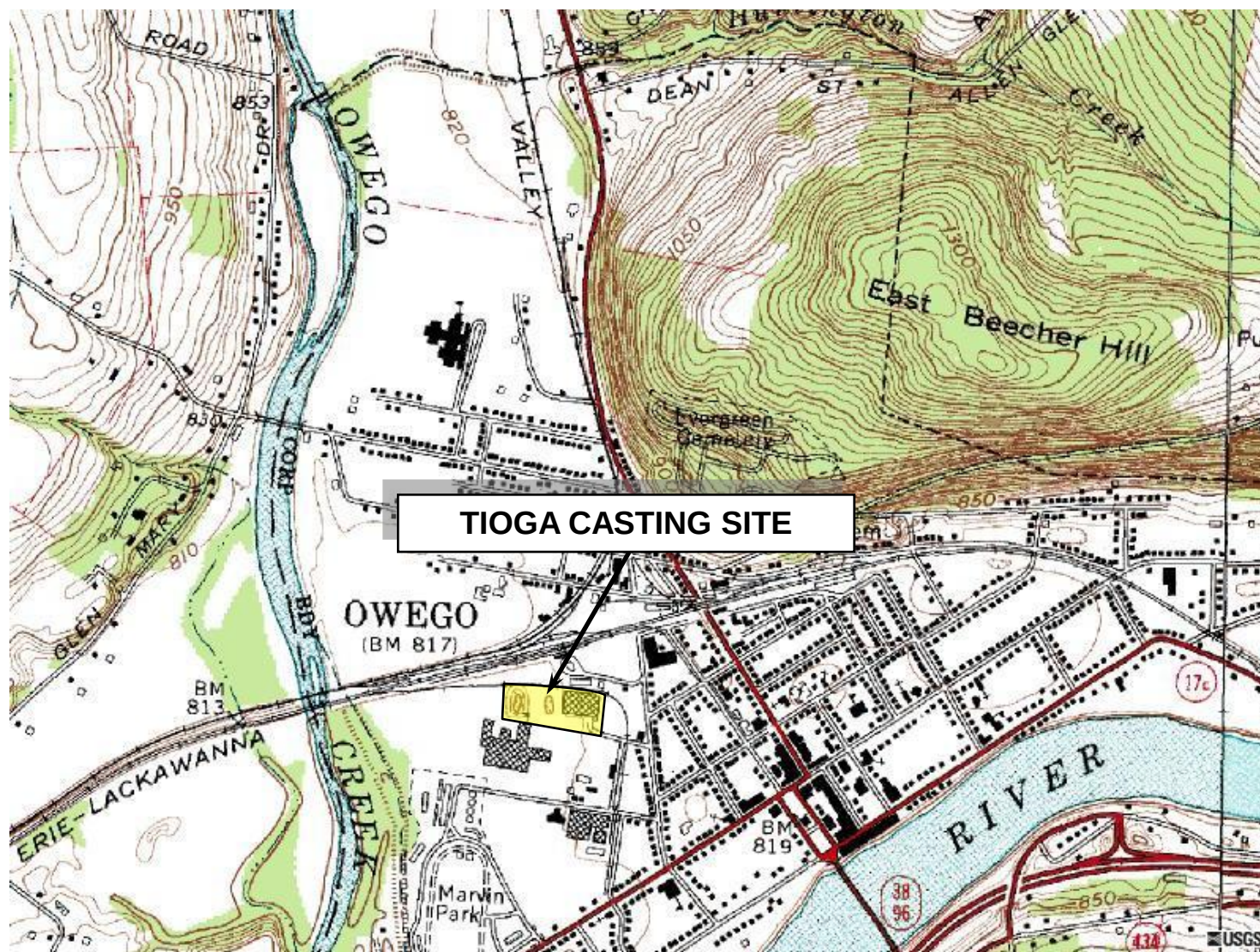
Table 4 shows that none of the soil samples contained concentrations of PCBs greater than the corresponding 6NYCRR Part 375 Commercial SCO of 1 ppm.

3.3. Soil Vapor Intrusion

Soil vapor intrusion sample results are summarized in Table 5. As shown in Table 5, sub-slab soil vapor sample SV-02 contained 1,1,1-trichloroethane at a concentration of 1,100 micrograms per cubic meter (ug/m^3). This result is greater than the New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH Guidance) Soil Vapor / Indoor Air Matrix 2 mitigation value of $1,000 \text{ ug}/\text{m}^3$. None of the other samples contained VOCs at concentrations greater than the applicable NYSDOH Guidance values.

4. Summary

Three groundwater monitoring wells, 20 soil borings, and five sub-slab soil vapor sampling points were sampled to evaluate for the presence of VOCs, metals and PCBs at the former metal foundry. No VOCs were detected in soil or groundwater at concentrations greater than the applicable 6NYCRR Part 375 Commercial SCOs or NYSDEC Class GA Standards, respectively. Only one sub-slab soil vapor sample contained VOCs at a concentration greater than the NYSDOH Guidance value for mitigation. None of the groundwater samples contained metals greater than the corresponding NYSDEC Class GA Standards. Soil samples from three soil borings contained concentrations of metals that exceeded the 6NYCRR Part 375 Commercial SCOs for manganese, copper, or lead. None of the soil borings contained PCBs at concentrations greater than the applicable 6NYCRR Part 375 Commercial SCOs.



TIOGA CASTING SITE



SOURCE: U.S.G.S 7.5 MIN. OWEGO QUAD, 1990

**MALCOLM
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NYSDEC STANDBY CONTRACT NO. D004443
TIOGA CASTING FACILITIES
OWEGO, NEW YORK
TIOGA CASTING SITE LOCATION

FIGURE 1-1



Table 1
Summary of Groundwater Sampling Results - VOCs
Tioga Castings
Owego, New York
NYSDEC Site No. 7-54-012

Well Date Units	NYSDEC Class GA Standard or Guidance Value (ug/L)	MW-2 7/17/2008 ug/L	MW-4 7/17/2008 ug/L	MW-X ⁽¹⁾ 7/17/2008 ug/L	MW-5 7/17/2008 ug/L
Volatiles					
1,1,1-Trichloroethane	5	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	5	10 U	10 U	10 U	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane		10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	1	10 U	10 U	10 U	10 U
1,1-Dichloroethane	5	10 U	10 U	10 U	10 U
1,1-Dichloroethene	5	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	5	10 U	10 U	10 U	10 U
1,2-Dibromo-3-Chloropropane	0.04	10 U	10 U	10 U	10 U
1,2-Dibromoethane	5	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	3	10 U	10 U	10 U	10 U
1,2-Dichloroethane	0.6	10 U	10 U	10 U	10 U
1,2-Dichloropropane	1	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	3	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	3	10 U	10 U	10 U	10 U
2-Hexanone		10 U	10 U	10 U	10 U
Acetone	50*	10 U	10 U	10 U	10 U
Benzene	1	10 U	10 U	10 U	10 U
Bromodichloromethane	50*	10 U	10 U	10 U	10 U
Bromoform	50*	10 U	10 U	10 U	10 U
Bromomethane	5	10 U	10 U	10 U	10 U
Carbon disulfide		10 U	10 U	10 U	10 U
Carbon tetrachloride	5	10 U	10 U	10 U	10 U
Chlorobenzene	5	10 U	10 U	10 U	10 U
Chloroethane	5	10 U	10 U	10 U	10 U
Chloroform	7	10 U	10 U	10 U	10 U
Chloromethane		10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	0.4**	10 U	10 U	10 U	10 U
Cyclohexane		10 U	10 U	10 U	10 U
Dibromochloromethane	50	10 U	10 U	10 U	10 U
Dichlorodifluoromethane	5	10 U	10 U	10 U	10 U
Ethylbenzene	5	10 U	10 U	10 U	10 U
Isopropylbenzene	5	10 U	10 U	10 U	10 U
Methyl acetate		10 U	10 U	10 U	10 U
Methyl Ethyl Ketone		10 U	10 U	10 U	10 U
methyl isobutyl ketone		10 U	10 U	10 U	10 U
Methyl tert-butyl ether		10 U	10 U	10 U	10 U
Methylcyclohexane		10 U	10 U	10 U	10 U
Methylene Chloride	5	10 U	10 U	10 U	10 U
Styrene	5	10 U	10 U	10 U	10 U
Tetrachloroethene		10 U	10 U	10 U	10 U
Toluene	5	10 U	10 U	10 U	10 U
trans-1,2-Dichloroethene	5	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	0.4**	10 U	10 U	10 U	10 U
Trichloroethene	5	10 U	10 U	10 U	10 U
Trichlorofluoromethane	5	10 U	10 U	10 U	10 U
Vinyl chloride	2	10 U	10 U	10 U	10 U
Xylenes, Total	5	10 U	10 U	10 U	10 U

Notes:

U - Analyte not detected at the indicated quantitation limit

(1) - MW-X is a duplicate sample collected at MW-4

* Guidance Value

**Sum of these compounds can not exceed 0.4 ug/L.

***Sum of these compounds can not exceed 300 ug/L.

Table 2
Summary of Groundwater Sampling Results - Metals
Tioga Castings
Owego, New York
NYSDEC Site No. 7-54-012

Well Date Units	NYSDEC Class GA Standards	MW-2 8/2/2007 ug/L	MW-2 7/17/2008 ug/L	MW-4 8/2/2007 ug/L	MW-4 7/17/2008 ug/L	MW-X ⁽¹⁾ 7/17/2008 ug/L	MW-5 8/2/2007 ug/L	MW-5 7/17/2008 ug/L
Metals (total)								
Aluminum		60.2 B	23.6 U	40.0 U	32.6 B	32.8 B	79.0 B	28.9 B
Antimony		5.6 U	5.5 U	5.6 U	5.5 U	5.5 U	5.6 U	5.5 U
Arsenic	25	4.2 U	3.7 U	4.2 U	3.7 U	3.7 U	4.2 U	3.7 U
Barium	1000	61.6 B	54.3 B	40.0 B	38.3 B	38.1 B	56.4 B	55.7 B
Beryllium		0.40 B	0.3 U	0.27 U	0.3 U	0.3 U	0.51 B	0.3 U
Cadmium	5	0.36 U	0.3 U	0.36 U	0.7 B	0.6 B	0.36 U	0.3 U
Calcium		54500 E	48800	42700 E	42400	42400	44400 E	45200
Chromium	50	0.84 U	0.9 U	0.84 U	0.9 U	0.9 U	0.84 U	0.9 U
Cobalt		1.1 B	1.1 U	0.89 U	1.1 U	1.1 U	0.89 U	1.1 U
Copper		1.3 U	1.3 U	1.4 B	1.3 U	1.3 U	1.3 U	1.3 U
Iron		19.3 U	19.3 U	47.6 B	34.0 B	34.0 B	19.3 U	19.3 U
Lead	25	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
Magnesium		8650 E	7670	8190 E	7830	7820	7600 E	7570
Manganese		2.8 B	8.2 B	0.79 B	1.2 B	1.1 B	0.90 B	0.7 B
Mercury	0.7	0.12 U	0.1 U	0.12 U	0.1 U	0.1 U	0.12 U	0.1 U
Nickel		1.2 U	1.0 U	1.2 U	1.0 U	1.3 B	1.2 U	1.4 B
Potassium		4710 BE	3900 B	1020 BE	1860 B	2420 B	3330 BE	3340 B
Selenium	10	6.1 U	6.1 U	6.1 U	6.1 U	6.1 U	6.1 U	6.1 U
Silver	50	1.7 B	1.3 U	1.0 U	1.3 U	1.3 U	1.6 B	1.3 U
Sodium	20000	36100 E	18700	12000 E	12800	12800	14200 E	15400
Thallium		7.0 U	5.9 U	7.0 U	5.9 U	5.9 U	7.0 U	5.9 U
Vanadium		0.80 B	1.0 U	0.78 U	1.0 U	1.0 U	0.80 B	1.0 U
Zinc		3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U

Notes:

 - Concentration exceeds corresponding NYSDEC Class GA Standard

U - Analyte not detected at the indicated quantitation limit

B - Value greater than or equal to the instrument detection limit but less than the quantitation limit

E - Estimated concentration

(1) - MW-X is a duplicate sample collected at MW-4

Table 3
Summary of Soil Sampling Results - VOCs
Tioga Castings
Owego, New York
NYSDEC Site No. 7-54-012

Soil Boring Sample Interval (feet bgs) Date Units	Commercial Soil Cleanup Objective ppm	SB-01 12-13 7/15/2008 mg/kg	SB-02 17-17.5 7/15/2008 mg/kg	SB-03 19-19.5 7/15/2008 mg/kg	SB-04 14.5-15 7/15/2008 mg/kg	SB-05 14.5-15 7/15/2008 mg/kg
VOCs						
1,1,1-Trichloroethane	500	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
1,1,2,2-Tetrachloroethane	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
1,1,2-Trichloroethane	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
1,1-Dichloroethane	240	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
1,1-Dichloroethene	500	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
1,2,4-Trichlorobenzene	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
1,2-Dibromo-3-Chloropropane	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
1,2-Dibromoethane	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
1,2-Dichlorobenzene	500	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
1,2-Dichloroethane	30	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
1,2-Dichloropropane	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
1,3-Dichlorobenzene	280	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
1,4-Dichlorobenzene	130	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
2-Hexanone	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
Acetone	500	0.008 J B	0.021 B	0.014 B	0.016 B	0.075 B
Benzene	44	0.001 J	0.002 J	0.001 J	0.005 J	0.000 J
Bromodichloromethane	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
Bromoform	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
Bromomethane	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
Carbon disulfide	NS	0.011 U	0.001 J	0.012 U	0.011 U	0.012 U
Carbon tetrachloride	22	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
Chlorobenzene	500	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
Chloroethane	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
Chloroform	350	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
Chloromethane	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
cis-1,2-Dichloroethene	500	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
cis-1,3-Dichloropropene	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
Cyclohexane	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
Dibromochloromethane	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
Dichlorodifluoromethane	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
Ethylbenzene	390	0.001 J	0.002 J	0.001 J	0.004 J	0.012 U
Isopropylbenzene	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
Methyl acetate	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
Methyl Ethyl Ketone	500	0.011 U	0.012 U	0.012 U	0.011 U	0.018
Methyl isobutyl ketone	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
Methyl tert-butyl ether	500	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
Methylcyclohexane	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
Methylene Chloride	500	0.009 J B	0.010 J B	0.002 J B	0.016 B	0.007 J B
Styrene	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
Tetrachloroethene	150	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
Toluene	500	0.002 J B	0.003 J B	0.003 J B	0.005 J B	0.001 J B
trans-1,2-Dichloroethene	500	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
trans-1,3-Dichloropropene	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
Trichloroethene	200	0.022	0.023	0.070	0.080	0.003 J
Trichlorofluoromethane	NS	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
Vinyl chloride	13	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
Xylenes, Total	500	0.004 J	0.005 J	0.003 J	0.009 J	0.012 U

Notes

U - Analyte not detected at indicated quantitation limit

J - Estimated value

B - Analyte detected in blank and sample

NS - Not specified.

ppm - Parts per million / mg/kg - milligrams per kilogram

Table 3
Summary of Soil Sampling Results - VOCs
Tioga Castings
Owego, New York
NYSDEC Site No. 7-54-012

Soil Boring Sample Interval (feet bgs) Date Units	Commercial Soil Cleanup Objective ppm	SB-06 7.5-8.5 7/15/2008 mg/kg	SB-06 14-15 7/15/2008 mg/kg	SB-07 14.5-15.5 7/15/2008 mg/kg	SB-08 9.5-10 7/15/2008 mg/kg	SB-09 7.5-8.5 7/16/2008 mg/kg
VOCs						
1,1,1-Trichloroethane	500	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
1,1,2,2-Tetrachloroethane	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
1,1,2-Trichloroethane	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
1,1-Dichloroethane	240	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
1,1-Dichloroethene	500	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
1,2,4-Trichlorobenzene	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
1,2-Dibromo-3-Chloropropane	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
1,2-Dibromoethane	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
1,2-Dichlorobenzene	500	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
1,2-Dichloroethane	30	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
1,2-Dichloropropane	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
1,3-Dichlorobenzene	280	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
1,4-Dichlorobenzene	130	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
2-Hexanone	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Acetone	500	0.250 B	0.006 J B	0.011 U	0.043 B	0.015 B
Benzene	44	0.001 J	0.0003 J	0.011 U	0.002 J	0.012 U
Bromodichloromethane	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Bromoform	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Bromomethane	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Carbon disulfide	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Carbon tetrachloride	22	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Chlorobenzene	500	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Chloroethane	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Chloroform	350	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Chloromethane	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
cis-1,2-Dichloroethene	500	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
cis-1,3-Dichloropropene	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Cyclohexane	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Dibromochloromethane	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Dichlorodifluoromethane	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Ethylbenzene	390	0.002 J	0.0003 J	0.011 U	0.003 J	0.012 U
Isopropylbenzene	NS	0.004 J	0.011 U	0.011 U	0.012 U	0.012 U
Methyl acetate	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Methyl Ethyl Ketone	500	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Methyl isobutyl ketone	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Methyl tert-butyl ether	500	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Methylcyclohexane	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Methylene Chloride	500	0.005 J B	0.007 J B	0.003 J B	0.007 J B	0.005 J B
Styrene	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Tetrachloroethene	150	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Toluene	500	0.006 J B	0.001 J B	0.011 U	0.005 J B	0.012 U
trans-1,2-Dichloroethene	500	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
trans-1,3-Dichloropropene	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Trichloroethene	200	0.012 J	0.009 J	0.011 U	0.008 J	0.001 J
Trichlorofluoromethane	NS	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Vinyl chloride	13	0.023 U	0.011 U	0.011 U	0.012 U	0.012 U
Xylenes, Total	500	0.011 J	0.001 J	0.011 U	0.009 J	0.012 U

Notes

U - Analyte not detected at indicated quantitation limit

J - Estimated value

B - Analyte detected in blank and sample

NS - Not specified.

ppm - Parts per million / mg/kg - milligrams per kilogram

Table 3
Summary of Soil Sampling Results - VOCs
Tioga Castings
Owego, New York
NYSDEC Site No. 7-54-012

Soil Boring Sample Interval (feet bgs) Date Units	Commercial Soil Cleanup Objective ppm	SGB-11 14-15 7/16/2008 mg/kg	SB-13 4-5 7/16/2008 mg/kg	SB-14 7-8 7/16/2008 mg/kg
VOCs				
1,1,1-Trichloroethane	500	0.012 U	0.012 U	0.012 U
1,1,2,2-Tetrachloroethane	NS	0.012 U	0.012 U	0.012 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	0.012 U	0.012 U	0.012 U
1,1,2-Trichloroethane	NS	0.012 U	0.012 U	0.012 U
1,1-Dichloroethane	240	0.012 U	0.012 U	0.012 U
1,1-Dichloroethene	500	0.012 U	0.012 U	0.012 U
1,2,4-Trichlorobenzene	NS	0.012 U	0.012 U	0.012 U
1,2-Dibromo-3-Chloropropane	NS	0.012 U	0.012 U	0.012 U
1,2-Dibromoethane	NS	0.012 U	0.012 U	0.012 U
1,2-Dichlorobenzene	500	0.012 U	0.012 U	0.012 U
1,2-Dichloroethane	30	0.012 U	0.012 U	0.012 U
1,2-Dichloropropane	NS	0.012 U	0.012 U	0.012 U
1,3-Dichlorobenzene	280	0.012 U	0.012 U	0.012 U
1,4-Dichlorobenzene	130	0.012 U	0.012 U	0.012 U
2-Hexanone	NS	0.012 U	0.012 U	0.012 U
Acetone	500	0.012 U	0.012 U	0.012 U
Benzene	44	0.012 U	0.012 U	0.001 J
Bromodichloromethane	NS	0.012 U	0.012 U	0.012 U
Bromoform	NS	0.012 U	0.012 U	0.012 U
Bromomethane	NS	0.012 U	0.012 U	0.012 U
Carbon disulfide	NS	0.012 U	0.012 U	0.012 U
Carbon tetrachloride	22	0.012 U	0.012 U	0.012 U
Chlorobenzene	500	0.012 U	0.012 U	0.012 U
Chloroethane	NS	0.012 U	0.012 U	0.012 U
Chloroform	350	0.012 U	0.012 U	0.012 U
Chloromethane	NS	0.012 U	0.012 U	0.012 U
cis-1,2-Dichloroethene	500	0.012 U	0.012 U	0.012 U
cis-1,3-Dichloropropene	NS	0.012 U	0.012 U	0.012 U
Cyclohexane	NS	0.012 U	0.012 U	0.012 U
Dibromochloromethane	NS	0.012 U	0.012 U	0.012 U
Dichlorodifluoromethane	NS	0.012 U	0.012 U	0.012 U
Ethylbenzene	390	0.012 U	0.012 U	0.001 J
Isopropylbenzene	NS	0.012 U	0.012 U	0.001 J
Methyl acetate	NS	0.012 U	0.012 U	0.012 U
Methyl Ethyl Ketone	500	0.012 U	0.012 U	0.012 U
Methyl isobutyl ketone	NS	0.012 U	0.012 U	0.012 U
Methyl tert-butyl ether	500	0.012 U	0.012 U	0.012 U
Methylcyclohexane	NS	0.012 U	0.012 U	0.003 J
Methylene Chloride	500	0.005 J B	0.002 J B	0.003 J B
Styrene	NS	0.012 U	0.012 U	0.012 U
Tetrachloroethene	150	0.012 U	0.012 U	0.012 U
Toluene	500	0.001 J B	0.012 U	0.002 J B
trans-1,2-Dichloroethene	500	0.012 U	0.012 U	0.012 U
trans-1,3-Dichloropropene	NS	0.012 U	0.012 U	0.012 U
Trichloroethene	200	0.010 J	0.012 U	0.012 U
Trichlorofluoromethane	NS	0.012 U	0.012 U	0.012 U
Vinyl chloride	13	0.012 U	0.012 U	0.012 U
Xylenes, Total	500	0.001 J	0.012 U	0.001 J

Notes

U - Analyte not detected at indicated quantitation limit

J - Estimated value

B - Analyte detected in blank and sample

NS - Not specified.

ppm - Parts per million / mg/kg - milligrams per kilogram

Table 4
Summary of Soil Sampling Results - Metals/PCBs
Tioga Castings
Owego, New York
NYSDEC Site No. 7-54-012

Soil Boring Sample Interval (feet bgs) Date Units	Commercial Soil Cleanup Objective ppm	SB-01 3.8-18 7/15/2008 mg/kg	SB-02 3.5-17.5 7/15/2008 mg/kg	SB-03 4.5-20 7/15/2008 mg/kg	SB-04 3.5-15 7/15/2008 mg/kg
Metals -Total					
Aluminum		5830	4550	4840	5560
Antimony		0.69 B	0.80 B	1.10 B	0.54 U
Arsenic	16	4.9	3.5	4.8	2.9
Barium	400	47.8	62.6	53.1	42.4
Beryllium	590	0.44 B	0.36 B	0.29 B	0.52 B
Cadmium	9.3	0.50 B	0.80	0.80	0.50 B
Calcium		19500	15000	11900	18200
Chromium (hexavalent/trivalent)	400**/1500**	60.1	47.6	50.3	49.3
Cobalt		4.0 B	3.0 B	4.5 B	2.8 B
Copper	270	83.5	43.9	50.0	32.6
Iron		27200	28100	37700	23100
Lead	1,000	142	168	273	196
Magnesium		1840	1570	1620	1680
Manganese	10,000	985	1180	890	1660
Mercury	2.8	0.018 B	0.014 B	0.068 B	0.013 B
Nickel	310	51.6	30.4	49.7	23.2
Potassium		543 B	394 B	534 B	555 B
Selenium	1,500	0.59 U	0.59 U	0.59 U	0.59 U
Silver	1,500	0.14 B	0.18 B	0.23 B	0.18 B
Sodium		283 B	189 B	176 B	202 B
Thallium		0.30 U	0.30 U	0.30 U	0.51 B
Vanadium		7.3	5.3	7.1	7.0
Zinc	10,000	84.6	86.1	126.0	92.5
PCBs					
PCB-1016	NS	0.019 U	0.019 U	0.019 U	0.019 U
PCB-1221	NS	0.037 U	0.036 U	0.037 U	0.036 U
PCB-1232	NS	0.019 U	0.019 U	0.019 U	0.019 U
PCB-1242	NS	0.019 U	0.019 U	0.019 U	0.019 U
PCB-1248	NS	0.019 U	0.019 U	0.019 U	0.019 U
PCB-1254	NS	0.019 U	0.021	0.016 J	0.019 U
PCB-1260	NS	0.019 U	0.018 J	0.009 J	0.019 U
Total PCBs	1		0.021	0.025	

Notes

J/B - value greater than or equal to the instrument detection limit, but less than the quantitation limit

E - value estimated or not reported due to the presence of interferences

ppm - parts per million / mg/kg - milligrams per kilogram

** - Total species concentration must be below each SCO

Table 4
Summary of Soil Sampling Results - Metals/PCBs
Tioga Castings
Owego, New York
NYSDEC Site No. 7-54-012

Soil Boring Sample Interval (feet bgs) Date Units	Commercial Soil Cleanup Objective ppm	SB-05 4-15 7/15/2008 mg/kg	SB-06 7.5-8.5 7/15/2008 mg/kg	SB-07 4-5 7/15/2008 mg/kg	SB-07 14.5-15.5 7/15/2008 mg/kg
Metals -Total					
Aluminum		5020	21600	7250	8150
Antimony		1.30 B	0.54 U	0.54 U	0.54 U
Arsenic	16	4.4	2.4	2.9	4.0
Barium	400	47.6	266.0	74.2	74.3
Beryllium	590	0.34 B	1.40	0.50 B	0.25 B
Cadmium	9.3	1.20	0.04 U	0.04 U	0.04 U
Calcium		17600	80800	30300	1640
Chromium (hexavalent/trivalent)	400**/1500**	43.7	32.3	19.5	8.8
Cobalt		3.8 B	6.9	2.9 B	6.4
Copper	270	56.8	13.2	56.2	11.0
Iron		28800	11900	25100	18200
Lead	1,000	264	6	12	5
Magnesium		1880	4100	1760	2140
Manganese	10,000	1160	5250	1500	385
Mercury	2.8	0.046 B	0.014 B	0.025 B	0.008 U
Nickel	310	22.7	5.7	15.8	15.3
Potassium		500 B	2970	620	562 B
Selenium	1,500	0.59 U	0.59 U	0.59 U	0.59 U
Silver	1,500	0.25 B	0.10 B	0.07 U	0.07 U
Sodium		124 B	640	427 B	70 B
Thallium		0.30 U	1.30 B	0.30 U	0.30 U
Vanadium		8.1	35.8	9.5	9.5
Zinc	10,000	128.0	14.5	37.2	46.0
PCBs					
PCB-1016	NS	0.019 U	0.019 U	0.019 U	0.019 U
PCB-1221	NS	0.036 U	0.037 U	0.036 U	0.037 U
PCB-1232	NS	0.019 U	0.019 U	0.019 U	0.019 U
PCB-1242	NS	0.019 U	0.019 U	0.019 U	0.019 U
PCB-1248	NS	0.019 U	0.019 U	0.019 U	0.019 U
PCB-1254	NS	0.016 J	0.012 J	0.004 J	0.019 U
PCB-1260	NS	0.011 J	0.034	0.013 J	0.019 U
Total PCBs	1	0.027	0.046	0.017	

Notes

J/B - value greater than or equal to the instrument detection limit, but less than the quantitation limit

E - value estimated or not reported due to the presence of interferences

ppm - parts per million / mg/kg - milligrams per kilogram

** - Total species concentration must be below each SCO

Table 4
Summary of Soil Sampling Results - Metals/PCBs
Tioga Castings
Owego, New York
NYSDEC Site No. 7-54-012

Soil Boring Sample Interval (feet bgs) Date Units	Commercial Soil Cleanup Objective ppm	SB-08 9.5-10 7/15/2008 mg/kg	SB-08 14.5-15 7/16/2008 mg/kg	SB-09 4-5 7/16/2008 mg/kg	SB-09 7.5-8.5 7/16/2008 mg/kg
Metals -Total					
Aluminum		9390	3930	40700	14600
Antimony		0.54 U	1.30 B	0.54 N,U	0.54 N,U
Arsenic	16	2.7	6.4	1.9	7.7
Barium	400	62.1	189.0	214.0	202.0
Beryllium	590	0.42 B	0.14 B	3.20	0.73
Cadmium	9.3	0.05 B	0.20 B	0.04 U	0.30 B
Calcium		1640	2190	94800	2820
Chromium (hexavalent/trivalent)	400**/1500**	18.9	46.9	32.0	19.3
Cobalt		8.4	4.3 B	5.4	10.9
Copper	270	24.6	92.3	28.3	19.6
Iron		21500	59600	15900	27600
Lead	1,000	14	64	6	28
Magnesium		2810	912	2070	3320
Manganese	10,000	246	727	12700 E,*	1630 E,*
Mercury	2.8	0.017 B	0.033 B	0.008 U	0.052 B
Nickel	310	27.1	173.0	3.6 B	25.1
Potassium		704	667	2570	961
Selenium	1,500	0.59 U	0.59 U	0.59 U	0.59 U
Silver	1,500	0.07 U	0.08 B	0.33 B	0.07 U
Sodium		155 B	624	528	67 B
Thallium		0.30 U	0.30 U	0.30 U	0.30 U
Vanadium		12.7	9.5	29.9	17.5
Zinc	10,000	59.3	80.1	6.1 B	80.0
PCBs					
PCB-1016	NS	0.020 U	0.020 U	0.018 U	0.021 U
PCB-1221	NS	0.039 U	0.039 U	0.036 U	0.041 U
PCB-1232	NS	0.020 U	0.020 U	0.018 U	0.021 U
PCB-1242	NS	0.020 U	0.020 U	0.018 U	0.021 U
PCB-1248	NS	0.020 U	0.020 U	0.018 U	0.021 U
PCB-1254	NS	0.033	0.020 U	0.018 U	0.021 U
PCB-1260	NS	0.023	0.020 U	0.018 U	0.021 U
Total PCBs	1	0.056			

Notes

J/B - value greater than or equal to the instrument detection limit, but less than the quantitation limit

E - value estimated or not reported due to the presence of interferences

ppm - parts per million / mg/kg - milligrams per kilogram

** - Total species concentration must be below each SCO

Table 4
Summary of Soil Sampling Results - Metals/PCBs
Tioga Castings
Owego, New York
NYSDEC Site No. 7-54-012

Soil Boring Sample Interval (feet bgs) Date Units	Commercial Soil Cleanup Objective ppm	SB-10 17-18 7/16/2008 mg/kg	SB-11 4-5 7/16/2008 mg/kg	SB-12 14-15 7/16/2008 mg/kg	SB-13 4-5 7/16/2008 mg/kg
Metals -Total					
Aluminum		8330	5350	8790	10300
Antimony		0.54 N,U	0.54 N,U	0.54 N,U	0.54 N,U
Arsenic	16	3.7	2.3	5.3	4.3
Barium	400	54.9	17.6 B	72.4	71.5
Beryllium	590	0.33 B	0.22 B	0.34 B	0.54 B
Cadmium	9.3	0.10 B	0.10 B	0.10 B	0.40 B
Calcium		7570	1560	1320	16700
Chromium (hexavalent/trivalent)	400**/1500**	16.7	7.6	13.0	18.0
Cobalt		6.7	1.1 B	6.5	4.9 B
Copper	270	26.2	14.1	12.4	83.1
Iron		19900	18100	19400	27600
Lead	1,000	10	42	5	18
Magnesium		2960	795	2420	1450
Manganese	10,000	343 E,*	105 E,*	500 E,*	1010 E,*
Mercury	2.8	0.008 U	0.008 U	0.020 B	0.030 B
Nickel	310	17.5	3.1 B	16.9	14.5
Potassium		676	688	620	1050
Selenium	1,500	0.59 U	0.59 U	0.59 U	0.59 U
Silver	1,500	0.07 U	0.07 U	0.07 U	0.07 U
Sodium		59 B	351 B	60 B	197 B
Thallium		0.30 U	0.30 U	0.30 U	0.30 U
Vanadium		11.4	5.9	11.3	17.5
Zinc	10,000	51.4	18.5	46.5	34.1
PCBs					
PCB-1016	NS	0.019 U	0.021 U	0.019 U	0.020 U
PCB-1221	NS	0.037 U	0.040 U	0.036 U	0.039 U
PCB-1232	NS	0.019 U	0.021 U	0.019 U	0.020 U
PCB-1242	NS	0.019 U	0.021 U	0.019 U	0.020 U
PCB-1248	NS	0.019 U	0.021 U	0.019 U	0.020 U
PCB-1254	NS	0.019 U	0.021 U	0.019 U	0.020 U
PCB-1260	NS	0.019 U	0.021 U	0.019 U	0.020 U
Total PCBs	1				

Notes

J/B - value greater than or equal to the instrument detection limit, but less than the quantitation limit

E - value estimated or not reported due to the presence of interferences

ppm - parts per million / mg/kg - milligrams per kilogram

** - Total species concentration must be below each SCO

Table 4
Summary of Soil Sampling Results - Metals/PCBs
Tioga Castings
Owego, New York
NYSDEC Site No. 7-54-012

Soil Boring Sample Interval (feet bgs) Date Units	Commercial Soil Cleanup Objective ppm	SB-14 7-8 7/16/2008 mg/kg	SB-15 3-4 7/16/2008 mg/kg	SB-16 4-5 7/16/2008 mg/kg	SB-17 14-15 7/16/2008 mg/kg
Metals -Total					
Aluminum		11800	5130	4730	8160
Antimony		0.54 N,U	0.85 B,N	1.10 B,N	0.54 N,U
Arsenic	16	4.1	9.1	7.8	4.2
Barium	400	101.0	179.0	48.9	57.9
Beryllium	590	0.62	0.47 B	0.30 B	0.25 B
Cadmium	9.3	0.30 B	0.60	3.00	0.08 B
Calcium		11600	4560	2540	3610
Chromium (hexavalent/trivalent)	400**/1500**	21.7	12.0	22.5	11.6
Cobalt		7.0	7.3	5.2 B	6.2
Copper	270	528	37.8	96.3	17.7
Iron		39600	42900	60900	18600
Lead	1,000	140	592	96	11
Magnesium		4490	1040	828	2530
Manganese	10,000	745 E,*	543 E,*	3100 E,*	409 E,*
Mercury	2.8	0.248	0.271	0.198	0.008 U
Nickel	310	21.2	14.2	21.5	16.0
Potassium		926	808	732	611
Selenium	1,500	0.59 U	0.59 U	0.59 U	0.59 U
Silver	1,500	0.07 U	0.22 B	0.24 B	0.07 U
Sodium		148 B	133 B	125 B	98 B
Thallium		0.30 U	0.30 U	0.30 U	0.30 U
Vanadium		18.3	23.0	22.1	10.3
Zinc	10,000	93.9	197.0	256.0	48.8
PCBs					
PCB-1016	NS	0.019 U	0.021 U	0.019 U	0.018 U
PCB-1221	NS	0.037 U	0.041 U	0.037 U	0.034 U
PCB-1232	NS	0.019 U	0.021 U	0.019 U	0.018 U
PCB-1242	NS	0.019 U	0.021 U	0.019 U	0.018 U
PCB-1248	NS	0.019 U	0.021 U	0.019 U	0.018 U
PCB-1254	NS	0.019 U	0.021 U	0.019 U	0.018 U
PCB-1260	NS	0.019 U	0.021 U	0.019 U	0.018 U
Total PCBs	1				

Notes

J/B - value greater than or equal to the instrument detection limit, but less than the quantitation limit

E - value estimated or not reported due to the presence of interferences

ppm - parts per million / mg/kg - milligrams per kilogram

** - Total species concentration must be below each SCO

Table 4
Summary of Soil Sampling Results - Metals/PCBs
Tioga Castings
Owego, New York
NYSDEC Site No. 7-54-012

Soil Boring Sample Interval (feet bgs) Date Units	Commercial Soil Cleanup Objective ppm	SB-18 14-15 7/16/2008 mg/kg	SB-19 3.5-4.5 7/16/2008 mg/kg	SB-20 14-15 7/16/2008 mg/kg
Metals -Total				
Aluminum		9660	6040	10800
Antimony		0.54 N,U	1.80 B,N	0.54 N,U
Arsenic	16	3.9	6.8	5.6
Barium	400	22.3	89.0	99.9
Beryllium	590	0.44 B	0.41 B	0.43 B
Cadmium	9.3	0.10 B	1.30	0.20 B
Calcium		2780	12300	1210
Chromium (hexavalent/trivalent)	400**/1500**	11.6	17.5	14.0
Cobalt		8.6	5.1 B	8.8
Copper	270	14.4	166.0	23.4
Iron		19700	38900	24500
Lead	1,000	11	2330	11
Magnesium		3100	1380	3170
Manganese	10,000	269 E,*	975 E,*	948 E,*
Mercury	2.8	0.018 B	0.163	0.014 B
Nickel	310	18.4	16.1	22.4
Potassium		619	547 B	670
Selenium	1,500	0.59 U	0.59 U	0.59 U
Silver	1,500	0.07 U	0.33 B	0.07 U
Sodium		42 B	206 B	55 B
Thallium		0.30 U	0.30 U	0.30 U
Vanadium		11.9	16.2	14.2
Zinc	10,000	46.6	401.0	80.8
PCBs				
PCB-1016	NS	0.018 U	0.019 U	0.017 U
PCB-1221	NS	0.035 U	0.037 U	0.033 U
PCB-1232	NS	0.018 U	0.019 U	0.017 U
PCB-1242	NS	0.018 U	0.019 U	0.017 U
PCB-1248	NS	0.018 U	0.019 U	0.017 U
PCB-1254	NS	0.018 U	0.019 U	0.017 U
PCB-1260	NS	0.008 J	0.016 J	0.017 U
Total PCBs	1	0.008	0.016	

Notes

J/B - value greater than or equal to the instrument detection limit, but less than the quantitation limit

E - value estimated or not reported due to the presence of interferences

ppm - parts per million / mg/kg - milligrams per kilogram

** - Total species concentration must be below each SCO

Table 5
Summary of Soil Vapor Intursion Sampling Results - VOCs
Tioga Castings
Owego, New York
NYSDEC Site No. 7-54-012

Sample ID Sample Type Sample Date Units	NYSDOH Soil Vapor Intrusion Guidance	AA-1 Ambient Air 7/17/2008 ug/m ³	SV-1 Soil Vapor 7/18/2008 ug/m ³	SV-2 Soil Vapor 7/18/2008 ug/m ³	SV-3 Soil Vapor 7/18/2008 ug/m ³	SV-4 Soil Vapor 7/18/2008 ug/m ³	SV-5 Soil Vapor 7/18/2008 ug/m ³
TO-15 Volatiles							
Acetone		22	20	240	29	20	160
Benzene		2.9	6.5	19	8.8	8.1	12
Benzyl Chloride		0.19 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane		0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bromoform		0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Bromomethane		0.14 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,3-Butadiene		0.08 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
2-Butanone (MEK)		4.1	6.3	31	14	4.2	17
Carbon Disulfide		0.12 U	14	71	19	2.7	28
Carbon Tetrachloride	5	0.56	0.31 U	0.31 U	0.82	0.31 U	0.31 U
Chlorobenzene		0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chlorodibromomethane		0.31 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Chloroethane		0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform		0.17 U	0.24 U	0.24 U	0.24 U	0.24 U	0.79
Chloromethane		1	0.19	0.5	0.11	0.1 U	0.1 U
Cyclohexane		0.99	2.6	8	0.17 U	8.6	0.17 U
1,2-Dibromoethane		0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene		0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,3-Dichlorobenzene		0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene		0.21 U	0.42	0.3 U	1	1.2	1.2
Dichlorodifluoromethane		3	7.1	5	4.1	3.8	21
1,1-Dichloroethane		0.14 U	0.2 U	20	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane		0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethylene	100	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethylene	100	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
t-1,2-Dichloroethylene		0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane		0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
cis-1,3-Dichloropropene		0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
trans-1,3-Dichloropropene		0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,2-Dichlorotetrafluoroethane (114)		0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Ethanol		80	14	30	30	14	14
Ethyl Acetate		0.26 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
Ethylbenzene		3.7	5.4	16	8.6	2.9	6
4-Ethyl Toluene		2.4	3.1	5.2	3.3	0.88	1.6
n-Heptane		2.1	48	140	300	13	47
Hexachlorobutadiene		0.75 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Hexane		8.3	90	290	380	14	60
2-Hexanone		0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Isopropanol		1.8	1.8	5.3	1.8	0.75	2.7
Methyl tert-Butyl Ether (MTBE)		0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Methylene Chloride	60	3.6	2.6	2.4	2.1	2.3	4.9
4-Methyl-2-Pentanone (MIBK)		0.44	0.2 U	0.2 U	0.2 U	0.2 U	1.1
Propene		0.13 U	0.18 U	0.18 U	0.18 U	16	0.18 U
Styrene		0.15 U	0.41	0.79	0.54	0.28	0.45
1,1,2,2-Tetrachloroethane		0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Tetrachloroethylene	100	0.24 U	2.7	5.7	0.84	1.3	4.6
Tetrahydrofuran		0.23	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Toluene		13	23	350	41	80	130
1,2,4-Trichlorobenzene		0.26 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,1,1-Trichloroethane		0.19 U	1.1	1100	54	13	5
1,1,2-Trichloroethane		0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Trichloroethylene	5	0.19 U	0.88	0.4	0.27 U	0.27 U	0.27 U
Trichlorofluoromethane		2.2	2.3	1.9	15	11	21
1,1,2-Trichloro-1,2,2-Trifluoroethane		0.71	1.2	0.87	2	1.7	1.4
1,2,4-Trimethylbenzene		9	12	17	10	5.1	6.1
1,3,5-Trimethylbenzene		2.6	3.2	5.4	3.6	1.9	2.5
Vinyl Acetate		0.5 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U
Vinyl Chloride	5	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
m/p-Xylene		13	17	48	18	13	22
o-Xylene		5.5	8.5	21	8.6	7.9	9.7

Notes

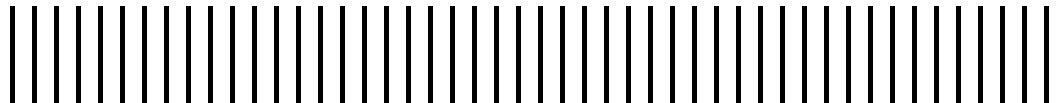
U - Analyte not detected at indicated quantitation limit

Yellow "Mitigate" based on NYSDOH Guidance for Evaluating Soil Vapor Intrusion (Soil Vapor / Indoor Air Matrix 2)

ug/m³ - micrograms per cubic meter

Appendix A

Soil Boring Logs



PROJECT	Tioga Castings	LOCATION	Owego, NY	SHEET	1 OF 1
CLIENT	NYSDEC	PROJECT No.	0266362	MEAS. PT. ELEV.	
DRILLING CONTRACTOR	Aztech	GROUND ELEV.		DATUM	
PURPOSE	Site Investigation	DATE STARTED	7/15/08	DATE FINISHED	7/15/08
WELL MATERIAL		DRILLER	Ron	PIRNIE STAFF	J.R.W
DRILLING METHOD(S)	Geoprobe	SAMPLE		CORE	
DRILL RIG TYPE	6610	TYPE	MacroCore		
GROUND WATER DEPTH	'	DIA.	2"		
MEASURING POINT		WEIGHT	#		
DATE OF MEASUREMENT		FALL	"		

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	4.5		0		Reddish-brown fine sandy Silt. Loose, dry.	1.0		
					Fine-med Sand and Gravel with some silt. Gravel up to .75 in. Loose, dry.	2.0		
4					Fine-med Sand with some v. coarse sand and pea gravel. Loose, dry. Landfill liner at 3 ft bgs.	3.0		
					SAA.	3.8		
					Black v. fine sand, slag, metal fragments, concrete.	5.0		
6					Lt brown-gray sand and gravel with some silt.	6.5		
8	4.5		0		Black sand, slag, metal fragments, concrete, zones of copper-red fine sand. Loose, slightly moist.			
10					SAA, without copper-reddish sand.	10.0		
12	4.5		0					Collect sample 12-13 ft bgs (VOCs).
14								
16					SAA, wood fagments at 16.5 ft bgs.	15.0		
18	2.5		0		Lt brown Sand and Gravel with some silt. Moist, slightly cohesive.	16.5		
						18.0		Refusal at 18 ft bgs.

PROJECT **Tioga Castings**

LOCATION **Owego, NY**

SHEET **1 OF 1**

CLIENT **NYSDEC**

PROJECT No. **0266362**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Site Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DRILL RIG TYPE **6610**

TYPE

MacroCore

DATE STARTED **7/15/08**

GROUND WATER DEPTH **17.0'**

DIA.

2"

DATE FINISHED **7/15/08**

MEASURING POINT

WEIGHT

#

DRILLER **Ron**

DATE OF MEASUREMENT

FALL

"

PIRNIE STAFF **J.R.W**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	4.5		0		Reddish-brown fine sandy silt. Loose, dry.			
					Fine-med Sand and Gravel with some silt. Gravel up to .75 in. Loose, dry.	1.0		
4					Fine-med Sand with some v. coarse sand and pea gravel. Loose, dry. Landfill liner at 3 ft bgs.	2.0		
					SAA.	3.0		
					Black sand, concrete, metal	3.5		
6					Black, tan, dk brown, and red sands, slag. Loose, slightly moist.	5.0		
8	3		0		Sand and gravel, slag. Black, brown, and tan sands, plastic and metal fragments.			
10					Sand and gravel, slag. Black, brown, and tan sands, plastic and metal fragments.	10.0		
12	4.5		0		SAA, wet at 17-17.5 ft bgs.			
14					SAA, wet at 17-17.5 ft bgs.	15.0		
16					SAA, wet at 17-17.5 ft bgs.			
18	4.5		0		Brown Sand and Gravel with trace silt, some gravel larger than sample core. Moist, slightly cohesive.	17.0		
20					Brown Sand and Gravel with trace silt, some gravel larger than sample core. Moist, slightly cohesive.			
					Brown Sand and Gravel with trace silt, some gravel larger than sample core. Moist, slightly cohesive.	20.0		

Collect composite sample 3.5-17.5 (Metals and PCBs).

Wet at 17 ft bgs.
Collect sample 17-17.5 (VOCs).

PROJECT Tioga Castings			LOCATION Owego, NY			SHEET 1 OF 1	
CLIENT NYSDEC						PROJECT No. 0266362	
DRILLING CONTRACTOR Aztech						MEAS. PT. ELEV.	
PURPOSE Site Investigation						GROUND ELEV.	
WELL MATERIAL						DATUM	
DRILLING METHOD(S) Geoprobe			SAMPLE	CORE	CASING	DATE STARTED 7/15/08	
DRILL RIG TYPE 6610		TYPE	MacroCore			DATE FINISHED 7/15/08	
GROUND WATER DEPTH '		DIA.	2"			DRILLER Ron	
MEASURING POINT		WEIGHT	#			PIRNIE STAFF J.R.W	
DATE OF MEASUREMENT		FALL	"				

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	4.5		0		Reddish-brown fine sandy silt. Loose, dry.			Collect sample 4.5-20 ft bgs (Metals and PCBs).
					Fine-med Sand and Gravel with some silt. Gravel up to .75 in. Loose, dry.	1.0		
					Fine-med Sand with some v. coarse sand and pea gravel. Loose, dry. Landfill liner at 3 ft bgs.	2.0		
4					SAA. Plastic sheeting at base of sand.	3.0		
					Black silt and sand with gravel, slag, and concrete. Dry.	4.5		
6	4.5		0		SAA with some wood, no concrete.	5.0		
8					Brown sand with trace silt. Firm, slightly cohesive. Plastic sheeting at base.	9.0		
10					Black sand. Loose, dry.	9.5		
					White fine sand. Loose, dry.	10.0		
12	4		0		Black and red fine sand. Loose, dry.	11.5		
14					Black, brown, and dk brown sand and gravel. Slag and wood. Firm, moist.	12.5		Collect sample 19-19.5 ft bgs (VOCs).
					SAA.	15.0		
16					Red, black, and tan sand, some slag. Black sand has greasy texture. Loose, moist.	18.0		
18	4		0		Brown and gray Sandy Silt with some Clay and Gravel. Firm, moist, cohesive.	19.5		
20						20.0		

BORING No.SB-04

SHEET 1 OF 1

PIRNIE STAFF J.R.W

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
0				[Pattern]	Reddish-brown fine sandy silt. Loose, dry.			
1.0				[Pattern]	Fine-med Sand and Gravel with some silt.	1.0		
2.0				[Pattern]	Gravel up to .75 in. Loose, dry.	2.0		
2.5				[Pattern]	Fine-med Sand with some v. coarse sand and pea gravel. Loose, dry. Landfill liner at 2.5 ft bgs.	2.5		
3.5				[Pattern]	SAA.	3.5		
5.0				[Pattern]	Metal, brick, silty gravel, concrete, slag. Firm, slightly cohesive. Plastic sheeting at 4.5 ft bgs.	5.0		
7.0				[Pattern]	SAA, loose.	7.0		
8.0				[Pattern]	Black, dk red, and tan sands, slag. Black sand has greasy texture.	8.0		
10.0				[Pattern]	SAA, with zone of pink sand at 14 ft bgs.	10.0		
14.7				[Pattern]	Brown fine Sand with Silt. Moist, slightly cohesive.	14.7		
15.0				[Pattern]		15.0		

PROJECT Tioga Castings		LOCATION Owego, NY			SHEET 1 OF 1		
CLIENT NYSDEC					PROJECT No. 0266362		
DRILLING CONTRACTOR Aztech					MEAS. PT. ELEV.		
PURPOSE Site Investigation					GROUND ELEV.		
WELL MATERIAL					DATUM		
DRILLING METHOD(S) Geoprobe		SAMPLE	CORE	CASING	DATE STARTED 7/15/08		
DRILL RIG TYPE 6610		TYPE MacroCore			DATE FINISHED 7/15/08		
GROUND WATER DEPTH 14.8'		DIA. 2"			DRILLER Ron		
MEASURING POINT		WEIGHT #				PIRNIE STAFF J.R.W	
DATE OF MEASUREMENT		FALL "					

DEPTH FT.	SAMPLE TYPE RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	4.5		0		Reddish-brown fine sandy Silt. Loose, dry.			
					Fine-med Sand and Gravel with some silt. Gravel up to .75 in. Loose, dry.	1.0		
					Fine-med Sand with some v. coarse Sand and pea Gravel. Loose, dry.	2.0		
4					Landfill liner at 3 ft bgs.	3.0		
					SAA, plastic sheeting at base of sand.	4.0		
					Black, wood, gravel, sand, slag. Slightly cohesive, firm, dry.	5.0		
6					Tan and brown sand and gravel, slag, glass, plastic sheeting at 6.5 ft bgs.	6.5		
8	5		0		Black and brown sand, slag, glass and some concrete.			Collect sample 4-15 ft bgs (Metals and PCBs).
10					SAA, with some dk red sand. Loose and moist. Wet at 14.8 ft bgs.	10.0		
12	4		0		Brown Sand and Gravel with trace silt, some gravel larger than sample core. Moist, cohesive, firm.	14.8		
14						15.0		Collect sample 14.5-15 ft bgs (VOCs).

MALCOLM PIRNIE				TEST BORING LOG			BORING No.SB-06	
PROJECT Tioga Castings				LOCATION Owego, NY			SHEET 1 OF 1	
CLIENT NYSDEC				PROJECT No. 0266362			MEAS. PT. ELEV.	
DRILLING CONTRACTOR Aztech				PURPOSE Site Investigation			GROUND ELEV.	
WELL MATERIAL				DATE STARTED 7/15/08			DATUM	
DRILLING METHOD(S) Geoprobe				SAMPLE MacroCore			DATE FINISHED 7/15/08	
DRILL RIG TYPE 6610				TYPE MacroCore			DRILLER Ron	
GROUND WATER DEPTH 14.5'				DIA. 2"			PIRNIE STAFF J.R.W	
MEASURING POINT				WEIGHT #				
DATE OF MEASUREMENT				FALL				
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
0	3		0		Concrete slab, drill with star bit.			
2					Black sand, slag, ash and gravel. Loose, moist.	0.5		
4								
6	2.5		225		SAA.	5.0		
8					Gray sand. Loose, very moist. Slight petro odors. PID=225 ppm.	7.5		Collect samples 7.5-8 ft bgs (VOCs, Metals, and PCBs).
10					Brown Sand and Gravel with Silt. Moist.	8.0		
12	2		0		SAA. Wet at 14.5 ft bgs.	10.0		
14								
						15.0		Collect samples 14-15 ft bgs (VOCs only) very little matrix.

PROJECT	Tioga Castings	LOCATION	Owego, NY	SHEET	1 OF 1
CLIENT	NYSDEC	PROJECT No.	0266362	MEAS. PT. ELEV.	
DRILLING CONTRACTOR	Aztech	GROUND ELEV.		DATUM	
PURPOSE	Site Investigation	DATE STARTED	7/15/08	DATE FINISHED	7/15/08
WELL MATERIAL		DRILLER	Ron	PIRNIC STAFF	J.R.W
DRILLING METHOD(S)	Geoprobe	SAMPLE	CORE	CASING	
DRILL RIG TYPE	6610	TYPE	MacroCore		
GROUND WATER DEPTH	14.8'	DIA.	2"		
MEASURING POINT		WEIGHT	#		
DATE OF MEASUREMENT		FALL	"		

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	3		0		Concrete slab-drilled with star bit.			
4			0		Black, brown, and red sand. Glass, gravel, slag, ash, and concrete. Moist, loose. Pink clayey substance at 4.5 ft bgs. Cohesive and plastic.	2.0		Collect samples 4.5-5 (Metals and PCBs).
6			0		SAA, with out pink clayey substance. Moist, loose.	5.0		
8	2.5		0					
10			0		SAA, moist.	10.0		
12	3		0					
14			0		Brown Sand and Gravel with some Silt. Firm, very moist. Wet at 14.8 ft bgs.	13.0		Collect samples 14.5-15.5 (VOCs, Metals, and PCBs).
16			0		SAA, wet.	15.0		
18	3		0					
20			0			20.0		

BORING No.SB-08

SHEET 1 OF 1

PROJECT No. 0266362

MEAS. PT. ELEV.

GROUND ELEV.

DATUM

DATE STARTED 7/15/08

DATE FINISHED 7/15/08

DRILLER **Ron**

PIRNIE STAFF J.R.W

PIRNIE STAFF J.R.W

[illegible]

MALCOLM PIRNIE				TEST BORING LOG			BORING No.SB-09	
PROJECT Tioga Castings				LOCATION Owego, NY			SHEET 1 OF 1	
CLIENT NYSDEC				PROJECT No. 0266362				
DRILLING CONTRACTOR Aztech				MEAS. PT. ELEV.				
PURPOSE Site Investigation				GROUND ELEV.				
WELL MATERIAL				DATUM				
DRILLING METHOD(S) Geoprobe			SAMPLE	CORE	CASING	DATE STARTED 7/16/08		
DRILL RIG TYPE 6610		TYPE	MacroCore			DATE FINISHED 7/16/08		
GROUND WATER DEPTH 12.0'		DIA.	2"			DRILLER Ron		
MEASURING POINT		WEIGHT	#			PIRNIE STAFF J.R.W		
DATE OF MEASUREMENT		FALL	"					
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2		0		Brown and black sand, slag, gravel, ash, and glass. Loose, moist.			Collect samples 4-5 ft bgs (Metals and PCBs).
4								
6					SAA.	5.0		
8	2.5		0		Gray and dk brown Clayey Silt. Firm, moist, cohesive.	7.5		
10					Brown Sand and Gravel with Silt	8.5		
12	2.5		0		SAA. Wet at 12 ft bgs.	10.0		Collect samples 7.5-8.5 ft bgs (Metals, PCBs, and VOCs).
14								
						15.0		

PROJECT Tioga Castings	LOCATION Owego, NY			SHEET 1 OF 1
CLIENT NYSDEC				PROJECT No. 0266362
DRILLING CONTRACTOR Aztech				MEAS. PT. ELEV.
PURPOSE Site Investigation				GROUND ELEV.
WELL MATERIAL				DATUM
DRILLING METHOD(S) Geoprobe	SAMPLE	CORE	CASING	DATE STARTED 7/16/08
DRILL RIG TYPE 6610	TYPE MacroCore			DATE FINISHED 7/16/08
GROUND WATER DEPTH 18.0'	DIA. 2"			DRILLER Ron
MEASURING POINT	WEIGHT #			PIRNIE STAFF J.R.W
DATE OF MEASUREMENT	FALL	"		

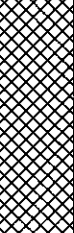
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
0					Concrete slab, drill with star bit.			
2	1		0		Lt brown Sand and Gravel with Silt.	0.5		
4								
6					SAA, moist.	5.0		
8	2		0					
10					SAA, wet at 15 ft bgs.	10.0		
12	2.5		0					
14								
16					SAA, saturated at 18 ft bgs.	15.0		
18	2.5		0					Collect samples 17-18 ft bgs (Metals and PCBs) not enough matrix for VOCs.
20						20.0		

MALCOLM PIRNIE				TEST BORING LOG			BORING No.SB-11	
PROJECT Tioga Castings				LOCATION Owego, NY			SHEET 1 OF 1	
CLIENT NYSDEC				PROJECT No. 0266362			MEAS. PT. ELEV.	
DRILLING CONTRACTOR Aztech				PURPOSE Site Investigation			GROUND ELEV.	
WELL MATERIAL				DATE STARTED 7/16/08			DATE FINISHED 7/16/08	
DRILLING METHOD(S) Geoprobe				SAMPLE MacroCore			DRILLER Ron	
DRILL RIG TYPE 6610				CORE			PIRNIE STAFF J.R.W	
GROUND WATER DEPTH 15.0'				CASING				
MEASURING POINT				DIA. 2"				
DATE OF MEASUREMENT				WEIGHT #				
				FALL "				
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
0			0		Concrete slab. Drill with star bit.	0.5		
2	2.5		0		Black and brown sand, slag, ash, glass, some gravel. Black sand has greasy texture. Moist.			
4			0					
6	2.5		0		SAA, with some wood.	5.0		Collect samples 4-5 ft bgs (Metals and PCBs).
8			0					
10			0		Lt gray and brown Clayey silt. Firm, moist, cohesive.	8.0		
12	2		0		Brown Sand and Gravel with some silt.	9.0		
14			0		SAA, wet at 15 ft bgs.	10.0		
						15.0		Collect samples 14-15 ft bgs (VOC only) very little matrix.

PROJECT	Tioga Castings	LOCATION	Owego, NY	SHEET	1 OF 1
CLIENT	NYSDEC	PROJECT No.	0266362	MEAS. PT. ELEV.	
DRILLING CONTRACTOR	Aztech	GROUND ELEV.		DATUM	
PURPOSE	Site Investigation	DATE STARTED	7/16/08	DATE FINISHED	7/16/08
WELL MATERIAL		DRILLER	Ron	PIRNIE STAFF	J.R.W
DRILLING METHOD(S)	Geoprobe	SAMPLE	CORE	CASING	
DRILL RIG TYPE	6610	TYPE	MacroCore		
GROUND WATER DEPTH	'	DIA.	2"		
MEASURING POINT		WEIGHT	#		
DATE OF MEASUREMENT		FALL	"		

DEPTH FT.	SAMPLE TYPE RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	4		0		Brown med-fn Sand and Silt with some Gravel. Lt. brown Sand and Gravel with some Silt. Firm, moist.	0.5		
4								
6								
8	2.5		0		SAA.	5.0		
10								
12	3.5		0		SAA.	10.0		
14								
						15.0		Collect samples 10-15 ft bgs (Metals and PCBs) not enough matrix for VOCs.

PROJECT Tioga Castings	LOCATION Owego, NY	SHEET 1 OF 1
CLIENT NYSDEC	PROJECT No. 0266362	
DRILLING CONTRACTOR Aztech	MEAS. PT. ELEV.	
PURPOSE Site Investigation	GROUND ELEV.	
WELL MATERIAL	DATUM	
DRILLING METHOD(S) Geoprobe	SAMPLE	CORE
DRILL RIG TYPE 6610	TYPE MacroCore	
GROUND WATER DEPTH 15.0'	DIA. 2"	
MEASURING POINT	WEIGHT #	
DATE OF MEASUREMENT	FALL	
	PIRNE STAFF J.R.W	

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2.5		0		Concrete slab. Drill with star bit.			
4					Black and dk reddish-brown sand, slag, gravel, glass. Bottom 3 inches is brown sandy Silt with trace Gravel. Moist, cohesive.	0.5		
6	2		0		Lt brown Sand and Gravel with Silt. Moist.	5.0		
10					SAA, wet at 15 ft bgs.	10.0		
12	3		0					
14								
						15.0		Collect samples 4-5 ft bgs (VOCs, Metals, and PCBs).

PROJECT **Tioga Castings**

LOCATION **Owego, NY**

SHEET **1 OF 1**

CLIENT **NYSDEC**

PROJECT No. **0266362**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Site Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DATE STARTED **7/16/08**

DRILL RIG TYPE **6610**

TYPE

MacroCore

DATE FINISHED **7/16/08**

GROUND WATER DEPTH **15.0'**

DIA.

2"

DRILLER **Ron**

MEASURING POINT

WEIGHT

#

PIRNIE STAFF **J.R.W**

DATE OF MEASUREMENT

FALL

"

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
0			0		Concrete slab. Drill with star bit.			
2	2		0		Black and dk reddish-brown sand, slag, gravel, and glass. Firm, moist.	0.5		
4								
6					SAA, slight petro odors. PID=108 PPM.	5.0		
8	2.5		108		Gray and tan Silt with occasional Gravel. Firm, moist. Becomes plastic at 8-8.5 ft bgs.	7.5		
10					Lt brown Sand and Gravel with some Silt.	8.5		
12	2.5		0		SAA, wet at 15 ft bgs.	10.0		
14								
						15.0		Collect samples 7-8 ft bgs (VOC, Metals, and PCBs).

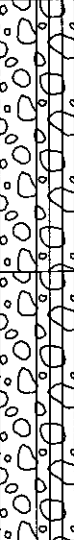
PROJECT	Tioga Castings	LOCATION	Owego, NY	SHEET	1 OF 1
CLIENT	NYSDEC	PROJECT No.	0266362	MEAS. PT. ELEV.	
DRILLING CONTRACTOR	Aztech	GROUND ELEV.		DATUM	
PURPOSE	Site Investigation	DATE STARTED	7/16/08	DATE FINISHED	7/16/08
WELL MATERIAL		DRILLER	Ron	PIRNIE STAFF	J.R.W
DRILLING METHOD(S)	Geoprobe	SAMPLE	CORE	CASING	
DRILL RIG TYPE	6610	TYPE	MacroCore		
GROUND WATER DEPTH	15.0'	DIA.	2"		
MEASURING POINT		WEIGHT	#		
DATE OF MEASUREMENT		FALL	"		

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	4		0		Lt brown Sand and Gravel with silt. Moist			
4					Ash, slag, glass.	3.0		
					Brown Silt with fn Sand. Firm, moist.	4.0		
6	3.5		0		SAA, with trace Clay.	5.0		
8								
10					Lt brown Sand and Gravel with Silt.	9.0		
12	2.5		0		SAA, wet at 15 ft bgs.	10.0		
14								
						15.0		

Collect samples 3-4 ft bgs (Metals and PCBs).



PROJECT	Tioga Castings	LOCATION	Owego, NY	SHEET	1 OF 1
CLIENT	NYSDEC	PROJECT No.	0266362	MEAS. PT. ELEV.	
DRILLING CONTRACTOR	Aztech	GROUND ELEV.		DATUM	
PURPOSE	Site Investigation	DATE STARTED	7/16/08	DATE FINISHED	7/16/08
WELL MATERIAL		DRILLER	Ron	PIRNIE STAFF	J.R.W
DRILLING METHOD(S)	Geoprobe	SAMPLE	CORE	CASING	
DRILL RIG TYPE	6610	TYPE	MacroCore		
GROUND WATER DEPTH	15.0'	DIA.	2"		
MEASURING POINT		WEIGHT	#		
DATE OF MEASUREMENT		FALL	"		

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2		0		Concrete slab. Drill with star bit.	0.5		
4					Dk brown-reddish sand, slag, ash, and glass. Bottom 3 inches is green-brown fn Sand and Silt with Gravel. Moist, cohesive.			
6	1		0		Lt brown Sand and Gravel with Silt. Very moist.	5.0		
8								
10					SAA, wet at 15 ft bgs.	10.0		
12	3.5		0					
14								
						15.0		Collect samples 4-5 ft bgs (Metals and PCBs). Not enough matrix for VOCs sample.

PROJECT **Tioga Castings**

LOCATION **Owego, NY**

SHEET **1** OF **1**

CLIENT **NYSDEC**

PROJECT No. **0266362**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Site Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DRILL RIG TYPE **6610**

TYPE

MacroCore

DATE STARTED **7/16/08**

GROUND WATER DEPTH **15.0'**

DIA.

2"

DATE FINISHED **7/16/08**

MEASURING POINT

WEIGHT

#

DRILLER **Ron**

DATE OF MEASUREMENT

FALL

"

PIRNIE STAFF **J.R.W**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
0					Asphalt	0.2		
2	2.5		0		Lt brown Sand and Gravel with Silt. Moist.			
4								
6					SAA.	5.0		
8	3.5		0					
10					SAA, wet at 15 ft bgs.	10.0		
12	2		0					
14								
						15.0		Collect samples 14-15 ft bgs (Metals and PCBs). Not enough matrix for VOCs.

PROJECT Tioga Castings	LOCATION Owego, NY			SHEET 1 OF 1
CLIENT NYSDEC				PROJECT No. 0266362
DRILLING CONTRACTOR Aztech				MEAS. PT. ELEV.
PURPOSE Site Investigation				GROUND ELEV.
WELL MATERIAL				DATUM
DRILLING METHOD(S) Geoprobe	SAMPLE	CORE	CASING	DATE STARTED 7/16/08
DRILL RIG TYPE 6610	TYPE MacroCore			DATE FINISHED 7/16/08
GROUND WATER DEPTH 14.0'	DIA. 2"			DRILLER Ron
MEASURING POINT	WEIGHT #			PIRNIE STAFF J.R.W
DATE OF MEASUREMENT	FALL	"		

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	3		0		Lt brown Sand and Gravel with Silt.			
4								
6					SAA with wet Silty Sand zone at 8.5-9.5 ft bgs.	5.0		
8	2.5		0					
10					SAA, wet at 14 ft bgs.	10.0		
12	2		0					
14								
						15.0		▼ Collect samples 14-15 ft bgs (Metals and PCBs). Not enough matrix for VOCs.

PROJECT	Tioga Castings	LOCATION	Owego, NY	SHEET	1 OF 1
CLIENT	NYSDEC	PROJECT No.	0266362	MEAS. PT. ELEV.	
DRILLING CONTRACTOR	Aztech	GROUND ELEV.		DATUM	
PURPOSE	Site Investigation	DATE STARTED	7/16/08	DATE FINISHED	7/16/08
WELL MATERIAL		DRILLER	Ron	PIRNIE STAFF	J.R.W
DRILLING METHOD(S)	Geoprobe	SAMPLE	CORE	CASING	
DRILL RIG TYPE	6610	TYPE	MacroCore		
GROUND WATER DEPTH	17.0'	DIA.	2"		
MEASURING POINT		WEIGHT	#		
DATE OF MEASUREMENT		FALL	"		

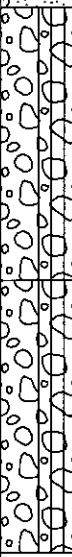
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2.5		0		Lt brown Sand and Gravel with Silt. Loose, dry.	1.0		
4					Dk brown-reddish sand, gravel, ash, slag, and glass. Loose, moist.			
6					SAA.	5.0		
8	3.5		0		Brown sandy Silt. Firm	6.0		
10					Lt brown Sand and Gravel with Silt.	8.0		
12					SAA.	10.0		
14	3		0					
16					SAA, saturated at 17 ft bgs.	15.0		
18	2		0					
20						20.0		

Collect samples 3.5-4.5 (Metals and PCBs).



PROJECT Tioga Castings		LOCATION Owego, NY			SHEET 1 OF 1	
CLIENT NYSDEC					PROJECT No. 0266362	
DRILLING CONTRACTOR Aztech					MEAS. PT. ELEV.	
PURPOSE Site Investigation					GROUND ELEV.	
WELL MATERIAL					DATUM	
DRILLING METHOD(S) Geoprobe		SAMPLE	CORE	CASING	DATE STARTED 7/16/08	
DRILL RIG TYPE 6610	TYPE	MacroCore			DATE FINISHED 7/16/08	
GROUND WATER DEPTH '	DIA.	2"			DRILLER Ron	
MEASURING POINT	WEIGHT	#				
DATE OF MEASUREMENT	FALL	"				
					PIRNIE STAFF J.R.W	

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
					Concrete slab. Drill with star bit.			
					Dk brown-red silty sand, glass, and slag.	0.5		
2	2		0		Lt brown fn Sand and Silt with some gravel. Firm, cohesive.	1.0		
4								
6					Lt brown Sand and Gravel with silt.	5.0		
8	2.5		0					
10					SAA.	10.0		
12	3.5		0					
14								
						15.0		Collect samples 14-15 ft bgs. Not enough matrix for VOCs.

MALCOLM PIRNIE				TEST BORING LOG			BORING No.SB-21		
PROJECT Tioga Castings				LOCATION Owego, NY			SHEET 1 OF 1		
CLIENT NYSDEC							PROJECT No. 0266362		
DRILLING CONTRACTOR Aztech							MEAS. PT. ELEV.		
PURPOSE Site Investigation							GROUND ELEV.		
WELL MATERIAL							DATUM		
DRILLING METHOD(S) Geoprobe		SAMPLE		CORE		CASING		DATE STARTED 7/16/08	
DRILL RIG TYPE 6610		TYPE MacroCore						DATE FINISHED 7/16/08	
GROUND WATER DEPTH 15.0'		DIA. 2"						DRILLER Ron	
MEASURING POINT		WEIGHT #						PIRNIE STAFF J.R.W	
DATE OF MEASUREMENT		FALL		"					
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS	
2	4.5		0		Dk brown fn-med sand. Loose. Lt brown sand and gravel with trace coal.	0.5			
4					Lt brown fine Silty Sand with some Gravel. Firm, moist.	3.5			
6	2.5		0		Lt brown Sand and Gravel with Silt. Moist.	5.0			
10					SAA, wet at 15 ft bgs.	10.0			
12	3		0						
14									
						15.0			

MALCOLM PIRNIE				TEST BORING LOG			BORING No.SB-22	
PROJECT Tioga Castings				LOCATION Owego, NY			SHEET 1 OF 1	
CLIENT NYSDEC				PROJECT No. 0266362			MEAS. PT. ELEV.	
DRILLING CONTRACTOR Aztech				PURPOSE Site Investigation			GROUND ELEV.	
WELL MATERIAL				DRILLING METHOD(S) Geoprobe			DATE STARTED 7/16/08	
DRILL RIG TYPE 6610				TYPE MacroCore			DATE FINISHED 7/16/08	
GROUND WATER DEPTH '				DIA. 2"			DRILLER Ron	
MEASURING POINT				WEIGHT #			PIRNIE STAFF J.R.W	
DATE OF MEASUREMENT				FALL "				
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
0			0		Concrete slab. Drill with Star bit.			
2	2.5		0		Black and red sand, slag, concrete, gravel. Moist.	0.5		
4			0		SAA.	5.0		
6	3		0		Brown fn-med Sand and Silt with some Gravel. Wet, slightly cohesive.	7.0		
8			0		Lt brown Sand and Gravel with Silt.	8.0		
10			0			10.0		

PROJECT **Tioga Castings**

LOCATION **Owego, NY**

SHEET **1** OF **1**

CLIENT **NYSDEC**

PROJECT No. **0266362**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Site Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DATE STARTED **7/16/08**

DRILL RIG TYPE **6610**

TYPE **MacroCore**

DATE FINISHED **7/16/08**

GROUND WATER DEPTH

DIA. **2"**

DRILLER **Ron**

MEASURING POINT

WEIGHT **#**

PIRNIE STAFF **J.R.W**

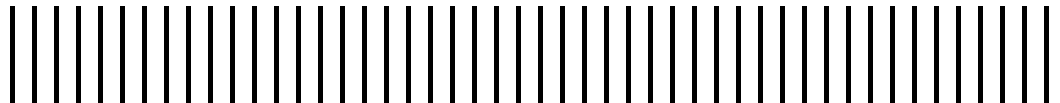
DATE OF MEASUREMENT

FALL **"**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2.5		0		Concrete slab. Drill with star bit.			
4					Black and lt red sands, ash, slag, glass. Loose, moist.	0.5		
6	2.5		0		Lt brown Sand and Gravel with Silt.	5.0		
8								
10						10.0		

Appendix B

Analytical Reporting Forms



ANALYTICAL REPORT

Job Number: 220-5884-1

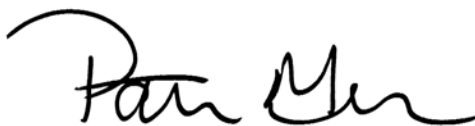
SDG Number: 220-5884

Job Description: NYSDEC Standby - Tioga Castings

For:

Malcolm Pirnie, Inc.
43 British American Boulevard
1st Floor
Latham, NY 12110

Attention: Mr. Bruce Nelson



Designee for
Johanna Dubauskas
Project Manager I
johanna.dubauskas@testamericainc.com
08/05/2008

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

Case Narrative for Job: 220-5884-1

Client: **Malcolm Pirnie, Inc.**
Date: August 5, 2008

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.



Lawrence Decker
Laboratory Director

August 5, 2008
Date

Job Narrative
220-J5884-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

Method(s) OLM04.2/Vol: Surrogate recovery for the following sample was outside control limits: SB-13 (4-5) (220-5884-7). A second run confirmed matrix interference. One set of data was submitted.

No other analytical or quality issues were noted.

GC Semi VOA

No analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

FORMULAS FOR NYSDEC SAMPLE CALCULATIONS

Volatiles

$$\frac{(AX)(IS)(DF)}{(AIS)(RRF)(V)(\% \text{ solids})} = C$$

$$\frac{(AX)(IS)(VT)(1000)(DF)}{(AIS)(RRF)(VA)(V)(\% \text{ solids})} = C \quad (\text{for medium level soils})$$

SemiVolatiles

$$\frac{(AX)(IS)(VE)(DF)(\text{GPC factor is 2 if needed})}{(AIS)(RRF)(\text{volume injected})(V)(\% \text{ solids})} = C$$

Pesticides

$$\frac{(AX)(VE)(DF)}{(RRF)(V)(\% \text{ solids})(\text{volume injected})} = C$$

PCBs for compound/retention time

$$\frac{(AX)(VE)(DF)}{(RRF \text{ of compound at the stated retention time})(V)(\% \text{ solids})(\text{volume injected})} = C$$

DRO/CTETPH

$$\frac{(AX)(VE)(DF)}{(RRF)(V)(\% \text{ solids})(\text{volume injected})} = C$$

AX = area of the target Ion

AIS = Area of Internal standard

C = concentration as ug/L or ug/Kg

DF = dilution

IS = Internal standard concentration (ng)

RRF = average RF (from initial cal except CLP methods from continuing cal)

V = sample volume for liquids in mls or sample weight for solids in grams

VA = volume of aliquot for medium level soils

VE = volume of concentrated extract

VT = volume of methanol for volatile medium level soils

SAMPLE SUMMARY

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-5884-1	SB-09 (7.5-8.5)	Solid	07/16/2008 0758	07/17/2008 0951
220-5884-2	SB-09 (4-5)	Solid	07/16/2008 0805	07/17/2008 0951
220-5884-3	SB-10 (17-18)	Solid	07/16/2008 1418	07/17/2008 0951
220-5884-4	SB-11 (4-5)	Solid	07/16/2008 0730	07/17/2008 0951
220-5884-5	SB-11 (14-15)	Solid	07/16/2008 0730	07/17/2008 0951
220-5884-6	SB-12 (14-15)	Solid	07/16/2008 1435	07/17/2008 0951
220-5884-7	SB-13 (4-5)	Solid	07/16/2008 0855	07/17/2008 0951
220-5884-8	SB-14 (7-8)	Solid	07/16/2008 0830	07/17/2008 0951
220-5884-9	SB-15 (3-4)	Solid	07/16/2008 0920	07/17/2008 0951
220-5884-10	SB-16 4-5)	Solid	07/16/2008 1013	07/17/2008 0951
220-5884-11	SB-17 (14-15)	Solid	07/16/2008 1348	07/17/2008 0951
220-5884-12	SB-18 (14-15)	Solid	07/16/2008 1450	07/17/2008 0951
220-5884-13	SB-19 (3.5-4.5)	Solid	07/16/2008 1036	07/17/2008 0951
220-5884-14	SB-20 (14-15)	Solid	07/16/2008 1445	07/17/2008 0951
220-5884-15TB	TRIP BLANK	Water	07/16/2008 0000	07/17/2008 0951

METHOD SUMMARY

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Description	Lab Location	Method	Preparation Method
Matrix Solid			
CLP Volatile Organic Compounds	TAL CT	OLM04.2 OLM04.2/Vol	
Purge-and-Trap	TAL CT		SW846 5030B
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL CT	SW846 8082	
Ultrasonic Extraction	TAL CT		SW846 3550B
ILM05.3 Metals	TAL BUF	ILM05.3 ILM05.3	
Matrix Water			
CLP Volatile Organic Compounds	TAL CT	OLM04.2 OLM04.2/Vol	
Purge-and-Trap	TAL CT		SW846 5030B

Lab References:

TAL BUF = TestAmerica Buffalo

TAL CT = TestAmerica Connecticut

Method References:

ILM05.3 = U.S. Environmental Protection Agency

OLM04.2 = "Statement of Work for Organic Analysis", Multi-Media, Multi-Concentration September 1998

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Method	Analyst	Analyst ID
OLM04.2 OLM04.2/Vol	Humbert, Dave	DH
SW846 8082	Smith, Karli	KS
EPA PercentMoisture	Culik, Marie E	MEC

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: SB-09 (7.5-8.5)

Lab Sample ID: 220-5884-1

Date Sampled: 07/16/2008 0758

Client Matrix: Solid

% Moisture: 19.8

Date Received: 07/17/2008 0951

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18283

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5187.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/23/2008 1609

Final Weight/Volume: 5 mL

Date Prepared: 07/23/2008 1609

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Chloromethane		12	U	0.12	12
Vinyl chloride		12	U	0.12	12
Bromomethane		12	U	0.12	12
Chloroethane		12	U	0.12	12
1,1-Dichloroethene		12	U	0.12	12
Carbon disulfide		12	U	0.12	12
Acetone		15	B	0.12	12
Methylene Chloride		4.6	J B	0.12	12
1,1-Dichloroethane		12	U	0.12	12
Methyl Ethyl Ketone		12	U	0.12	12
Chloroform		12	U	0.12	12
1,1,1-Trichloroethane		12	U	0.12	12
Carbon tetrachloride		12	U	0.12	12
Benzene		12	U	0.12	12
1,2-Dichloroethane		12	U	0.12	12
Trichloroethene		1.1	J	0.12	12
1,2-Dichloropropane		12	U	0.12	12
Bromodichloromethane		12	U	0.12	12
cis-1,3-Dichloropropene		12	U	0.12	12
methyl isobutyl ketone		12	U	0.12	12
Toluene		12	U	0.12	12
trans-1,3-Dichloropropene		12	U	0.12	12
1,1,2-Trichloroethane		12	U	0.12	12
Tetrachloroethene		12	U	0.12	12
2-Hexanone		12	U	0.12	12
Dibromochloromethane		12	U	0.12	12
Chlorobenzene		12	U	0.12	12
Ethylbenzene		12	U	0.12	12
Styrene		12	U	0.12	12
Bromoform		12	U	0.12	12
1,1,2,2-Tetrachloroethane		12	U	0.12	12
Xylenes, Total		12	U	0.12	12
cis-1,2-Dichloroethene		12	U	0.12	12
trans-1,2-Dichloroethene		12	U	0.12	12
Dichlorodifluoromethane		12	U	0.12	12
Trichlorofluoromethane		12	U	0.12	12
1,1,2-Trichloro-1,2,2-trifluoroethane		12	U	0.12	12
Methyl tert-butyl ether		12	U	0.12	12
1,2-Dibromoethane		12	U	0.12	12
Isopropylbenzene		12	U	0.12	12
1,3-Dichlorobenzene		12	U	0.12	12
1,4-Dichlorobenzene		12	U	0.12	12
1,2-Dichlorobenzene		12	U	0.12	12
1,2-Dibromo-3-Chloropropane		12	U	0.12	12

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: SB-09 (7.5-8.5)

Lab Sample ID: 220-5884-1

Date Sampled: 07/16/2008 0758

Client Matrix: Solid

% Moisture: 19.8

Date Received: 07/17/2008 0951

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18283

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5187.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/23/2008 1609

Final Weight/Volume: 5 mL

Date Prepared: 07/23/2008 1609

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene		12	U	0.12	12
Methyl acetate		12	U	0.12	12
Cyclohexane		12	U	0.12	12
Methylcyclohexane		12	U	0.12	12
Surrogate		%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		100		70 - 121	
4-Bromofluorobenzene		102		59 - 113	
Toluene-d8 (Surr)		103		84 - 138	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: SB-11 (14-15)

Lab Sample ID: 220-5884-5

Date Sampled: 07/16/2008 0730

Client Matrix: Solid

% Moisture: 13.4

Date Received: 07/17/2008 0951

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18353

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5164.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/22/2008 1904

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1904

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Chloromethane		12	U	0.12	12
Vinyl chloride		12	U	0.12	12
Bromomethane		12	U	0.12	12
Chloroethane		12	U	0.12	12
1,1-Dichloroethene		12	U	0.12	12
Carbon disulfide		12	U	0.12	12
Acetone		12	U	0.12	12
Methylene Chloride		5.2	J B	0.12	12
1,1-Dichloroethane		12	U	0.12	12
Methyl Ethyl Ketone		12	U	0.12	12
Chloroform		12	U	0.12	12
1,1,1-Trichloroethane		12	U	0.12	12
Carbon tetrachloride		12	U	0.12	12
Benzene		12	U	0.12	12
1,2-Dichloroethane		12	U	0.12	12
Trichloroethene		9.7	J	0.12	12
1,2-Dichloropropane		12	U	0.12	12
Bromodichloromethane		12	U	0.12	12
cis-1,3-Dichloropropene		12	U	0.12	12
methyl isobutyl ketone		12	U	0.12	12
Toluene		0.72	J B	0.12	12
trans-1,3-Dichloropropene		12	U	0.12	12
1,1,2-Trichloroethane		12	U	0.12	12
Tetrachloroethene		12	U	0.12	12
2-Hexanone		12	U	0.12	12
Dibromochloromethane		12	U	0.12	12
Chlorobenzene		12	U	0.12	12
Ethylbenzene		12	U	0.12	12
Styrene		12	U	0.12	12
Bromoform		12	U	0.12	12
1,1,2,2-Tetrachloroethane		12	U	0.12	12
Xylenes, Total		0.63	J	0.12	12
cis-1,2-Dichloroethene		12	U	0.12	12
trans-1,2-Dichloroethene		12	U	0.12	12
Dichlorodifluoromethane		12	U	0.12	12
Trichlorofluoromethane		12	U	0.12	12
1,1,2-Trichloro-1,2,2-trifluoroethane		12	U	0.12	12
Methyl tert-butyl ether		12	U	0.12	12
1,2-Dibromoethane		12	U	0.12	12
Isopropylbenzene		12	U	0.12	12
1,3-Dichlorobenzene		12	U	0.12	12
1,4-Dichlorobenzene		12	U	0.12	12
1,2-Dichlorobenzene		12	U	0.12	12
1,2-Dibromo-3-Chloropropane		12	U	0.12	12

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: SB-11 (14-15)

Lab Sample ID: 220-5884-5

Date Sampled: 07/16/2008 0730

Client Matrix: Solid

% Moisture: 13.4

Date Received: 07/17/2008 0951

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18353

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5164.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/22/2008 1904

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1904

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene		12	U	0.12	12
Methyl acetate		12	U	0.12	12
Cyclohexane		12	U	0.12	12
Methylcyclohexane		12	U	0.12	12
Surrogate		%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		118		70 - 121	
4-Bromofluorobenzene		107		59 - 113	
Toluene-d8 (Surr)		110		84 - 138	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: SB-13 (4-5)

Lab Sample ID: 220-5884-7

Date Sampled: 07/16/2008 0855

Client Matrix: Solid

% Moisture: 17.1

Date Received: 07/17/2008 0951

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18353

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5165.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/22/2008 1929

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1929

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Chloromethane		12	U	0.12	12
Vinyl chloride		12	U	0.12	12
Bromomethane		12	U	0.12	12
Chloroethane		12	U	0.12	12
1,1-Dichloroethene		12	U	0.12	12
Carbon disulfide		12	U	0.12	12
Acetone		12	U	0.12	12
Methylene Chloride		2.4	J B	0.12	12
1,1-Dichloroethane		12	U	0.12	12
Methyl Ethyl Ketone		12	U	0.12	12
Chloroform		12	U	0.12	12
1,1,1-Trichloroethane		12	U	0.12	12
Carbon tetrachloride		12	U	0.12	12
Benzene		12	U	0.12	12
1,2-Dichloroethane		12	U	0.12	12
Trichloroethene		12	U	0.12	12
1,2-Dichloropropane		12	U	0.12	12
Bromodichloromethane		12	U	0.12	12
cis-1,3-Dichloropropene		12	U	0.12	12
methyl isobutyl ketone		12	U	0.12	12
Toluene		12	U	0.12	12
trans-1,3-Dichloropropene		12	U	0.12	12
1,1,2-Trichloroethane		12	U	0.12	12
Tetrachloroethene		12	U	0.12	12
2-Hexanone		12	U	0.12	12
Dibromochloromethane		12	U	0.12	12
Chlorobenzene		12	U	0.12	12
Ethylbenzene		12	U	0.12	12
Styrene		12	U	0.12	12
Bromoform		12	U	0.12	12
1,1,2,2-Tetrachloroethane		12	U	0.12	12
Xylenes, Total		12	U	0.12	12
cis-1,2-Dichloroethene		12	U	0.12	12
trans-1,2-Dichloroethene		12	U	0.12	12
Dichlorodifluoromethane		12	U	0.12	12
Trichlorofluoromethane		12	U	0.12	12
1,1,2-Trichloro-1,2,2-trifluoroethane		12	U	0.12	12
Methyl tert-butyl ether		12	U	0.12	12
1,2-Dibromoethane		12	U	0.12	12
Isopropylbenzene		12	U	0.12	12
1,3-Dichlorobenzene		12	U	0.12	12
1,4-Dichlorobenzene		12	U	0.12	12
1,2-Dichlorobenzene		12	U	0.12	12
1,2-Dibromo-3-Chloropropane		12	U	0.12	12

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: SB-13 (4-5)

Lab Sample ID: 220-5884-7

Date Sampled: 07/16/2008 0855

Client Matrix: Solid

% Moisture: 17.1

Date Received: 07/17/2008 0951

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18353

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5165.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/22/2008 1929

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1929

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene		12	U	0.12	12
Methyl acetate		12	U	0.12	12
Cyclohexane		12	U	0.12	12
Methylcyclohexane		12	U	0.12	12
Surrogate		%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		84		70 - 121	
4-Bromofluorobenzene		46	*	59 - 113	
Toluene-d8 (Surr)		71	*	84 - 138	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: SB-14 (7-8)

Lab Sample ID: 220-5884-8

Date Sampled: 07/16/2008 0830

Client Matrix: Solid

% Moisture: 13.1

Date Received: 07/17/2008 0951

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18353

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5166.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/22/2008 1954

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1954

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Chloromethane		12	U	0.12	12
Vinyl chloride		12	U	0.12	12
Bromomethane		12	U	0.12	12
Chloroethane		12	U	0.12	12
1,1-Dichloroethene		12	U	0.12	12
Carbon disulfide		12	U	0.12	12
Acetone		12	U	0.12	12
Methylene Chloride		2.7	J B	0.12	12
1,1-Dichloroethane		12	U	0.12	12
Methyl Ethyl Ketone		12	U	0.12	12
Chloroform		12	U	0.12	12
1,1,1-Trichloroethane		12	U	0.12	12
Carbon tetrachloride		12	U	0.12	12
Benzene		0.80	J	0.12	12
1,2-Dichloroethane		12	U	0.12	12
Trichloroethene		12	U	0.12	12
1,2-Dichloropropane		12	U	0.12	12
Bromodichloromethane		12	U	0.12	12
cis-1,3-Dichloropropene		12	U	0.12	12
methyl isobutyl ketone		12	U	0.12	12
Toluene		2.0	J B	0.12	12
trans-1,3-Dichloropropene		12	U	0.12	12
1,1,2-Trichloroethane		12	U	0.12	12
Tetrachloroethene		12	U	0.12	12
2-Hexanone		12	U	0.12	12
Dibromochloromethane		12	U	0.12	12
Chlorobenzene		12	U	0.12	12
Ethylbenzene		0.83	J	0.12	12
Styrene		12	U	0.12	12
Bromoform		12	U	0.12	12
1,1,2,2-Tetrachloroethane		12	U	0.12	12
Xylenes, Total		1.3	J	0.12	12
cis-1,2-Dichloroethene		12	U	0.12	12
trans-1,2-Dichloroethene		12	U	0.12	12
Dichlorodifluoromethane		12	U	0.12	12
Trichlorofluoromethane		12	U	0.12	12
1,1,2-Trichloro-1,2,2-trifluoroethane		12	U	0.12	12
Methyl tert-butyl ether		12	U	0.12	12
1,2-Dibromoethane		12	U	0.12	12
Isopropylbenzene		0.92	J	0.12	12
1,3-Dichlorobenzene		12	U	0.12	12
1,4-Dichlorobenzene		12	U	0.12	12
1,2-Dichlorobenzene		12	U	0.12	12
1,2-Dibromo-3-Chloropropane		12	U	0.12	12

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: SB-14 (7-8)

Lab Sample ID: 220-5884-8

Date Sampled: 07/16/2008 0830

Client Matrix: Solid

% Moisture: 13.1

Date Received: 07/17/2008 0951

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18353

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5166.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/22/2008 1954

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1954

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene		12	U	0.12	12
Methyl acetate		12	U	0.12	12
Cyclohexane		12	U	0.12	12
Methylcyclohexane		3.3	J	0.12	12
Surrogate		%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		100		70 - 121	
4-Bromofluorobenzene		76		59 - 113	
Toluene-d8 (Surr)		100		84 - 138	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: TRIP BLANK

Lab Sample ID: 220-5884-15TB

Client Matrix: Water

Date Sampled: 07/16/2008 0000

Date Received: 07/17/2008 0951

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18355

Instrument ID: HP 6890/5973 GC/MS

Preparation: 5030B

Lab File ID: Y4804.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 07/22/2008 1546

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1546

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	10	U	0.10	10
Vinyl chloride	10	U	0.10	10
Bromomethane	10	U	0.10	10
Chloroethane	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
Carbon disulfide	10	U	0.10	10
Acetone	10	U	0.10	10
Methylene Chloride	10	U	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
Chloroform	10	U	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Benzene	10	U	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Trichloroethene	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
Toluene	10	U	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Bromoform	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
cis-1,2-Dichloroethene	10	U	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10
Dichlorodifluoromethane	10	U	0.10	10
Trichlorofluoromethane	10	U	0.10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	0.10	10
Methyl tert-butyl ether	10	U	0.10	10
1,2-Dibromoethane	10	U	0.10	10
Isopropylbenzene	10	U	0.10	10
1,3-Dichlorobenzene	10	U	0.10	10
1,4-Dichlorobenzene	10	U	0.10	10
1,2-Dichlorobenzene	10	U	0.10	10
1,2-Dibromo-3-Chloropropane	10	U	0.10	10

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: TRIP BLANK

Lab Sample ID: 220-5884-15TB

Date Sampled: 07/16/2008 0000

Client Matrix: Water

Date Received: 07/17/2008 0951

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18355

Instrument ID: HP 6890/5973 GC/MS

Preparation: 5030B

Lab File ID: Y4804.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 07/22/2008 1546

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1546

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene	10	U	0.10	10
Methyl acetate	10	U	0.10	10
Cyclohexane	10	U	0.10	10
Methylcyclohexane	10	U	0.10	10
Surrogate	%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	99		76 - 114	
4-Bromofluorobenzene	93		86 - 115	
Toluene-d8 (Surr)	100		88 - 110	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: SB-09 (7.5-8.5)

Lab Sample ID: 220-5884-1

Date Sampled: 07/16/2008 0758

Client Matrix: Solid

% Moisture: 19.8

Date Received: 07/17/2008 0951

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method: 8082

Analysis Batch: 220-18252

Instrument ID: HP 5890 with dual ECD

Preparation: 3550B

Prep Batch: 220-18172

Lab File ID: D4716124.d

Dilution: 1.0

Initial Weight/Volume: 30.36 g

Date Analyzed: 07/22/2008 2108

Final Weight/Volume: 10 mL

Date Prepared: 07/21/2008 1909

Injection Volume: 1.0 uL

Column ID: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		21	U	5.7	21
PCB-1221		41	U	1.4	41
PCB-1232		21	U	5.7	21
PCB-1242		21	U	5.7	21
PCB-1248		21	U	5.7	21
PCB-1254		21	U	1.9	21
PCB-1260		21	U	4.3	21

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	120	24 - 154
DCB Decachlorobiphenyl	99	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: SB-09 (4-5)

Lab Sample ID: 220-5884-2

Date Sampled: 07/16/2008 0805

Client Matrix: Solid

% Moisture: 9.3

Date Received: 07/17/2008 0951

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method: 8082

Analysis Batch: 220-18252

Instrument ID: HP 5890 with dual ECD

Preparation: 3550B

Prep Batch: 220-18172

Lab File ID: D4716125.d

Dilution: 1.0

Initial Weight/Volume: 30.48 g

Date Analyzed: 07/22/2008 2125

Final Weight/Volume: 10 mL

Date Prepared: 07/21/2008 1909

Injection Volume: 1.0 uL

Column ID: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		18	U	5.0	18
PCB-1221		36	U	1.2	36
PCB-1232		18	U	5.0	18
PCB-1242		18	U	5.0	18
PCB-1248		18	U	5.0	18
PCB-1254		18	U	1.7	18
PCB-1260		18	U	3.7	18

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	83	24 - 154
DCB Decachlorobiphenyl	83	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: SB-10 (17-18)

Lab Sample ID: 220-5884-3

Date Sampled: 07/16/2008 1418

Client Matrix: Solid

% Moisture: 10.0

Date Received: 07/17/2008 0951

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method: 8082

Analysis Batch: 220-18252

Instrument ID: HP 5890 with dual ECD

Preparation: 3550B

Prep Batch: 220-18172

Lab File ID: D4716126.d

Dilution: 1.0

Initial Weight/Volume: 30.13 g

Date Analyzed: 07/22/2008 2141

Final Weight/Volume: 10 mL

Date Prepared: 07/21/2008 1909

Injection Volume: 1.0 uL

Column ID: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	5.1	19
PCB-1221		37	U	1.2	37
PCB-1232		19	U	5.1	19
PCB-1242		19	U	5.1	19
PCB-1248		19	U	5.1	19
PCB-1254		19	U	1.7	19
PCB-1260		19	U	3.8	19

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	90	24 - 154
DCB Decachlorobiphenyl	104	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: SB-11 (4-5)

Lab Sample ID: 220-5884-4

Date Sampled: 07/16/2008 0730

Client Matrix: Solid

% Moisture: 17.7

Date Received: 07/17/2008 0951

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method: 8082

Analysis Batch: 220-18252

Instrument ID: HP 5890 with dual ECD

Preparation: 3550B

Prep Batch: 220-18172

Lab File ID: D4716127.d

Dilution: 1.0

Initial Weight/Volume: 30.19 g

Date Analyzed: 07/22/2008 2158

Final Weight/Volume: 10 mL

Date Prepared: 07/21/2008 1909

Injection Volume: 1.0 uL

Column ID: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		21	U	5.6	21
PCB-1221		40	U	1.3	40
PCB-1232		21	U	5.6	21
PCB-1242		21	U	5.6	21
PCB-1248		21	U	5.6	21
PCB-1254		21	U	1.8	21
PCB-1260		21	U	4.2	21

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	99	24 - 154
DCB Decachlorobiphenyl	93	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: SB-12 (14-15)

Lab Sample ID: 220-5884-6

Date Sampled: 07/16/2008 1435

Client Matrix: Solid

% Moisture: 10.8

Date Received: 07/17/2008 0951

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method: 8082

Analysis Batch: 220-18252

Instrument ID: HP 5890 with dual ECD

Preparation: 3550B

Prep Batch: 220-18172

Lab File ID: D4716128.d

Dilution: 1.0

Initial Weight/Volume: 30.58 g

Date Analyzed: 07/22/2008 2215

Final Weight/Volume: 10 mL

Date Prepared: 07/21/2008 1909

Injection Volume: 1.0 uL

Column ID: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	5.1	19
PCB-1221		36	U	1.2	36
PCB-1232		19	U	5.1	19
PCB-1242		19	U	5.1	19
PCB-1248		19	U	5.1	19
PCB-1254		19	U	1.7	19
PCB-1260		19	U	3.8	19

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	82	24 - 154
DCB Decachlorobiphenyl	96	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: SB-13 (4-5)

Lab Sample ID: 220-5884-7

Date Sampled: 07/16/2008 0855

Client Matrix: Solid

% Moisture: 17.1

Date Received: 07/17/2008 0951

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method: 8082

Analysis Batch: 220-18252

Instrument ID: HP 5890 with dual ECD

Preparation: 3550B

Prep Batch: 220-18172

Lab File ID: D4716129.d

Dilution: 1.0

Initial Weight/Volume: 30.37 g

Date Analyzed: 07/22/2008 2232

Final Weight/Volume: 10 mL

Date Prepared: 07/21/2008 1909

Injection Volume: 1.0 uL

Column ID: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		20	U	5.5	20
PCB-1221		39	U	1.3	39
PCB-1232		20	U	5.5	20
PCB-1242		20	U	5.5	20
PCB-1248		20	U	5.5	20
PCB-1254		20	U	1.8	20
PCB-1260		20	U	4.1	20

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	70	24 - 154
DCB Decachlorobiphenyl	93	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: SB-14 (7-8)

Lab Sample ID: 220-5884-8

Date Sampled: 07/16/2008 0830

Client Matrix: Solid

% Moisture: 13.1

Date Received: 07/17/2008 0951

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method: 8082

Analysis Batch: 220-18252

Instrument ID: HP 5890 with dual ECD

Preparation: 3550B

Prep Batch: 220-18172

Lab File ID: D4716130.d

Dilution: 1.0

Initial Weight/Volume: 30.41 g

Date Analyzed: 07/22/2008 2249

Final Weight/Volume: 10 mL

Date Prepared: 07/21/2008 1909

Injection Volume: 1.0 uL

Column ID: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	5.2	19
PCB-1221		37	U	1.3	37
PCB-1232		19	U	5.2	19
PCB-1242		19	U	5.2	19
PCB-1248		19	U	5.2	19
PCB-1254		19	U	1.7	19
PCB-1260		19	U	3.9	19

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	74	24 - 154
DCB Decachlorobiphenyl	65	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: SB-15 (3-4)

Lab Sample ID: 220-5884-9

Date Sampled: 07/16/2008 0920

Client Matrix: Solid

% Moisture: 19.0

Date Received: 07/17/2008 0951

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method: 8082

Analysis Batch: 220-18252

Instrument ID: HP 5890 with dual ECD

Preparation: 3550B

Prep Batch: 220-18172

Lab File ID: D4716131.d

Dilution: 1.0

Initial Weight/Volume: 30.04 g

Date Analyzed: 07/22/2008 2305

Final Weight/Volume: 10 mL

Date Prepared: 07/21/2008 1909

Injection Volume: 1.0 uL

Column ID: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		21	U	5.7	21
PCB-1221		41	U	1.4	41
PCB-1232		21	U	5.7	21
PCB-1242		21	U	5.7	21
PCB-1248		21	U	5.7	21
PCB-1254		21	U	1.9	21
PCB-1260		21	U	4.3	21

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	57	24 - 154
DCB Decachlorobiphenyl	62	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: SB-16 4-5)

Lab Sample ID: 220-5884-10

Date Sampled: 07/16/2008 1013

Client Matrix: Solid

% Moisture: 13.3

Date Received: 07/17/2008 0951

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method: 8082

Analysis Batch: 220-18252

Instrument ID: HP 5890 with dual ECD

Preparation: 3550B

Prep Batch: 220-18172

Lab File ID: D4716132.d

Dilution: 1.0

Initial Weight/Volume: 30.72 g

Date Analyzed: 07/22/2008 2322

Final Weight/Volume: 10 mL

Date Prepared: 07/21/2008 1909

Injection Volume: 1.0 uL

Column ID: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	5.2	19
PCB-1221		37	U	1.2	37
PCB-1232		19	U	5.2	19
PCB-1242		19	U	5.2	19
PCB-1248		19	U	5.2	19
PCB-1254		19	U	1.7	19
PCB-1260		19	U	3.9	19

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	71	24 - 154
DCB Decachlorobiphenyl	65	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: SB-17 (14-15)

Lab Sample ID: 220-5884-11

Date Sampled: 07/16/2008 1348

Client Matrix: Solid

% Moisture: 5.9

Date Received: 07/17/2008 0951

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method: 8082

Analysis Batch: 220-18252

Instrument ID: HP 5890 with dual ECD

Preparation: 3550B

Prep Batch: 220-18172

Lab File ID: D4716133.d

Dilution: 1.0

Initial Weight/Volume: 30.68 g

Date Analyzed: 07/22/2008 2339

Final Weight/Volume: 10 mL

Date Prepared: 07/21/2008 1909

Injection Volume: 1.0 uL

Column ID: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		18	U	4.8	18
PCB-1221		34	U	1.1	34
PCB-1232		18	U	4.8	18
PCB-1242		18	U	4.8	18
PCB-1248		18	U	4.8	18
PCB-1254		18	U	1.6	18
PCB-1260		18	U	3.6	18

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	73	24 - 154
DCB Decachlorobiphenyl	85	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: SB-18 (14-15)

Lab Sample ID: 220-5884-12

Date Sampled: 07/16/2008 1450

Client Matrix: Solid

% Moisture: 7.0

Date Received: 07/17/2008 0951

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-18252	Instrument ID:	HP 5890 with dual ECD
Preparation:	3550B	Prep Batch: 220-18172	Lab File ID:	C4716134.d
Dilution:	1.0		Initial Weight/Volume:	30.79 g
Date Analyzed:	07/22/2008 2356		Final Weight/Volume:	10 mL
Date Prepared:	07/21/2008 1909		Injection Volume:	1.0 uL
			Column ID:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		18	U	4.8	18
PCB-1221		35	U	1.2	35
PCB-1232		18	U	4.8	18
PCB-1242		18	U	4.8	18
PCB-1248		18	U	4.8	18
PCB-1254		18	U	1.6	18
PCB-1260		7.7	J	3.6	18

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	81	24 - 154
DCB Decachlorobiphenyl	95	25 - 159

Method:	8082	Analysis Batch: 220-18252	Instrument ID:	HP 5890 with dual ECD
Preparation:	3550B	Prep Batch: 220-18172	Lab File ID:	C4716134.d
Dilution:	1.0		Initial Weight/Volume:	30.79 g
Date Analyzed:	07/22/2008 2356		Final Weight/Volume:	10 mL
Date Prepared:	07/21/2008 1909		Injection Volume:	1.0 uL
			Column ID:	SECONDARY

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	76	24 - 154
DCB Decachlorobiphenyl	88	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: SB-19 (3.5-4.5)

Lab Sample ID: 220-5884-13

Date Sampled: 07/16/2008 1036

Client Matrix: Solid

% Moisture: 11.3

Date Received: 07/17/2008 0951

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-18252	Instrument ID:	HP 5890 with dual ECD
Preparation:	3550B	Prep Batch: 220-18172	Lab File ID:	C4716135.d
Dilution:	1.0		Initial Weight/Volume:	30.43 g
Date Analyzed:	07/23/2008 0012		Final Weight/Volume:	10 mL
Date Prepared:	07/21/2008 1909		Injection Volume:	1.0 uL
			Column ID:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	5.1	19
PCB-1221		37	U	1.2	37
PCB-1232		19	U	5.1	19
PCB-1242		19	U	5.1	19
PCB-1248		19	U	5.1	19
PCB-1254		19	U	1.7	19
PCB-1260		16	J	3.8	19

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	65	24 - 154
DCB Decachlorobiphenyl	62	25 - 159

Method:	8082	Analysis Batch: 220-18252	Instrument ID:	HP 5890 with dual ECD
Preparation:	3550B	Prep Batch: 220-18172	Lab File ID:	D4716135.d
Dilution:	1.0		Initial Weight/Volume:	30.43 g
Date Analyzed:	07/23/2008 0012		Final Weight/Volume:	10 mL
Date Prepared:	07/21/2008 1909		Injection Volume:	1.0 uL
			Column ID:	SECONDARY

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	52	24 - 154
DCB Decachlorobiphenyl	56	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Client Sample ID: SB-20 (14-15)

Lab Sample ID: 220-5884-14

Date Sampled: 07/16/2008 1445

Client Matrix: Solid

% Moisture: 2.5

Date Received: 07/17/2008 0951

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method: 8082

Analysis Batch: 220-18252

Instrument ID: HP 5890 with dual ECD

Preparation: 3550B

Prep Batch: 220-18172

Lab File ID: D4716136.d

Dilution: 1.0

Initial Weight/Volume: 30.72 g

Date Analyzed: 07/23/2008 0029

Final Weight/Volume: 10 mL

Date Prepared: 07/21/2008 1909

Injection Volume: 1.0 uL

Column ID: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		17	U	4.6	17
PCB-1221		33	U	1.1	33
PCB-1232		17	U	4.6	17
PCB-1242		17	U	4.6	17
PCB-1248		17	U	4.6	17
PCB-1254		17	U	1.5	17
PCB-1260		17	U	3.5	17

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	95	24 - 154
DCB Decachlorobiphenyl	113	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

General Chemistry

Client Sample ID: SB-09 (7.5-8.5)

Lab Sample ID: 220-5884-1

Client Matrix: Solid

Date Sampled: 07/16/2008 0758

Date Received: 07/17/2008 0951

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	19.8		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			
Percent Solids	80.2		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			

Client Sample ID: SB-09 (4-5)

Lab Sample ID: 220-5884-2

Client Matrix: Solid

Date Sampled: 07/16/2008 0805

Date Received: 07/17/2008 0951

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	9.34		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			
Percent Solids	90.7		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			

Client Sample ID: SB-10 (17-18)

Lab Sample ID: 220-5884-3

Client Matrix: Solid

Date Sampled: 07/16/2008 1418

Date Received: 07/17/2008 0951

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	10.0		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			
Percent Solids	90.0		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

General Chemistry

Client Sample ID: SB-11 (4-5)

Lab Sample ID: 220-5884-4

Client Matrix: Solid

Date Sampled: 07/16/2008 0730

Date Received: 07/17/2008 0951

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	17.7		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			
Percent Solids	82.3		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			

Client Sample ID: SB-11 (14-15)

Lab Sample ID: 220-5884-5

Client Matrix: Solid

Date Sampled: 07/16/2008 0730

Date Received: 07/17/2008 0951

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	13.4		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			
Percent Solids	86.6		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			

Client Sample ID: SB-12 (14-15)

Lab Sample ID: 220-5884-6

Client Matrix: Solid

Date Sampled: 07/16/2008 1435

Date Received: 07/17/2008 0951

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	10.8		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			
Percent Solids	89.2		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			

Client Sample ID: SB-13 (4-5)

Lab Sample ID: 220-5884-7

Client Matrix: Solid

Date Sampled: 07/16/2008 0855

Date Received: 07/17/2008 0951

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	17.1		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			
Percent Solids	82.9		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

General Chemistry

Client Sample ID: SB-14 (7-8)

Lab Sample ID: 220-5884-8

Client Matrix: Solid

Date Sampled: 07/16/2008 0830

Date Received: 07/17/2008 0951

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	13.1		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			
Percent Solids	86.9		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			

Client Sample ID: SB-15 (3-4)

Lab Sample ID: 220-5884-9

Client Matrix: Solid

Date Sampled: 07/16/2008 0920

Date Received: 07/17/2008 0951

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	19.0		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			
Percent Solids	81.0		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			

Client Sample ID: SB-16 4-5)

Lab Sample ID: 220-5884-10

Client Matrix: Solid

Date Sampled: 07/16/2008 1013

Date Received: 07/17/2008 0951

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	13.3		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			
Percent Solids	86.7		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			

Client Sample ID: SB-17 (14-15)

Lab Sample ID: 220-5884-11

Client Matrix: Solid

Date Sampled: 07/16/2008 1348

Date Received: 07/17/2008 0951

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	5.89		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			
Percent Solids	94.1		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

General Chemistry

Client Sample ID: SB-18 (14-15)

Lab Sample ID: 220-5884-12

Client Matrix: Solid

Date Sampled: 07/16/2008 1450

Date Received: 07/17/2008 0951

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	7.00		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			
Percent Solids	93.0		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			

Client Sample ID: SB-19 (3.5-4.5)

Lab Sample ID: 220-5884-13

Client Matrix: Solid

Date Sampled: 07/16/2008 1036

Date Received: 07/17/2008 0951

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	11.3		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			
Percent Solids	88.7		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			

Client Sample ID: SB-20 (14-15)

Lab Sample ID: 220-5884-14

Client Matrix: Solid

Date Sampled: 07/16/2008 1445

Date Received: 07/17/2008 0951

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	2.48		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			
Percent Solids	97.5		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18119	Date Analyzed		07/18/2008 1325			

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Surrogate Recovery Report

OLM04.2/Vol CLP Volatile Organic Compounds

Client Matrix: Solid

Lab Sample ID	Client Sample ID	12DCE %Rec	TOL %Rec	BFB %Rec
220-5884-1	SB-09 (7.5-8.5)	100	103	102
220-5884-5	SB-11 (14-15)	118	110	107
220-5884-7	SB-13 (4-5)	84	71*	46*
220-5884-8	SB-14 (7-8)	100	100	76
MB 220-18283/2		98	97	106
MB 220-18353/2		95	99	103
LCS 220-18283/3		100	98	97
LCS 220-18353/3		96	97	99
MSB 220-18283/11		102	100	98
220-5884-1 MS	SB-09 (7.5-8.5) MS	93	107	81
220-5884-1 MSD	SB-09 (7.5-8.5) MSD	80	92	70

Surrogate	Acceptance Limits
12DCE = 1,2-Dichloroethane-d4 (Surr)	70-121
TOL = Toluene-d8 (Surr)	84-138
BFB = 4-Bromofluorobenzene	59-113

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Surrogate Recovery Report

OLM04.2/Vol CLP Volatile Organic Compounds

Client Matrix: Water

Lab Sample ID	Client Sample ID	12DCE %Rec	TOL %Rec	BFB %Rec
220-5884-15	TRIP BLANK	99	100	93
MB 220-18355/2		94	103	94
LCS 220-18355/3		98	101	99

Surrogate	Acceptance Limits
12DCE = 1,2-Dichloroethane-d4 (Surr)	76-114
TOL = Toluene-d8 (Surr)	88-110
BFB = 4-Bromofluorobenzene	86-115

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Surrogate Recovery Report

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Matrix: Solid

Lab Sample ID	Client Sample ID	TCX1 %Rec	TCX2 %Rec	DCB1 %Rec	DCB2 %Rec
220-5884-1	SB-09 (7.5-8.5)		120		99
220-5884-2	SB-09 (4-5)		83		83
220-5884-3	SB-10 (17-18)		90		104
220-5884-4	SB-11 (4-5)		99		93
220-5884-6	SB-12 (14-15)		82		96
220-5884-7	SB-13 (4-5)		70		93
220-5884-8	SB-14 (7-8)		74		65
220-5884-9	SB-15 (3-4)		57		62
220-5884-10	SB-16 (4-5)		71		65
220-5884-11	SB-17 (14-15)		73		85
220-5884-12	SB-18 (14-15)	76	81	95	88
220-5884-13	SB-19 (3.5-4.5)	65	52	62	56
220-5884-14	SB-20 (14-15)		95		113
MB 220-18172/1-A		99	92	107	101
LCS 220-18172/2-A		98	89	109	103

Surrogate	Acceptance Limits
TCX = Tetrachloro-m-xylene	24-154
DCB = DCB Decachlorobiphenyl	25-159

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Method Blank - Batch: 220-18283

Method: OLM04.2/Vol Preparation: 5030B

Lab Sample ID: MB 220-18283/2
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 07/23/2008 1038
Date Prepared: 07/23/2008 1038

Analysis Batch: 220-18283
Prep Batch: N/A
Units: ug/Kg

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: O5178.D
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Chloromethane	10	U	0.10	10
Vinyl chloride	10	U	0.10	10
Bromomethane	10	U	0.10	10
Chloroethane	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
Carbon disulfide	10	U	0.10	10
Acetone	2.2	J	0.10	10
Methylene Chloride	1.7	J	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
Chloroform	10	U	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Benzene	10	U	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Trichloroethene	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
Toluene	0.41	J	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Bromoform	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
cis-1,2-Dichloroethene	10	U	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10
Dichlorodifluoromethane	10	U	0.10	10
Trichlorofluoromethane	10	U	0.10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	0.10	10
Methyl tert-butyl ether	10	U	0.10	10
1,2-Dibromoethane	10	U	0.10	10
Isopropylbenzene	10	U	0.10	10
1,3-Dichlorobenzene	10	U	0.10	10

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Method Blank - Batch: 220-18283

Method: OLM04.2/Vol Preparation: 5030B

Lab Sample ID: MB 220-18283/2

Analysis Batch: 220-18283

Instrument ID: HP 5890/5971A GC/MS

Client Matrix: Solid

Prep Batch: N/A

Lab File ID: O5178.D

Dilution: 1.0

Units: ug/Kg

Initial Weight/Volume: 5 g

Date Analyzed: 07/23/2008 1038

Final Weight/Volume: 5 mL

Date Prepared: 07/23/2008 1038

Analyte	Result	Qual	MDL	RL
1,4-Dichlorobenzene	10	U	0.10	10
1,2-Dichlorobenzene	10	U	0.10	10
1,2-Dibromo-3-Chloropropane	10	U	0.10	10
1,2,4-Trichlorobenzene	10	U	0.10	10
Methyl acetate	10	U	0.10	10
Cyclohexane	10	U	0.10	10
Methylcyclohexane	10	U	0.10	10
Surrogate	% Rec	Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	98	70 - 121		
4-Bromofluorobenzene	106	59 - 113		
Toluene-d8 (Surr)	97	84 - 138		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Lab Control Spike - Batch: 220-18283

Method: OLM04.2/Vol
Preparation: 5030B

Lab Sample ID: LCS 220-18283/3
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 07/23/2008 1126
Date Prepared: 07/23/2008 1126

Analysis Batch: 220-18283
Prep Batch: N/A
Units: ug/Kg

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: O5179.D
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1-Dichloroethene	20.0	20.1	101	59 - 172	
Benzene	20.0	19.7	98	66 - 142	
Trichloroethene	20.0	19.7	98	62 - 137	
Toluene	20.0	20.4	102	59 - 139	
Chlorobenzene	20.0	19.6	98	60 - 133	
Surrogate	% Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	100		70 - 121		
4-Bromofluorobenzene	97		59 - 113		
Toluene-d8 (Surr)	98		84 - 138		

Matrix Spike Blank - Batch: 220-18283

Method: OLM04.2/Vol
Preparation: 5030B

Lab Sample ID: MSB 220-18283/11
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 07/23/2008 1855
Date Prepared: 07/23/2008 1855

Analysis Batch: 220-18283
Prep Batch: N/A
Units: ug/Kg

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: O5193.D
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1-Dichloroethene	50.0	57.4	115	59 - 172	
Benzene	50.0	49.9	100	66 - 142	
Trichloroethene	50.0	49.9	100	62 - 137	
Toluene	50.0	50.7	101	59 - 139	
Chlorobenzene	50.0	49.1	98	60 - 133	
Surrogate	% Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	102		70 - 121		
4-Bromofluorobenzene	98		59 - 113		
Toluene-d8 (Surr)	100		84 - 138		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 220-18283

Method: OLM04.2/Vol
Preparation: 5030B

MS Lab Sample ID: 220-5884-1
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 07/23/2008 1920
Date Prepared: 07/23/2008 1920

Analysis Batch: 220-18283
Prep Batch: N/A

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: O5194.D
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

MSD Lab Sample ID: 220-5884-1
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 07/23/2008 1945
Date Prepared: 07/23/2008 1945

Analysis Batch: 220-18283
Prep Batch: N/A

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: O5195.D
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,1-Dichloroethene	120	104	59 - 172	14	22		
Benzene	108	97	66 - 142	10	21		
Trichloroethene	117	92	62 - 137	24	24		
Toluene	114	99	59 - 139	14	21		
Chlorobenzene	100	87	60 - 133	13	21		
Surrogate	MS % Rec		MSD % Rec	Acceptance Limits			
1,2-Dichloroethane-d4 (Surr)	93		80	70 - 121			
4-Bromofluorobenzene	81		70	59 - 113			
Toluene-d8 (Surr)	107		92	84 - 138			

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Method Blank - Batch: 220-18353

Method: OLM04.2/Vol Preparation: 5030B

Lab Sample ID: MB 220-18353/2
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 07/22/2008 1047
Date Prepared: 07/22/2008 1047

Analysis Batch: 220-18353
Prep Batch: N/A
Units: ug/Kg

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: O5149.D
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Chloromethane	10	U	0.10	10
Vinyl chloride	10	U	0.10	10
Bromomethane	10	U	0.10	10
Chloroethane	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
Carbon disulfide	10	U	0.10	10
Acetone	2.1	J	0.10	10
Methylene Chloride	1.5	J	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
Chloroform	10	U	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Benzene	10	U	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Trichloroethene	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
Toluene	0.24	J	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Bromoform	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
cis-1,2-Dichloroethene	10	U	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10
Dichlorodifluoromethane	10	U	0.10	10
Trichlorofluoromethane	10	U	0.10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	0.10	10
Methyl tert-butyl ether	10	U	0.10	10
1,2-Dibromoethane	10	U	0.10	10
Isopropylbenzene	10	U	0.10	10
1,3-Dichlorobenzene	10	U	0.10	10

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Method Blank - Batch: 220-18353

Method: OLM04.2/Vol
Preparation: 5030B

Lab Sample ID: MB 220-18353/2
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 07/22/2008 1047
Date Prepared: 07/22/2008 1047

Analysis Batch: 220-18353
Prep Batch: N/A
Units: ug/Kg

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: O5149.D
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
1,4-Dichlorobenzene	10	U	0.10	10
1,2-Dichlorobenzene	10	U	0.10	10
1,2-Dibromo-3-Chloropropane	10	U	0.10	10
1,2,4-Trichlorobenzene	10	U	0.10	10
Methyl acetate	10	U	0.10	10
Cyclohexane	10	U	0.10	10
Methylcyclohexane	10	U	0.10	10

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95	70 - 121
4-Bromofluorobenzene	103	59 - 113
Toluene-d8 (Surr)	99	84 - 138

Lab Control Spike - Batch: 220-18353

Method: OLM04.2/Vol
Preparation: 5030B

Lab Sample ID: LCS 220-18353/3
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 07/22/2008 1247
Date Prepared: 07/22/2008 1247

Analysis Batch: 220-18353
Prep Batch: N/A
Units: ug/Kg

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: O5151.D
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1-Dichloroethene	20.0	21.5	108	59 - 172	
Benzene	20.0	21.0	105	66 - 142	
Trichloroethene	20.0	20.4	102	62 - 137	
Toluene	20.0	21.4	107	59 - 139	
Chlorobenzene	20.0	21.2	106	60 - 133	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96	70 - 121
4-Bromofluorobenzene	99	59 - 113
Toluene-d8 (Surr)	97	84 - 138

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Method Blank - Batch: 220-18355

Method: OLM04.2/Vol Preparation: 5030B

Lab Sample ID: MB 220-18355/2

Analysis Batch: 220-18355

Instrument ID: HP 6890/5973 GC/MS

Client Matrix: Water

Prep Batch: N/A

Lab File ID: Y4797.D

Dilution: 1.0

Units: ug/L

Initial Weight/Volume: 5 mL

Date Analyzed: 07/22/2008 1112

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1112

Analyte	Result	Qual	MDL	RL
Chloromethane	10	U	0.10	10
Vinyl chloride	10	U	0.10	10
Bromomethane	10	U	0.10	10
Chloroethane	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
Carbon disulfide	10	U	0.10	10
Acetone	10	U	0.10	10
Methylene Chloride	0.82	J	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
Chloroform	10	U	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Benzene	10	U	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Trichloroethene	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
Toluene	10	U	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Bromoform	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
cis-1,2-Dichloroethene	10	U	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10
Dichlorodifluoromethane	10	U	0.10	10
Trichlorofluoromethane	10	U	0.10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	0.10	10
Methyl tert-butyl ether	10	U	0.10	10
1,2-Dibromoethane	10	U	0.10	10
Isopropylbenzene	10	U	0.10	10
1,3-Dichlorobenzene	10	U	0.10	10

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Method Blank - Batch: 220-18355

Method: OLM04.2/Vol
Preparation: 5030B

Lab Sample ID: MB 220-18355/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/22/2008 1112
Date Prepared: 07/22/2008 1112

Analysis Batch: 220-18355
Prep Batch: N/A
Units: ug/L

Instrument ID: HP 6890/5973 GC/MS
Lab File ID: Y4797.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
1,4-Dichlorobenzene	10	U	0.10	10
1,2-Dichlorobenzene	10	U	0.10	10
1,2-Dibromo-3-Chloropropane	10	U	0.10	10
1,2,4-Trichlorobenzene	10	U	0.10	10
Methyl acetate	10	U	0.10	10
Cyclohexane	10	U	0.10	10
Methylcyclohexane	10	U	0.10	10

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94	76 - 114
4-Bromofluorobenzene	94	86 - 115
Toluene-d8 (Surr)	103	88 - 110

Lab Control Spike - Batch: 220-18355

Method: OLM04.2/Vol
Preparation: 5030B

Lab Sample ID: LCS 220-18355/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/22/2008 1334
Date Prepared: 07/22/2008 1334

Analysis Batch: 220-18355
Prep Batch: N/A
Units: ug/L

Instrument ID: HP 6890/5973 GC/MS
Lab File ID: Y4800.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1-Dichloroethene	20.0	21.7	108	61 - 145	
Benzene	20.0	21.2	106	76 - 127	
Trichloroethene	20.0	21.8	109	71 - 120	
Toluene	20.0	20.7	104	76 - 125	
Chlorobenzene	20.0	20.6	103	75 - 130	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98	76 - 114
4-Bromofluorobenzene	99	86 - 115
Toluene-d8 (Surr)	101	88 - 110

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Method Blank - Batch: 220-18172

Method: 8082

Preparation: 3550B

Lab Sample ID: MB 220-18172/1-A

Client Matrix: Solid

Dilution: 1.0

Date Analyzed: 07/22/2008 1238

Date Prepared: 07/21/2008 1909

Analysis Batch: 220-18252

Prep Batch: 220-18172

Units: ug/Kg

Instrument ID: HP 5890 with dual ECD

Lab File ID: C4716106.d

Initial Weight/Volume: 30.0 g

Final Weight/Volume: 10 mL

Injection Volume: 1.0 uL

Column ID: PRIMARY

Analyte	Result	Qual	MDL	RL
PCB-1016	17	U	4.6	17
PCB-1221	33	U	1.1	33
PCB-1232	17	U	4.6	17
PCB-1242	17	U	4.6	17
PCB-1248	17	U	4.6	17
PCB-1254	17	U	1.5	17
PCB-1260	17	U	3.5	17

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	99	24 - 154
DCB Decachlorobiphenyl	107	25 - 159

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	92	24 - 154
DCB Decachlorobiphenyl	101	25 - 159

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Lab Control Spike - Batch: 220-18172

Method: 8082

Preparation: 3550B

Lab Sample ID: LCS 220-18172/2-A

Client Matrix: Solid

Dilution: 1.0

Date Analyzed: 07/22/2008 1255

Date Prepared: 07/21/2008 1909

Analysis Batch: 220-18252

Prep Batch: 220-18172

Units: ug/Kg

Instrument ID: HP 5890 with dual ECD

Lab File ID: C4716107.d

Initial Weight/Volume: 30.0 g

Final Weight/Volume: 10 mL

Injection Volume: 1.0 uL

Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
PCB-1016	167	160	96	42 - 130	
PCB-1260	167	137	82	50 - 128	
Surrogate	% Rec		Acceptance Limits		
Tetrachloro-m-xylene	98		24 - 154		
DCB Decachlorobiphenyl	109		25 - 159		
Surrogate	% Rec		Acceptance Limits		
Tetrachloro-m-xylene	89		24 - 154		
DCB Decachlorobiphenyl	103		25 - 159		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Duplicate - Batch: 220-18119

Method: PercentMoisture

Preparation: N/A

Lab Sample ID: 220-5884-1

Analysis Batch: 220-18119

Instrument ID: No Equipment Assigned

Client Matrix: Solid

Prep Batch: N/A

Lab File ID: N/A

Dilution: 1.0

Units: %

Initial Weight/Volume:

Date Analyzed: 07/18/2008 1325

Final Weight/Volume:

Date Prepared: N/A

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	19.8	22.3	12	20	
Percent Solids	80.2	77.7	3	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

DATA REPORTING QUALIFIERS

Client: Malcolm Pirnie, Inc.

Job Number: 220-5884-1

Sdg Number: 220-5884

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	*	Surrogate exceeds the control limit
	B	The analyte was found in an associated blank, as well as in the sample.
GC Semi VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.

ANALYTICAL REPORT

Job Number: 220-5867-1

SDG Number: 220-5867

Job Description: NYSDEC Standby - Tioga Castings

For:

Malcolm Pirnie, Inc.
43 British American Boulevard
1st Floor
Latham, NY 12110

Attention: Mr. Bruce Nelson



Designee for
Johanna Dubauskas
Project Manager I
johanna.dubauskas@testamericainc.com
07/30/2008

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

Case Narrative for Job: 220-5867-1

Client: Malcolm Pirnie, Inc.
Date: July 30, 2008

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.



Lawrence Decker
Laboratory Director

July 30, 2008

Date

Job Narrative
220-J5867-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

Method(s) OLM04.2/Vol: Surrogate recovery for the following sample was outside control limits: SB-01 (12-13) (220-5867-1). A second run confirmed matrix interference. One set of data was reported.

Method(s) OLM04.2/Vol: Surrogate recovery for the following sample was outside control limits: SB-08 (9.5-10) (220-5867-11). A second run confirmed matrix interference. One set of data was reported.

No other analytical or quality issues were noted.

GC Semi VOA

Method(s) 8082: The capping continuing calibration verification (CCV) analyzed on 7/23/08 did not meet control limits for Decachlorobiphenyl on the RTX-CLP2 column.

Method(s) 8082: The continuing calibration verifications (CCV) analyzed on 7/22/08 and 7/23/08 did not meet control limits for Aroclor-1016 on the RTX-CLP column. These were both beginning and ending verifications. Early PCB's were not detected in any of the associated samples, SB-02 (3.5-17.5) (220-5867-7), SB-03 (4.5-20) (220-5867-10), SB-05 (4-15) (220-5867-8), SB-06 (7.5-8.5) (220-5867-15), SB-07 (4-5) (220-5867-13), SB-08 (9.5-10) (220-5867-11), therefore there should be no impact on the data.

No other analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

FORMULAS FOR NYSDEC SAMPLE CALCULATIONS

Volatiles

$$\frac{(AX)(IS)(DF)}{(AIS)(RRF)(V)(\% \text{ solids})} = C$$

$$\frac{(AX)(IS)(VT)(1000)(DF)}{(AIS)(RRF)(VA)(V)(\% \text{ solids})} = C \quad (\text{for medium level soils})$$

SemiVolatiles

$$\frac{(AX)(IS)(VE)(DF)(\text{GPC factor is 2 if needed})}{(AIS)(RRF)(\text{volume injected})(V)(\% \text{ solids})} = C$$

Pesticides

$$\frac{(AX)(VE)(DF)}{(RRF)(V)(\% \text{ solids})(\text{volume injected})} = C$$

PCBs for compound/retention time

$$\frac{(AX)(VE)(DF)}{(RRF \text{ of compound at the stated retention time})(V)(\% \text{ solids})(\text{volume injected})} = C$$

DRO/CTETPH

$$\frac{(AX)(VE)(DF)}{(RRF)(V)(\% \text{ solids})(\text{volume injected})} = C$$

AX = area of the target Ion

AIS = Area of Internal standard

C = concentration as ug/L or ug/Kg

DF = dilution

IS = Internal standard concentration (ng)

RRF = average RF (from initial cal except CLP methods from continuing cal)

V = sample volume for liquids in mls or sample weight for solids in grams

VA = volume of aliquot for medium level soils

VE = volume of concentrated extract

VT = volume of methanol for volatile medium level soils

SAMPLE SUMMARY

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-5867-1	SB-01 (12-13)	Solid	07/15/2008 1055	07/16/2008 0944
220-5867-2	SB-02 (17-17.5)	Solid	07/15/2008 1120	07/16/2008 0944
220-5867-3	SB-05 (14.5-15)	Solid	07/15/2008 1145	07/16/2008 0944
220-5867-4	SB-04 (14.5-15)	Solid	07/15/2008 1230	07/16/2008 0944
220-5867-5	SB-03 (19-19.5)	Solid	07/15/2008 1345	07/16/2008 0944
220-5867-6	SB-01 (3.8-18)	Solid	07/15/2008 1055	07/16/2008 0944
220-5867-7	SB-02 (3.5-17.5)	Solid	07/15/2008 1120	07/16/2008 0944
220-5867-8	SB-05 (4-15)	Solid	07/15/2008 1145	07/16/2008 0944
220-5867-9	SB-04 (3.5-15)	Solid	07/15/2008 1230	07/16/2008 0944
220-5867-10	SB-03 (4.5-20)	Solid	07/15/2008 1345	07/16/2008 0944
220-5867-11	SB-08 (9.5-10)	Solid	07/15/2008 1416	07/16/2008 0944
220-5867-12	SB-08 (14.5-15)	Solid	07/15/2008 1435	07/16/2008 0944
220-5867-13	SB-07 (4-5)	Solid	07/15/2008 1500	07/16/2008 0944
220-5867-14	SB-07 (14.5-15.5)	Solid	07/15/2008 1500	07/16/2008 0944
220-5867-15	SB-06 (7.5-8.5)	Solid	07/15/2008 1530	07/16/2008 0944
220-5867-16	SB-06 (14-15)	Solid	07/15/2008 1535	07/16/2008 0944
220-5867-17TB	TRIP BLANK	Water	07/15/2008 0000	07/16/2008 0944

METHOD SUMMARY

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
CLP Volatile Organic Compounds	TAL CT	OLM04.2	OLM04.2/Vol
Purge-and-Trap	TAL CT		SW846 5030B
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL CT	SW846 8082	
Ultrasonic Extraction	TAL CT		SW846 3550B
ILM05.3 Metals	TAL BUF	ILM05.3	ILM05.3
Matrix: Water			
CLP Volatile Organic Compounds	TAL CT	OLM04.2	OLM04.2/Vol
Purge-and-Trap	TAL CT		SW846 5030B

Lab References:

TAL BUF = TestAmerica Buffalo

TAL CT = TestAmerica Connecticut

Method References:

ILM05.3 = U.S. Environmental Protection Agency

OLM04.2 = "Statement of Work for Organic Analysis", Multi-Media, Multi-Concentration September 1998

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Method	Analyst	Analyst ID
OLM04.2 OLM04.2/Vol	Humbert, Dave	DH
SW846 8082	Smith, Karli	KS
EPA PercentMoisture	Culik, Marie E	MEC

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-01 (12-13)

Lab Sample ID: 220-5867-1

Date Sampled: 07/15/2008 1055

Client Matrix: Solid

% Moisture: 7.8

Date Received: 07/16/2008 0944

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18353

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5153.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/22/2008 1400

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1400

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Chloromethane		11	U	0.11	11
Vinyl chloride		11	U	0.11	11
Bromomethane		11	U	0.11	11
Chloroethane		11	U	0.11	11
1,1-Dichloroethene		11	U	0.11	11
Carbon disulfide		11	U	0.11	11
Acetone		8.2	J B	0.11	11
Methylene Chloride		8.7	J B	0.11	11
1,1-Dichloroethane		11	U	0.11	11
Methyl Ethyl Ketone		11	U	0.11	11
Chloroform		11	U	0.11	11
1,1,1-Trichloroethane		11	U	0.11	11
Carbon tetrachloride		11	U	0.11	11
Benzene		1.2	J	0.11	11
1,2-Dichloroethane		11	U	0.11	11
Trichloroethene		22		0.11	11
1,2-Dichloropropane		11	U	0.11	11
Bromodichloromethane		11	U	0.11	11
cis-1,3-Dichloropropene		11	U	0.11	11
methyl isobutyl ketone		11	U	0.11	11
Toluene		1.6	J B	0.11	11
trans-1,3-Dichloropropene		11	U	0.11	11
1,1,2-Trichloroethane		11	U	0.11	11
Tetrachloroethene		11	U	0.11	11
2-Hexanone		11	U	0.11	11
Dibromochloromethane		11	U	0.11	11
Chlorobenzene		11	U	0.11	11
Ethylbenzene		1.4	J	0.11	11
Styrene		11	U	0.11	11
Bromoform		11	U	0.11	11
1,1,2,2-Tetrachloroethane		11	U	0.11	11
Xylenes, Total		3.6	J	0.11	11
cis-1,2-Dichloroethene		11	U	0.11	11
trans-1,2-Dichloroethene		11	U	0.11	11
Dichlorodifluoromethane		11	U	0.11	11
Trichlorofluoromethane		11	U	0.11	11
1,1,2-Trichloro-1,2,2-trifluoroethane		11	U	0.11	11
Methyl tert-butyl ether		11	U	0.11	11
1,2-Dibromoethane		11	U	0.11	11
Isopropylbenzene		11	U	0.11	11
1,3-Dichlorobenzene		11	U	0.11	11
1,4-Dichlorobenzene		11	U	0.11	11
1,2-Dichlorobenzene		11	U	0.11	11
1,2-Dibromo-3-Chloropropane		11	U	0.11	11

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-01 (12-13)

Lab Sample ID: 220-5867-1

Date Sampled: 07/15/2008 1055

Client Matrix: Solid

% Moisture: 7.8

Date Received: 07/16/2008 0944

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18353

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5153.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/22/2008 1400

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1400

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene		11	U	0.11	11
Methyl acetate		11	U	0.11	11
Cyclohexane		11	U	0.11	11
Methylcyclohexane		11	U	0.11	11
Surrogate		%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		85		70 - 121	
4-Bromofluorobenzene		44	*	59 - 113	
Toluene-d8 (Surr)		86		84 - 138	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-02 (17-17.5)

Lab Sample ID: 220-5867-2

Date Sampled: 07/15/2008 1120

Client Matrix: Solid

% Moisture: 15.7

Date Received: 07/16/2008 0944

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18283

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5181.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/23/2008 1301

Final Weight/Volume: 5 mL

Date Prepared: 07/23/2008 1301

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Chloromethane		12	U	0.12	12
Vinyl chloride		12	U	0.12	12
Bromomethane		12	U	0.12	12
Chloroethane		12	U	0.12	12
1,1-Dichloroethene		12	U	0.12	12
Carbon disulfide		1.4	J	0.12	12
Acetone		21	B	0.12	12
Methylene Chloride		9.5	J B	0.12	12
1,1-Dichloroethane		12	U	0.12	12
Methyl Ethyl Ketone		12	U	0.12	12
Chloroform		12	U	0.12	12
1,1,1-Trichloroethane		12	U	0.12	12
Carbon tetrachloride		12	U	0.12	12
Benzene		2.2	J	0.12	12
1,2-Dichloroethane		12	U	0.12	12
Trichloroethene		23		0.12	12
1,2-Dichloropropane		12	U	0.12	12
Bromodichloromethane		12	U	0.12	12
cis-1,3-Dichloropropene		12	U	0.12	12
methyl isobutyl ketone		12	U	0.12	12
Toluene		2.9	J B	0.12	12
trans-1,3-Dichloropropene		12	U	0.12	12
1,1,2-Trichloroethane		12	U	0.12	12
Tetrachloroethene		12	U	0.12	12
2-Hexanone		12	U	0.12	12
Dibromochloromethane		12	U	0.12	12
Chlorobenzene		12	U	0.12	12
Ethylbenzene		1.9	J	0.12	12
Styrene		12	U	0.12	12
Bromoform		12	U	0.12	12
1,1,2,2-Tetrachloroethane		12	U	0.12	12
Xylenes, Total		4.6	J	0.12	12
cis-1,2-Dichloroethene		12	U	0.12	12
trans-1,2-Dichloroethene		12	U	0.12	12
Dichlorodifluoromethane		12	U	0.12	12
Trichlorofluoromethane		12	U	0.12	12
1,1,2-Trichloro-1,2,2-trifluoroethane		12	U	0.12	12
Methyl tert-butyl ether		12	U	0.12	12
1,2-Dibromoethane		12	U	0.12	12
Isopropylbenzene		12	U	0.12	12
1,3-Dichlorobenzene		12	U	0.12	12
1,4-Dichlorobenzene		12	U	0.12	12
1,2-Dichlorobenzene		12	U	0.12	12
1,2-Dibromo-3-Chloropropane		12	U	0.12	12

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-02 (17-17.5)

Lab Sample ID: 220-5867-2

Date Sampled: 07/15/2008 1120

Client Matrix: Solid

% Moisture: 15.7

Date Received: 07/16/2008 0944

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18283

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5181.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/23/2008 1301

Final Weight/Volume: 5 mL

Date Prepared: 07/23/2008 1301

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene		12	U	0.12	12
Methyl acetate		12	U	0.12	12
Cyclohexane		12	U	0.12	12
Methylcyclohexane		12	U	0.12	12
Surrogate		%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		94		70 - 121	
4-Bromofluorobenzene		63		59 - 113	
Toluene-d8 (Surr)		98		84 - 138	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-05 (14.5-15)

Lab Sample ID: 220-5867-3

Date Sampled: 07/15/2008 1145

Client Matrix: Solid

% Moisture: 16.1

Date Received: 07/16/2008 0944

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18353

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5155.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/22/2008 1450

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1450

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Chloromethane		12	U	0.12	12
Vinyl chloride		12	U	0.12	12
Bromomethane		12	U	0.12	12
Chloroethane		12	U	0.12	12
1,1-Dichloroethene		12	U	0.12	12
Carbon disulfide		12	U	0.12	12
Acetone		75	B	0.12	12
Methylene Chloride		7.0	J B	0.12	12
1,1-Dichloroethane		12	U	0.12	12
Methyl Ethyl Ketone		18		0.12	12
Chloroform		12	U	0.12	12
1,1,1-Trichloroethane		12	U	0.12	12
Carbon tetrachloride		12	U	0.12	12
Benzene		0.16	J	0.12	12
1,2-Dichloroethane		12	U	0.12	12
Trichloroethene		3.2	J	0.12	12
1,2-Dichloropropane		12	U	0.12	12
Bromodichloromethane		12	U	0.12	12
cis-1,3-Dichloropropene		12	U	0.12	12
methyl isobutyl ketone		12	U	0.12	12
Toluene		0.68	J B	0.12	12
trans-1,3-Dichloropropene		12	U	0.12	12
1,1,2-Trichloroethane		12	U	0.12	12
Tetrachloroethene		12	U	0.12	12
2-Hexanone		12	U	0.12	12
Dibromochloromethane		12	U	0.12	12
Chlorobenzene		12	U	0.12	12
Ethylbenzene		12	U	0.12	12
Styrene		12	U	0.12	12
Bromoform		12	U	0.12	12
1,1,2,2-Tetrachloroethane		12	U	0.12	12
Xylenes, Total		12	U	0.12	12
cis-1,2-Dichloroethene		12	U	0.12	12
trans-1,2-Dichloroethene		12	U	0.12	12
Dichlorodifluoromethane		12	U	0.12	12
Trichlorofluoromethane		12	U	0.12	12
1,1,2-Trichloro-1,2,2-trifluoroethane		12	U	0.12	12
Methyl tert-butyl ether		12	U	0.12	12
1,2-Dibromoethane		12	U	0.12	12
Isopropylbenzene		12	U	0.12	12
1,3-Dichlorobenzene		12	U	0.12	12
1,4-Dichlorobenzene		12	U	0.12	12
1,2-Dichlorobenzene		12	U	0.12	12
1,2-Dibromo-3-Chloropropane		12	U	0.12	12

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-05 (14.5-15)

Lab Sample ID: 220-5867-3

Date Sampled: 07/15/2008 1145

Client Matrix: Solid

% Moisture: 16.1

Date Received: 07/16/2008 0944

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18353

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5155.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/22/2008 1450

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1450

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene		12	U	0.12	12
Methyl acetate		12	U	0.12	12
Cyclohexane		12	U	0.12	12
Methylcyclohexane		12	U	0.12	12
Surrogate		%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		94		70 - 121	
4-Bromofluorobenzene		81		59 - 113	
Toluene-d8 (Surr)		97		84 - 138	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-04 (14.5-15)

Lab Sample ID: 220-5867-4

Date Sampled: 07/15/2008 1230

Client Matrix: Solid

% Moisture: 9.9

Date Received: 07/16/2008 0944

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18283

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5182.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/23/2008 1326

Final Weight/Volume: 5 mL

Date Prepared: 07/23/2008 1326

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Chloromethane		11	U	0.11	11
Vinyl chloride		11	U	0.11	11
Bromomethane		11	U	0.11	11
Chloroethane		11	U	0.11	11
1,1-Dichloroethene		11	U	0.11	11
Carbon disulfide		11	U	0.11	11
Acetone		16	B	0.11	11
Methylene Chloride		16	B	0.11	11
1,1-Dichloroethane		11	U	0.11	11
Methyl Ethyl Ketone		11	U	0.11	11
Chloroform		11	U	0.11	11
1,1,1-Trichloroethane		11	U	0.11	11
Carbon tetrachloride		11	U	0.11	11
Benzene		4.5	J	0.11	11
1,2-Dichloroethane		11	U	0.11	11
Trichloroethene		80		0.11	11
1,2-Dichloropropane		11	U	0.11	11
Bromodichloromethane		11	U	0.11	11
cis-1,3-Dichloropropene		11	U	0.11	11
methyl isobutyl ketone		11	U	0.11	11
Toluene		5.2	J B	0.11	11
trans-1,3-Dichloropropene		11	U	0.11	11
1,1,2-Trichloroethane		11	U	0.11	11
Tetrachloroethene		11	U	0.11	11
2-Hexanone		11	U	0.11	11
Dibromochloromethane		11	U	0.11	11
Chlorobenzene		11	U	0.11	11
Ethylbenzene		4.2	J	0.11	11
Styrene		11	U	0.11	11
Bromoform		11	U	0.11	11
1,1,2,2-Tetrachloroethane		11	U	0.11	11
Xylenes, Total		9.4	J	0.11	11
cis-1,2-Dichloroethene		11	U	0.11	11
trans-1,2-Dichloroethene		11	U	0.11	11
Dichlorodifluoromethane		11	U	0.11	11
Trichlorofluoromethane		11	U	0.11	11
1,1,2-Trichloro-1,2,2-trifluoroethane		11	U	0.11	11
Methyl tert-butyl ether		11	U	0.11	11
1,2-Dibromoethane		11	U	0.11	11
Isopropylbenzene		11	U	0.11	11
1,3-Dichlorobenzene		11	U	0.11	11
1,4-Dichlorobenzene		11	U	0.11	11
1,2-Dichlorobenzene		11	U	0.11	11
1,2-Dibromo-3-Chloropropane		11	U	0.11	11

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-04 (14.5-15)

Lab Sample ID: 220-5867-4

Date Sampled: 07/15/2008 1230

Client Matrix: Solid

% Moisture: 9.9

Date Received: 07/16/2008 0944

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18283

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5182.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/23/2008 1326

Final Weight/Volume: 5 mL

Date Prepared: 07/23/2008 1326

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene		11	U	0.11	11
Methyl acetate		11	U	0.11	11
Cyclohexane		11	U	0.11	11
Methylcyclohexane		11	U	0.11	11
Surrogate		%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		91		70 - 121	
4-Bromofluorobenzene		66		59 - 113	
Toluene-d8 (Surr)		107		84 - 138	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-03 (19-19.5)

Lab Sample ID: 220-5867-5

Date Sampled: 07/15/2008 1345

Client Matrix: Solid

% Moisture: 19.0

Date Received: 07/16/2008 0944

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18353

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5157.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/22/2008 1553

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1553

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Chloromethane		12	U	0.12	12
Vinyl chloride		12	U	0.12	12
Bromomethane		12	U	0.12	12
Chloroethane		12	U	0.12	12
1,1-Dichloroethene		12	U	0.12	12
Carbon disulfide		12	U	0.12	12
Acetone		14	B	0.12	12
Methylene Chloride		2.3	J B	0.12	12
1,1-Dichloroethane		12	U	0.12	12
Methyl Ethyl Ketone		12	U	0.12	12
Chloroform		12	U	0.12	12
1,1,1-Trichloroethane		12	U	0.12	12
Carbon tetrachloride		12	U	0.12	12
Benzene		1.2	J	0.12	12
1,2-Dichloroethane		12	U	0.12	12
Trichloroethene		70		0.12	12
1,2-Dichloropropane		12	U	0.12	12
Bromodichloromethane		12	U	0.12	12
cis-1,3-Dichloropropene		12	U	0.12	12
methyl isobutyl ketone		12	U	0.12	12
Toluene		2.7	J B	0.12	12
trans-1,3-Dichloropropene		12	U	0.12	12
1,1,2-Trichloroethane		12	U	0.12	12
Tetrachloroethene		12	U	0.12	12
2-Hexanone		12	U	0.12	12
Dibromochloromethane		12	U	0.12	12
Chlorobenzene		12	U	0.12	12
Ethylbenzene		1.3	J	0.12	12
Styrene		12	U	0.12	12
Bromoform		12	U	0.12	12
1,1,2,2-Tetrachloroethane		12	U	0.12	12
Xylenes, Total		2.5	J	0.12	12
cis-1,2-Dichloroethene		12	U	0.12	12
trans-1,2-Dichloroethene		12	U	0.12	12
Dichlorodifluoromethane		12	U	0.12	12
Trichlorofluoromethane		12	U	0.12	12
1,1,2-Trichloro-1,2,2-trifluoroethane		12	U	0.12	12
Methyl tert-butyl ether		12	U	0.12	12
1,2-Dibromoethane		12	U	0.12	12
Isopropylbenzene		12	U	0.12	12
1,3-Dichlorobenzene		12	U	0.12	12
1,4-Dichlorobenzene		12	U	0.12	12
1,2-Dichlorobenzene		12	U	0.12	12
1,2-Dibromo-3-Chloropropane		12	U	0.12	12

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-03 (19-19.5)

Lab Sample ID: 220-5867-5

Date Sampled: 07/15/2008 1345

Client Matrix: Solid

% Moisture: 19.0

Date Received: 07/16/2008 0944

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18353

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5157.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/22/2008 1553

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1553

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene		12	U	0.12	12
Methyl acetate		12	U	0.12	12
Cyclohexane		12	U	0.12	12
Methylcyclohexane		12	U	0.12	12
Surrogate		%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		105		70 - 121	
4-Bromofluorobenzene		73		59 - 113	
Toluene-d8 (Surr)		124		84 - 138	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-08 (9.5-10)

Lab Sample ID: 220-5867-11

Date Sampled: 07/15/2008 1416

Client Matrix: Solid

% Moisture: 17.1

Date Received: 07/16/2008 0944

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18283

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5188.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/23/2008 1634

Final Weight/Volume: 5 mL

Date Prepared: 07/23/2008 1634

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Chloromethane		12	U	0.12	12
Vinyl chloride		12	U	0.12	12
Bromomethane		12	U	0.12	12
Chloroethane		12	U	0.12	12
1,1-Dichloroethene		12	U	0.12	12
Carbon disulfide		12	U	0.12	12
Acetone		43	B	0.12	12
Methylene Chloride		6.6	J B	0.12	12
1,1-Dichloroethane		12	U	0.12	12
Methyl Ethyl Ketone		12	U	0.12	12
Chloroform		12	U	0.12	12
1,1,1-Trichloroethane		12	U	0.12	12
Carbon tetrachloride		12	U	0.12	12
Benzene		1.9	J	0.12	12
1,2-Dichloroethane		12	U	0.12	12
Trichloroethene		8.4	J	0.12	12
1,2-Dichloropropane		12	U	0.12	12
Bromodichloromethane		12	U	0.12	12
cis-1,3-Dichloropropene		12	U	0.12	12
methyl isobutyl ketone		12	U	0.12	12
Toluene		5.4	J B	0.12	12
trans-1,3-Dichloropropene		12	U	0.12	12
1,1,2-Trichloroethane		12	U	0.12	12
Tetrachloroethene		12	U	0.12	12
2-Hexanone		12	U	0.12	12
Dibromochloromethane		12	U	0.12	12
Chlorobenzene		12	U	0.12	12
Ethylbenzene		2.5	J	0.12	12
Styrene		12	U	0.12	12
Bromoform		12	U	0.12	12
1,1,2,2-Tetrachloroethane		12	U	0.12	12
Xylenes, Total		9.1	J	0.12	12
cis-1,2-Dichloroethene		12	U	0.12	12
trans-1,2-Dichloroethene		12	U	0.12	12
Dichlorodifluoromethane		12	U	0.12	12
Trichlorofluoromethane		12	U	0.12	12
1,1,2-Trichloro-1,2,2-trifluoroethane		12	U	0.12	12
Methyl tert-butyl ether		12	U	0.12	12
1,2-Dibromoethane		12	U	0.12	12
Isopropylbenzene		12	U	0.12	12
1,3-Dichlorobenzene		12	U	0.12	12
1,4-Dichlorobenzene		12	U	0.12	12
1,2-Dichlorobenzene		12	U	0.12	12
1,2-Dibromo-3-Chloropropane		12	U	0.12	12

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-08 (9.5-10)

Lab Sample ID: 220-5867-11

Date Sampled: 07/15/2008 1416

Client Matrix: Solid

% Moisture: 17.1

Date Received: 07/16/2008 0944

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18283

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5188.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/23/2008 1634

Final Weight/Volume: 5 mL

Date Prepared: 07/23/2008 1634

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene		12	U	0.12	12
Methyl acetate		12	U	0.12	12
Cyclohexane		12	U	0.12	12
Methylcyclohexane		12	U	0.12	12
Surrogate		%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		95		70 - 121	
4-Bromofluorobenzene		66		59 - 113	
Toluene-d8 (Surr)		148	*	84 - 138	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-07 (14.5-15.5)

Lab Sample ID: 220-5867-14

Client Matrix: Solid

% Moisture: 11.9

Date Sampled: 07/15/2008 1500

Date Received: 07/16/2008 0944

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18353

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5159.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/22/2008 1643

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1643

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Chloromethane		11	U	0.11	11
Vinyl chloride		11	U	0.11	11
Bromomethane		11	U	0.11	11
Chloroethane		11	U	0.11	11
1,1-Dichloroethene		11	U	0.11	11
Carbon disulfide		11	U	0.11	11
Acetone		11	U	0.11	11
Methylene Chloride		2.7	J B	0.11	11
1,1-Dichloroethane		11	U	0.11	11
Methyl Ethyl Ketone		11	U	0.11	11
Chloroform		11	U	0.11	11
1,1,1-Trichloroethane		11	U	0.11	11
Carbon tetrachloride		11	U	0.11	11
Benzene		11	U	0.11	11
1,2-Dichloroethane		11	U	0.11	11
Trichloroethene		11	U	0.11	11
1,2-Dichloropropane		11	U	0.11	11
Bromodichloromethane		11	U	0.11	11
cis-1,3-Dichloropropene		11	U	0.11	11
methyl isobutyl ketone		11	U	0.11	11
Toluene		11	U	0.11	11
trans-1,3-Dichloropropene		11	U	0.11	11
1,1,2-Trichloroethane		11	U	0.11	11
Tetrachloroethene		11	U	0.11	11
2-Hexanone		11	U	0.11	11
Dibromochloromethane		11	U	0.11	11
Chlorobenzene		11	U	0.11	11
Ethylbenzene		11	U	0.11	11
Styrene		11	U	0.11	11
Bromoform		11	U	0.11	11
1,1,2,2-Tetrachloroethane		11	U	0.11	11
Xylenes, Total		11	U	0.11	11
cis-1,2-Dichloroethene		11	U	0.11	11
trans-1,2-Dichloroethene		11	U	0.11	11
Dichlorodifluoromethane		11	U	0.11	11
Trichlorofluoromethane		11	U	0.11	11
1,1,2-Trichloro-1,2,2-trifluoroethane		11	U	0.11	11
Methyl tert-butyl ether		11	U	0.11	11
1,2-Dibromoethane		11	U	0.11	11
Isopropylbenzene		11	U	0.11	11
1,3-Dichlorobenzene		11	U	0.11	11
1,4-Dichlorobenzene		11	U	0.11	11
1,2-Dichlorobenzene		11	U	0.11	11
1,2-Dibromo-3-Chloropropane		11	U	0.11	11

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-07 (14.5-15.5)

Lab Sample ID: 220-5867-14

Date Sampled: 07/15/2008 1500

Client Matrix: Solid

% Moisture: 11.9

Date Received: 07/16/2008 0944

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18353

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5159.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/22/2008 1643

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1643

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene		11	U	0.11	11
Methyl acetate		11	U	0.11	11
Cyclohexane		11	U	0.11	11
Methylcyclohexane		11	U	0.11	11
Surrogate		%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		96		70 - 121	
4-Bromofluorobenzene		86		59 - 113	
Toluene-d8 (Surr)		93		84 - 138	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-06 (7.5-8.5)

Lab Sample ID: 220-5867-15

Date Sampled: 07/15/2008 1530

Client Matrix: Solid

% Moisture: 11.9

Date Received: 07/16/2008 0944

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18353

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5168.D

Dilution: 2.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/22/2008 2051

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 2051

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Chloromethane		23	U	0.23	23
Vinyl chloride		23	U	0.23	23
Bromomethane		23	U	0.23	23
Chloroethane		23	U	0.23	23
1,1-Dichloroethene		23	U	0.23	23
Carbon disulfide		23	U	0.23	23
Acetone		250	B	0.23	23
Methylene Chloride		4.6	J B	0.23	23
1,1-Dichloroethane		23	U	0.23	23
Methyl Ethyl Ketone		23	U	0.23	23
Chloroform		23	U	0.23	23
1,1,1-Trichloroethane		23	U	0.23	23
Carbon tetrachloride		23	U	0.23	23
Benzene		0.62	J	0.23	23
1,2-Dichloroethane		23	U	0.23	23
Trichloroethene		12	J	0.23	23
1,2-Dichloropropane		23	U	0.23	23
Bromodichloromethane		23	U	0.23	23
cis-1,3-Dichloropropene		23	U	0.23	23
methyl isobutyl ketone		23	U	0.23	23
Toluene		5.8	J B	0.23	23
trans-1,3-Dichloropropene		23	U	0.23	23
1,1,2-Trichloroethane		23	U	0.23	23
Tetrachloroethene		23	U	0.23	23
2-Hexanone		23	U	0.23	23
Dibromochloromethane		23	U	0.23	23
Chlorobenzene		23	U	0.23	23
Ethylbenzene		1.9	J	0.23	23
Styrene		23	U	0.23	23
Bromoform		23	U	0.23	23
1,1,2,2-Tetrachloroethane		23	U	0.23	23
Xylenes, Total		11	J	0.23	23
cis-1,2-Dichloroethene		23	U	0.23	23
trans-1,2-Dichloroethene		23	U	0.23	23
Dichlorodifluoromethane		23	U	0.23	23
Trichlorofluoromethane		23	U	0.23	23
1,1,2-Trichloro-1,2,2-trifluoroethane		23	U	0.23	23
Methyl tert-butyl ether		23	U	0.23	23
1,2-Dibromoethane		23	U	0.23	23
Isopropylbenzene		4.0	J	0.23	23
1,3-Dichlorobenzene		23	U	0.23	23
1,4-Dichlorobenzene		23	U	0.23	23
1,2-Dichlorobenzene		23	U	0.23	23
1,2-Dibromo-3-Chloropropane		23	U	0.23	23

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-06 (7.5-8.5)

Lab Sample ID: 220-5867-15

Date Sampled: 07/15/2008 1530

Client Matrix: Solid

% Moisture: 11.9

Date Received: 07/16/2008 0944

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18353

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5168.D

Dilution: 2.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/22/2008 2051

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 2051

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene		23	U	0.23	23
Methyl acetate		23	U	0.23	23
Cyclohexane		23	U	0.23	23
Methylcyclohexane		23	U	0.23	23
Surrogate		%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		108		70 - 121	
4-Bromofluorobenzene		93		59 - 113	
Toluene-d8 (Surr)		106		84 - 138	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-06 (14-15)

Lab Sample ID: 220-5867-16

Client Matrix: Solid

% Moisture: 11.4

Date Sampled: 07/15/2008 1535

Date Received: 07/16/2008 0944

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18283

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5185.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/23/2008 1441

Final Weight/Volume: 5 mL

Date Prepared: 07/23/2008 1441

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Chloromethane		11	U	0.11	11
Vinyl chloride		11	U	0.11	11
Bromomethane		11	U	0.11	11
Chloroethane		11	U	0.11	11
1,1-Dichloroethene		11	U	0.11	11
Carbon disulfide		11	U	0.11	11
Acetone		6.3	J B	0.11	11
Methylene Chloride		7.0	J B	0.11	11
1,1-Dichloroethane		11	U	0.11	11
Methyl Ethyl Ketone		11	U	0.11	11
Chloroform		11	U	0.11	11
1,1,1-Trichloroethane		11	U	0.11	11
Carbon tetrachloride		11	U	0.11	11
Benzene		0.25	J	0.11	11
1,2-Dichloroethane		11	U	0.11	11
Trichloroethene		8.5	J	0.11	11
1,2-Dichloropropane		11	U	0.11	11
Bromodichloromethane		11	U	0.11	11
cis-1,3-Dichloropropene		11	U	0.11	11
methyl isobutyl ketone		11	U	0.11	11
Toluene		0.69	J B	0.11	11
trans-1,3-Dichloropropene		11	U	0.11	11
1,1,2-Trichloroethane		11	U	0.11	11
Tetrachloroethene		11	U	0.11	11
2-Hexanone		11	U	0.11	11
Dibromochloromethane		11	U	0.11	11
Chlorobenzene		11	U	0.11	11
Ethylbenzene		0.29	J	0.11	11
Styrene		11	U	0.11	11
Bromoform		11	U	0.11	11
1,1,2,2-Tetrachloroethane		11	U	0.11	11
Xylenes, Total		1.1	J	0.11	11
cis-1,2-Dichloroethene		11	U	0.11	11
trans-1,2-Dichloroethene		11	U	0.11	11
Dichlorodifluoromethane		11	U	0.11	11
Trichlorofluoromethane		11	U	0.11	11
1,1,2-Trichloro-1,2,2-trifluoroethane		11	U	0.11	11
Methyl tert-butyl ether		11	U	0.11	11
1,2-Dibromoethane		11	U	0.11	11
Isopropylbenzene		11	U	0.11	11
1,3-Dichlorobenzene		11	U	0.11	11
1,4-Dichlorobenzene		11	U	0.11	11
1,2-Dichlorobenzene		11	U	0.11	11
1,2-Dibromo-3-Chloropropane		11	U	0.11	11

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-06 (14-15)

Lab Sample ID: 220-5867-16

Date Sampled: 07/15/2008 1535

Client Matrix: Solid

% Moisture: 11.4

Date Received: 07/16/2008 0944

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18283

Instrument ID: HP 5890/5971A GC/MS

Preparation: 5030B

Lab File ID: O5185.D

Dilution: 1.0

Initial Weight/Volume: 5 g

Date Analyzed: 07/23/2008 1441

Final Weight/Volume: 5 mL

Date Prepared: 07/23/2008 1441

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene		11	U	0.11	11
Methyl acetate		11	U	0.11	11
Cyclohexane		11	U	0.11	11
Methylcyclohexane		11	U	0.11	11
Surrogate		%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		96		70 - 121	
4-Bromofluorobenzene		96		59 - 113	
Toluene-d8 (Surr)		96		84 - 138	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: TRIP BLANK

Lab Sample ID: 220-5867-17TB

Date Sampled: 07/15/2008 0000

Client Matrix: Water

Date Received: 07/16/2008 0944

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18355

Instrument ID: HP 6890/5973 GC/MS

Preparation: 5030B

Lab File ID: Y4803.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 07/22/2008 1519

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1519

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	10	U	0.10	10
Vinyl chloride	10	U	0.10	10
Bromomethane	10	U	0.10	10
Chloroethane	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
Carbon disulfide	10	U	0.10	10
Acetone	1.2	J	0.10	10
Methylene Chloride	0.48	J B	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
Chloroform	10	U	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Benzene	10	U	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Trichloroethene	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
Toluene	10	U	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Bromoform	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
cis-1,2-Dichloroethene	10	U	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10
Dichlorodifluoromethane	10	U	0.10	10
Trichlorofluoromethane	10	U	0.10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	0.10	10
Methyl tert-butyl ether	10	U	0.10	10
1,2-Dibromoethane	10	U	0.10	10
Isopropylbenzene	10	U	0.10	10
1,3-Dichlorobenzene	10	U	0.10	10
1,4-Dichlorobenzene	10	U	0.10	10
1,2-Dichlorobenzene	10	U	0.10	10
1,2-Dibromo-3-Chloropropane	10	U	0.10	10

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: TRIP BLANK

Lab Sample ID: 220-5867-17TB

Date Sampled: 07/15/2008 0000

Client Matrix: Water

Date Received: 07/16/2008 0944

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18355

Instrument ID: HP 6890/5973 GC/MS

Preparation: 5030B

Lab File ID: Y4803.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 07/22/2008 1519

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1519

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene	10	U	0.10	10
Methyl acetate	10	U	0.10	10
Cyclohexane	10	U	0.10	10
Methylcyclohexane	10	U	0.10	10
Surrogate	%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	99		76 - 114	
4-Bromofluorobenzene	93		86 - 115	
Toluene-d8 (Surr)	99		88 - 110	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-01 (3.8-18)

Lab Sample ID: 220-5867-6

Date Sampled: 07/15/2008 1055

Client Matrix: Solid

% Moisture: 10.5

Date Received: 07/16/2008 0944

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method: 8082

Analysis Batch: 220-18314

Instrument ID: HP 5890 with dual ECD

Preparation: 3550B

Prep Batch: 220-18170

Lab File ID: D4716144.d

Dilution: 1.0

Initial Weight/Volume: 30.11 g

Date Analyzed: 07/23/2008 1136

Final Weight/Volume: 10.0 mL

Date Prepared: 07/21/2008 1659

Injection Volume: 1.0 uL

Column ID: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	5.1	19
PCB-1221		37	U	1.2	37
PCB-1232		19	U	5.1	19
PCB-1242		19	U	5.1	19
PCB-1248		19	U	5.1	19
PCB-1254		19	U	1.7	19
PCB-1260		19	U	3.8	19

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	45	24 - 154
DCB Decachlorobiphenyl	43	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-02 (3.5-17.5)

Lab Sample ID: 220-5867-7

Date Sampled: 07/15/2008 1120

Client Matrix: Solid

% Moisture: 9.5

Date Received: 07/16/2008 0944

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-18314	Instrument ID:	HP 5890 with dual ECD
Preparation:	3550B	Prep Batch: 220-18170	Lab File ID:	C4716145.d
Dilution:	1.0		Initial Weight/Volume:	30.09 g
Date Analyzed:	07/23/2008 1152		Final Weight/Volume:	10.0 mL
Date Prepared:	07/21/2008 1659		Injection Volume:	1.0 uL
			Column ID:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	5.1	19
PCB-1221		36	U	1.2	36
PCB-1232		19	U	5.1	19
PCB-1242		19	U	5.1	19
PCB-1248		19	U	5.1	19
PCB-1254		21		1.7	19
PCB-1260		18	J	3.8	19

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	160	24 - 154
DCB Decachlorobiphenyl	154	25 - 159

Method:	8082	Analysis Batch: 220-18314	Instrument ID:	HP 5890 with dual ECD
Preparation:	3550B	Prep Batch: 220-18170	Lab File ID:	C4716145.d
Dilution:	1.0		Initial Weight/Volume:	30.09 g
Date Analyzed:	07/23/2008 1152		Final Weight/Volume:	10.0 mL
Date Prepared:	07/21/2008 1659		Injection Volume:	1.0 uL
			Column ID:	SECONDARY

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	120	24 - 154
DCB Decachlorobiphenyl	140	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-05 (4-15)

Lab Sample ID: 220-5867-8

Date Sampled: 07/15/2008 1145

Client Matrix: Solid

% Moisture: 9.4

Date Received: 07/16/2008 0944

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-18314	Instrument ID:	HP 5890 with dual ECD
Preparation:	3550B	Prep Batch: 220-18170	Lab File ID:	C4716146.d
Dilution:	1.0		Initial Weight/Volume:	30.21 g
Date Analyzed:	07/23/2008 1209		Final Weight/Volume:	10.0 mL
Date Prepared:	07/21/2008 1659		Injection Volume:	1.0 uL
			Column ID:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	5.1	19
PCB-1221		36	U	1.2	36
PCB-1232		19	U	5.1	19
PCB-1242		19	U	5.1	19
PCB-1248		19	U	5.1	19
PCB-1254		16	J	1.7	19
PCB-1260		11	J	3.8	19

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	102	24 - 154
DCB Decachlorobiphenyl	121	25 - 159

Method:	8082	Analysis Batch: 220-18314	Instrument ID:	HP 5890 with dual ECD
Preparation:	3550B	Prep Batch: 220-18170	Lab File ID:	C4716146.d
Dilution:	1.0		Initial Weight/Volume:	30.21 g
Date Analyzed:	07/23/2008 1209		Final Weight/Volume:	10.0 mL
Date Prepared:	07/21/2008 1659		Injection Volume:	1.0 uL
			Column ID:	SECONDARY

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	88	24 - 154
DCB Decachlorobiphenyl	101	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-04 (3.5-15)

Lab Sample ID: 220-5867-9

Date Sampled: 07/15/2008 1230

Client Matrix: Solid

% Moisture: 9.6

Date Received: 07/16/2008 0944

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method: 8082

Analysis Batch: 220-18314

Instrument ID: HP 5890 with dual ECD

Preparation: 3550B

Prep Batch: 220-18170

Lab File ID: D4716147.d

Dilution: 1.0

Initial Weight/Volume: 30.25 g

Date Analyzed: 07/23/2008 1226

Final Weight/Volume: 10.0 mL

Date Prepared: 07/21/2008 1659

Injection Volume: 1.0 uL

Column ID: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	5.1	19
PCB-1221		36	U	1.2	36
PCB-1232		19	U	5.1	19
PCB-1242		19	U	5.1	19
PCB-1248		19	U	5.1	19
PCB-1254		19	U	1.7	19
PCB-1260		19	U	3.8	19

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	88	24 - 154
DCB Decachlorobiphenyl	88	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-03 (4.5-20)

Lab Sample ID: 220-5867-10

Date Sampled: 07/15/2008 1345

Client Matrix: Solid

% Moisture: 10.7

Date Received: 07/16/2008 0944

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-18314	Instrument ID:	HP 5890 with dual ECD
Preparation:	3550B	Prep Batch: 220-18170	Lab File ID:	D4716148.d
Dilution:	1.0		Initial Weight/Volume:	30.16 g
Date Analyzed:	07/23/2008 1243		Final Weight/Volume:	10.0 mL
Date Prepared:	07/21/2008 1659		Injection Volume:	1.0 uL
			Column ID:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	5.1	19
PCB-1221		37	U	1.2	37
PCB-1232		19	U	5.1	19
PCB-1242		19	U	5.1	19
PCB-1248		19	U	5.1	19
PCB-1254		16	J	1.7	19
PCB-1260		9.2	J	3.8	19

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	89	24 - 154
DCB Decachlorobiphenyl	97	25 - 159

Method:	8082	Analysis Batch: 220-18314	Instrument ID:	HP 5890 with dual ECD
Preparation:	3550B	Prep Batch: 220-18170	Lab File ID:	C4716148.d
Dilution:	1.0		Initial Weight/Volume:	30.16 g
Date Analyzed:	07/23/2008 1243		Final Weight/Volume:	10.0 mL
Date Prepared:	07/21/2008 1659		Injection Volume:	1.0 uL
			Column ID:	SECONDARY

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	70	24 - 154
DCB Decachlorobiphenyl	83	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-08 (9.5-10)

Lab Sample ID: 220-5867-11

Date Sampled: 07/15/2008 1416

Client Matrix: Solid

% Moisture: 17.1

Date Received: 07/16/2008 0944

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-18314	Instrument ID:	HP 5890 with dual ECD
Preparation:	3550B	Prep Batch: 220-18170	Lab File ID:	C4716149.d
Dilution:	1.0		Initial Weight/Volume:	30.39 g
Date Analyzed:	07/23/2008 1259		Final Weight/Volume:	10.0 mL
Date Prepared:	07/21/2008 1659		Injection Volume:	1.0 uL
			Column ID:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		20	U	5.5	20
PCB-1221		39	U	1.3	39
PCB-1232		20	U	5.5	20
PCB-1242		20	U	5.5	20
PCB-1248		20	U	5.5	20
PCB-1254		33		1.8	20
PCB-1260		23		4.1	20

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	153	24 - 154
DCB Decachlorobiphenyl	196	25 - 159

Method:	8082	Analysis Batch: 220-18314	Instrument ID:	HP 5890 with dual ECD
Preparation:	3550B	Prep Batch: 220-18170	Lab File ID:	C4716149.d
Dilution:	1.0		Initial Weight/Volume:	30.39 g
Date Analyzed:	07/23/2008 1259		Final Weight/Volume:	10.0 mL
Date Prepared:	07/21/2008 1659		Injection Volume:	1.0 uL
			Column ID:	SECONDARY

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	131	24 - 154
DCB Decachlorobiphenyl	208	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-08 (14.5-15)

Lab Sample ID: 220-5867-12

Date Sampled: 07/15/2008 1435

Client Matrix: Solid

% Moisture: 15.5

Date Received: 07/16/2008 0944

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method: 8082

Analysis Batch: 220-18314

Instrument ID: HP 5890 with dual ECD

Preparation: 3550B

Prep Batch: 220-18170

Lab File ID: D4716150.d

Dilution: 1.0

Initial Weight/Volume: 30.04 g

Date Analyzed: 07/23/2008 1316

Final Weight/Volume: 10.0 mL

Date Prepared: 07/21/2008 1659

Injection Volume: 1.0 uL

Column ID: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		20	U	5.5	20
PCB-1221		39	U	1.3	39
PCB-1232		20	U	5.5	20
PCB-1242		20	U	5.5	20
PCB-1248		20	U	5.5	20
PCB-1254		20	U	1.8	20
PCB-1260		20	U	4.1	20

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	99	24 - 154
DCB Decachlorobiphenyl	107	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-07 (4-5)

Lab Sample ID: 220-5867-13

Date Sampled: 07/15/2008 1500

Client Matrix: Solid

% Moisture: 11.1

Date Received: 07/16/2008 0944

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-18314	Instrument ID:	HP 5890 with dual ECD
Preparation:	3550B	Prep Batch: 220-18170	Lab File ID:	C4716151.d
Dilution:	1.0		Initial Weight/Volume:	30.66 g
Date Analyzed:	07/23/2008 1333		Final Weight/Volume:	10.0 mL
Date Prepared:	07/21/2008 1659		Injection Volume:	1.0 uL
			Column ID:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	5.1	19
PCB-1221		36	U	1.2	36
PCB-1232		19	U	5.1	19
PCB-1242		19	U	5.1	19
PCB-1248		19	U	5.1	19
PCB-1254		4.1	J	1.7	19
PCB-1260		13	J	3.8	19

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	114	24 - 154
DCB Decachlorobiphenyl	134	25 - 159

Method:	8082	Analysis Batch: 220-18314	Instrument ID:	HP 5890 with dual ECD
Preparation:	3550B	Prep Batch: 220-18170	Lab File ID:	D4716151.d
Dilution:	1.0		Initial Weight/Volume:	30.66 g
Date Analyzed:	07/23/2008 1333		Final Weight/Volume:	10.0 mL
Date Prepared:	07/21/2008 1659		Injection Volume:	1.0 uL
			Column ID:	SECONDARY

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	115	24 - 154
DCB Decachlorobiphenyl	124	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-07 (14.5-15.5)

Lab Sample ID: 220-5867-14

Date Sampled: 07/15/2008 1500

Client Matrix: Solid

% Moisture: 11.9

Date Received: 07/16/2008 0944

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method: 8082

Analysis Batch: 220-18314

Instrument ID: HP 5890 with dual ECD

Preparation: 3550B

Prep Batch: 220-18170

Lab File ID: D4716152.d

Dilution: 1.0

Initial Weight/Volume: 30.53 g

Date Analyzed: 07/23/2008 1350

Final Weight/Volume: 10.0 mL

Date Prepared: 07/21/2008 1659

Injection Volume: 1.0 uL

Column ID: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	5.1	19
PCB-1221		37	U	1.2	37
PCB-1232		19	U	5.1	19
PCB-1242		19	U	5.1	19
PCB-1248		19	U	5.1	19
PCB-1254		19	U	1.7	19
PCB-1260		19	U	3.9	19

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	80	24 - 154
DCB Decachlorobiphenyl	103	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Client Sample ID: SB-06 (7.5-8.5)

Lab Sample ID: 220-5867-15

Date Sampled: 07/15/2008 1530

Client Matrix: Solid

% Moisture: 11.9

Date Received: 07/16/2008 0944

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-18314	Instrument ID:	HP 5890 with dual ECD
Preparation:	3550B	Prep Batch: 220-18170	Lab File ID:	D4716153.d
Dilution:	1.0		Initial Weight/Volume:	30.23 g
Date Analyzed:	07/23/2008 1407		Final Weight/Volume:	10.0 mL
Date Prepared:	07/21/2008 1659		Injection Volume:	1.0 uL
			Column ID:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	5.2	19
PCB-1221		37	U	1.2	37
PCB-1232		19	U	5.2	19
PCB-1242		19	U	5.2	19
PCB-1248		19	U	5.2	19
PCB-1254		12	J	1.7	19
PCB-1260		34		3.9	19

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	155	24 - 154
DCB Decachlorobiphenyl	150	25 - 159

Method:	8082	Analysis Batch: 220-18314	Instrument ID:	HP 5890 with dual ECD
Preparation:	3550B	Prep Batch: 220-18170	Lab File ID:	D4716153.d
Dilution:	1.0		Initial Weight/Volume:	30.23 g
Date Analyzed:	07/23/2008 1407		Final Weight/Volume:	10.0 mL
Date Prepared:	07/21/2008 1659		Injection Volume:	1.0 uL
			Column ID:	SECONDARY

Surrogate	%Rec	Acceptance Limits
Tetrachloro-m-xylene	131	24 - 154
DCB Decachlorobiphenyl	141	25 - 159

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

General Chemistry

Client Sample ID: SB-01 (12-13)

Lab Sample ID: 220-5867-1

Client Matrix: Solid

Date Sampled: 07/15/2008 1055

Date Received: 07/16/2008 0944

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	7.80		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			
Percent Solids	92.2		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			

Client Sample ID: SB-02 (17-17.5)

Lab Sample ID: 220-5867-2

Client Matrix: Solid

Date Sampled: 07/15/2008 1120

Date Received: 07/16/2008 0944

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	15.7		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			
Percent Solids	84.3		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			

Client Sample ID: SB-05 (14.5-15)

Lab Sample ID: 220-5867-3

Client Matrix: Solid

Date Sampled: 07/15/2008 1145

Date Received: 07/16/2008 0944

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	16.1		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			
Percent Solids	83.9		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1
Sdg Number: 220-5867

General Chemistry

Client Sample ID: SB-04 (14.5-15)

Lab Sample ID: 220-5867-4
Client Matrix: Solid

Date Sampled: 07/15/2008 1230
Date Received: 07/16/2008 0944

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	9.91		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			
Percent Solids	90.1		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			

Client Sample ID: SB-03 (19-19.5)

Lab Sample ID: 220-5867-5
Client Matrix: Solid

Date Sampled: 07/15/2008 1345
Date Received: 07/16/2008 0944

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	19.0		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			
Percent Solids	81.0		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			

Client Sample ID: SB-01 (3.8-18)

Lab Sample ID: 220-5867-6
Client Matrix: Solid

Date Sampled: 07/15/2008 1055
Date Received: 07/16/2008 0944

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	10.5		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			
Percent Solids	89.5		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			

Client Sample ID: SB-02 (3.5-17.5)

Lab Sample ID: 220-5867-7
Client Matrix: Solid

Date Sampled: 07/15/2008 1120
Date Received: 07/16/2008 0944

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	9.53		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			
Percent Solids	90.5		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1
Sdg Number: 220-5867

General Chemistry

Client Sample ID: SB-05 (4-15)

Lab Sample ID: 220-5867-8
Client Matrix: Solid

Date Sampled: 07/15/2008 1145
Date Received: 07/16/2008 0944

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	9.39		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			
Percent Solids	90.6		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			

Client Sample ID: SB-04 (3.5-15)

Lab Sample ID: 220-5867-9
Client Matrix: Solid

Date Sampled: 07/15/2008 1230
Date Received: 07/16/2008 0944

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	9.55		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			
Percent Solids	90.4		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			

Client Sample ID: SB-03 (4.5-20)

Lab Sample ID: 220-5867-10
Client Matrix: Solid

Date Sampled: 07/15/2008 1345
Date Received: 07/16/2008 0944

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	10.7		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			
Percent Solids	89.3		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			

Client Sample ID: SB-08 (9.5-10)

Lab Sample ID: 220-5867-11
Client Matrix: Solid

Date Sampled: 07/15/2008 1416
Date Received: 07/16/2008 0944

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	17.1		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			
Percent Solids	82.9		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1
Sdg Number: 220-5867

General Chemistry

Client Sample ID: SB-08 (14.5-15)

Lab Sample ID: 220-5867-12
Client Matrix: Solid

Date Sampled: 07/15/2008 1435
Date Received: 07/16/2008 0944

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	15.5		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			
Percent Solids	84.5		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			

Client Sample ID: SB-07 (4-5)

Lab Sample ID: 220-5867-13
Client Matrix: Solid

Date Sampled: 07/15/2008 1500
Date Received: 07/16/2008 0944

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	11.1		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			
Percent Solids	88.9		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			

Client Sample ID: SB-07 (14.5-15.5)

Lab Sample ID: 220-5867-14
Client Matrix: Solid

Date Sampled: 07/15/2008 1500
Date Received: 07/16/2008 0944

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	11.9		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			
Percent Solids	88.1		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			

Client Sample ID: SB-06 (7.5-8.5)

Lab Sample ID: 220-5867-15
Client Matrix: Solid

Date Sampled: 07/15/2008 1530
Date Received: 07/16/2008 0944

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	11.9		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			
Percent Solids	88.1		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed		07/16/2008 1400			

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

General Chemistry

Client Sample ID: SB-06 (14-15)

Lab Sample ID: 220-5867-16

Date Sampled: 07/15/2008 1535

Client Matrix: Solid

Date Received: 07/16/2008 0944

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	11.4		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed	07/16/2008	1400			
Percent Solids	88.6		%	0.100	0.100	1.0	PercentMoisture
	Any Batch: 220-18053	Date Analyzed	07/16/2008	1400			

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Surrogate Recovery Report

OLM04.2/Vol CLP Volatile Organic Compounds

Client Matrix: Solid

Lab Sample ID	Client Sample ID	12DCE %Rec	TOL %Rec	BFB %Rec
220-5867-1	SB-01 (12-13)	85	86	44*
220-5867-2	SB-02 (17-17.5)	94	98	63
220-5867-3	SB-05 (14.5-15)	94	97	81
220-5867-4	SB-04 (14.5-15)	91	107	66
220-5867-5	SB-03 (19-19.5)	105	124	73
220-5867-11	SB-08 (9.5-10)	95	148*	66
220-5867-14	SB-07 (14.5-15.5)	96	93	86
220-5867-15	SB-06 (7.5-8.5)	108	106	93
220-5867-16	SB-06 (14-15)	96	96	96
MB 220-18283/2		98	97	106
MB 220-18353/2		95	99	103
LCS 220-18283/3		100	98	97
LCS 220-18353/3		96	97	99

Surrogate	Acceptance Limits
12DCE = 1,2-Dichloroethane-d4 (Surr)	70-121
TOL = Toluene-d8 (Surr)	84-138
BFB = 4-Bromofluorobenzene	59-113

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Surrogate Recovery Report

OLM04.2/Vol CLP Volatile Organic Compounds

Client Matrix: Water

Lab Sample ID	Client Sample ID	12DCE %Rec	TOL %Rec	BFB %Rec
220-5867-17	TRIP BLANK	99	99	93
MB 220-18355/2		94	103	94
LCS 220-18355/3		98	101	99

Surrogate	Acceptance Limits
12DCE = 1,2-Dichloroethane-d4 (Surr)	76-114
TOL = Toluene-d8 (Surr)	88-110
BFB = 4-Bromofluorobenzene	86-115

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Surrogate Recovery Report

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Matrix: Solid

Lab Sample ID	Client Sample ID	TCX1 %Rec	TCX2 %Rec	DCB1 %Rec	DCB2 %Rec
220-5867-6	SB-01 (3.8-18)		45		43
220-5867-7	SB-02 (3.5-17.5)	120	160*	154	140
220-5867-8	SB-05 (4-15)	88	102	121	101
220-5867-9	SB-04 (3.5-15)		88		88
220-5867-10	SB-03 (4.5-20)	70	89	97	83
220-5867-11	SB-08 (9.5-10)	131	153	196*	208*
220-5867-12	SB-08 (14.5-15)		99		107
220-5867-13	SB-07 (4-5)	114	115	134	124
220-5867-14	SB-07 (14.5-15.5)		80		103
220-5867-15	SB-06 (7.5-8.5)	155*	131	150	141
MB 220-18170/1-A		83	78	100	96
LCS 220-18170/22-A		95	90	114	104

Surrogate	Acceptance Limits
TCX = Tetrachloro-m-xylene	24-154
DCB = DCB Decachlorobiphenyl	25-159

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Method Blank - Batch: 220-18283

Method: OLM04.2/Vol Preparation: 5030B

Lab Sample ID: MB 220-18283/2
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 07/23/2008 1038
Date Prepared: 07/23/2008 1038

Analysis Batch: 220-18283
Prep Batch: N/A
Units: ug/Kg

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: O5178.D
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Chloromethane	10	U	0.10	10
Vinyl chloride	10	U	0.10	10
Bromomethane	10	U	0.10	10
Chloroethane	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
Carbon disulfide	10	U	0.10	10
Acetone	2.2	J	0.10	10
Methylene Chloride	1.7	J	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
Chloroform	10	U	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Benzene	10	U	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Trichloroethene	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
Toluene	0.41	J	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Bromoform	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
cis-1,2-Dichloroethene	10	U	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10
Dichlorodifluoromethane	10	U	0.10	10
Trichlorofluoromethane	10	U	0.10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	0.10	10
Methyl tert-butyl ether	10	U	0.10	10
1,2-Dibromoethane	10	U	0.10	10
Isopropylbenzene	10	U	0.10	10
1,3-Dichlorobenzene	10	U	0.10	10

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Method Blank - Batch: 220-18283

Method: OLM04.2/Vol
Preparation: 5030B

Lab Sample ID: MB 220-18283/2
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 07/23/2008 1038
Date Prepared: 07/23/2008 1038

Analysis Batch: 220-18283
Prep Batch: N/A
Units: ug/Kg

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: O5178.D
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
1,4-Dichlorobenzene	10	U	0.10	10
1,2-Dichlorobenzene	10	U	0.10	10
1,2-Dibromo-3-Chloropropane	10	U	0.10	10
1,2,4-Trichlorobenzene	10	U	0.10	10
Methyl acetate	10	U	0.10	10
Cyclohexane	10	U	0.10	10
Methylcyclohexane	10	U	0.10	10

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98	70 - 121
4-Bromofluorobenzene	106	59 - 113
Toluene-d8 (Surr)	97	84 - 138

Lab Control Spike - Batch: 220-18283

Method: OLM04.2/Vol
Preparation: 5030B

Lab Sample ID: LCS 220-18283/3
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 07/23/2008 1126
Date Prepared: 07/23/2008 1126

Analysis Batch: 220-18283
Prep Batch: N/A
Units: ug/Kg

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: O5179.D
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1-Dichloroethene	20.0	20.1	101	59 - 172	
Benzene	20.0	19.7	98	66 - 142	
Trichloroethene	20.0	19.7	98	62 - 137	
Toluene	20.0	20.4	102	59 - 139	
Chlorobenzene	20.0	19.6	98	60 - 133	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	100	70 - 121
4-Bromofluorobenzene	97	59 - 113
Toluene-d8 (Surr)	98	84 - 138

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Method Blank - Batch: 220-18353

Method: OLM04.2/Vol Preparation: 5030B

Lab Sample ID: MB 220-18353/2

Analysis Batch: 220-18353

Instrument ID: HP 5890/5971A GC/MS

Client Matrix: Solid

Prep Batch: N/A

Lab File ID: O5149.D

Dilution: 1.0

Units: ug/Kg

Initial Weight/Volume: 5 g

Date Analyzed: 07/22/2008 1047

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1047

Analyte	Result	Qual	MDL	RL
Chloromethane	10	U	0.10	10
Vinyl chloride	10	U	0.10	10
Bromomethane	10	U	0.10	10
Chloroethane	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
Carbon disulfide	10	U	0.10	10
Acetone	2.1	J	0.10	10
Methylene Chloride	1.5	J	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
Chloroform	10	U	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Benzene	10	U	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Trichloroethene	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
Toluene	0.24	J	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Bromoform	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
cis-1,2-Dichloroethene	10	U	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10
Dichlorodifluoromethane	10	U	0.10	10
Trichlorofluoromethane	10	U	0.10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	0.10	10
Methyl tert-butyl ether	10	U	0.10	10
1,2-Dibromoethane	10	U	0.10	10
Isopropylbenzene	10	U	0.10	10
1,3-Dichlorobenzene	10	U	0.10	10

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Method Blank - Batch: 220-18353

Method: OLM04.2/Vol
Preparation: 5030B

Lab Sample ID: MB 220-18353/2
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 07/22/2008 1047
Date Prepared: 07/22/2008 1047

Analysis Batch: 220-18353
Prep Batch: N/A
Units: ug/Kg

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: O5149.D
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
1,4-Dichlorobenzene	10	U	0.10	10
1,2-Dichlorobenzene	10	U	0.10	10
1,2-Dibromo-3-Chloropropane	10	U	0.10	10
1,2,4-Trichlorobenzene	10	U	0.10	10
Methyl acetate	10	U	0.10	10
Cyclohexane	10	U	0.10	10
Methylcyclohexane	10	U	0.10	10

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95	70 - 121
4-Bromofluorobenzene	103	59 - 113
Toluene-d8 (Surr)	99	84 - 138

Lab Control Spike - Batch: 220-18353

Method: OLM04.2/Vol
Preparation: 5030B

Lab Sample ID: LCS 220-18353/3
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 07/22/2008 1247
Date Prepared: 07/22/2008 1247

Analysis Batch: 220-18353
Prep Batch: N/A
Units: ug/Kg

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: O5151.D
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1-Dichloroethene	20.0	21.5	108	59 - 172	
Benzene	20.0	21.0	105	66 - 142	
Trichloroethene	20.0	20.4	102	62 - 137	
Toluene	20.0	21.4	107	59 - 139	
Chlorobenzene	20.0	21.2	106	60 - 133	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96	70 - 121
4-Bromofluorobenzene	99	59 - 113
Toluene-d8 (Surr)	97	84 - 138

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Method Blank - Batch: 220-18355

Method: OLM04.2/Vol Preparation: 5030B

Lab Sample ID: MB 220-18355/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/22/2008 1112
Date Prepared: 07/22/2008 1112

Analysis Batch: 220-18355
Prep Batch: N/A
Units: ug/L

Instrument ID: HP 6890/5973 GC/MS
Lab File ID: Y4797.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Chloromethane	10	U	0.10	10
Vinyl chloride	10	U	0.10	10
Bromomethane	10	U	0.10	10
Chloroethane	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
Carbon disulfide	10	U	0.10	10
Acetone	10	U	0.10	10
Methylene Chloride	0.82	J	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
Chloroform	10	U	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Benzene	10	U	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Trichloroethene	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
Toluene	10	U	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Bromoform	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
cis-1,2-Dichloroethene	10	U	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10
Dichlorodifluoromethane	10	U	0.10	10
Trichlorofluoromethane	10	U	0.10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	0.10	10
Methyl tert-butyl ether	10	U	0.10	10
1,2-Dibromoethane	10	U	0.10	10
Isopropylbenzene	10	U	0.10	10
1,3-Dichlorobenzene	10	U	0.10	10

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Method Blank - Batch: 220-18355

Method: OLM04.2/Vol
Preparation: 5030B

Lab Sample ID: MB 220-18355/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/22/2008 1112
Date Prepared: 07/22/2008 1112

Analysis Batch: 220-18355
Prep Batch: N/A
Units: ug/L

Instrument ID: HP 6890/5973 GC/MS
Lab File ID: Y4797.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
1,4-Dichlorobenzene	10	U	0.10	10
1,2-Dichlorobenzene	10	U	0.10	10
1,2-Dibromo-3-Chloropropane	10	U	0.10	10
1,2,4-Trichlorobenzene	10	U	0.10	10
Methyl acetate	10	U	0.10	10
Cyclohexane	10	U	0.10	10
Methylcyclohexane	10	U	0.10	10

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94	76 - 114
4-Bromofluorobenzene	94	86 - 115
Toluene-d8 (Surr)	103	88 - 110

Lab Control Spike - Batch: 220-18355

Method: OLM04.2/Vol
Preparation: 5030B

Lab Sample ID: LCS 220-18355/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/22/2008 1334
Date Prepared: 07/22/2008 1334

Analysis Batch: 220-18355
Prep Batch: N/A
Units: ug/L

Instrument ID: HP 6890/5973 GC/MS
Lab File ID: Y4800.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1-Dichloroethene	20.0	21.7	108	61 - 145	
Benzene	20.0	21.2	106	76 - 127	
Trichloroethene	20.0	21.8	109	71 - 120	
Toluene	20.0	20.7	104	76 - 125	
Chlorobenzene	20.0	20.6	103	75 - 130	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98	76 - 114
4-Bromofluorobenzene	99	86 - 115
Toluene-d8 (Surr)	101	88 - 110

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Method Blank - Batch: 220-18170

Method: 8082

Preparation: 3550B

Lab Sample ID: MB 220-18170/1-A

Client Matrix: Solid

Dilution: 1.0

Date Analyzed: 07/22/2008 1656

Date Prepared: 07/21/2008 1659

Analysis Batch: 220-18252

Prep Batch: 220-18170

Units: ug/Kg

Instrument ID: HP 5890 with dual ECD

Lab File ID: D4716109.d

Initial Weight/Volume: 30.0 g

Final Weight/Volume: 10.0 mL

Injection Volume: 1.0 uL

Column ID: PRIMARY

Analyte	Result	Qual	MDL	RL
PCB-1016	17	U	4.6	17
PCB-1221	33	U	1.1	33
PCB-1232	17	U	4.6	17
PCB-1242	17	U	4.6	17
PCB-1248	17	U	4.6	17
PCB-1254	17	U	1.5	17
PCB-1260	17	U	3.5	17

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	83	24 - 154
DCB Decachlorobiphenyl	100	25 - 159

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	78	24 - 154
DCB Decachlorobiphenyl	96	25 - 159

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Lab Control Spike - Batch: 220-18170

Method: 8082

Preparation: 3550B

Lab Sample ID: LCS 220-18170/22-A

Client Matrix: Solid

Dilution: 1.0

Date Analyzed: 07/22/2008 1713

Date Prepared: 07/21/2008 1659

Analysis Batch: 220-18252

Prep Batch: 220-18170

Units: ug/Kg

Instrument ID: HP 5890 with dual ECD

Lab File ID: C4716110.d

Initial Weight/Volume: 30.0 g

Final Weight/Volume: 10.0 mL

Injection Volume: 1.0 uL

Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
PCB-1016	167	162	97	42 - 130	
PCB-1260	167	142	85	50 - 128	
Surrogate	% Rec		Acceptance Limits		
Tetrachloro-m-xylene	95		24 - 154		
DCB Decachlorobiphenyl	114		25 - 159		
Surrogate	% Rec		Acceptance Limits		
Tetrachloro-m-xylene	90		24 - 154		
DCB Decachlorobiphenyl	104		25 - 159		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Duplicate - Batch: 220-18053

Method: PercentMoisture
Preparation: N/A

Lab Sample ID: 220-5867-9
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 07/16/2008 1400
Date Prepared: N/A

Analysis Batch: 220-18053
Prep Batch: N/A
Units: %

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume:

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	9.55	9.43	1	20	
Percent Solids	90.4	90.6	0	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

DATA REPORTING QUALIFIERS

Client: Malcolm Pirnie, Inc.

Job Number: 220-5867-1

Sdg Number: 220-5867

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	*	Surrogate exceeds the control limit
	B	The analyte was found in an associated blank, as well as in the sample.
GC Semi VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	*	Surrogate exceeds the control limit

ANALYTICAL REPORT

Job Number: 220-5904-1

SDG Number: 220-5904

Job Description: NYSDEC Standby - Tioga Castings

For:

Malcolm Pirnie, Inc.
43 British American Boulevard
1st Floor
Latham, NY 12110

Attention: Mr. Bruce Nelson



Designee for
Johanna Dubauskas
Project Manager I
johanna.dubauskas@testamericainc.com
08/04/2008

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

Case Narrative for Job: 220-5904-1

Client: Malcolm Pirnie, Inc.
Date: August 4, 2008

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.



Lawrence Decker
Laboratory Director

August 4, 2008
Date

Job Narrative
220-J5904-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

No analytical or quality issues were noted.

SAMPLE SUMMARY

Client: Malcolm Pirnie, Inc.

Job Number: 220-5904-1

Sdg Number: 220-5904

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-5904-1	MW-4	Water	07/17/2008 1215	07/18/2008 0930
220-5904-2	MW-5	Water	07/17/2008 1400	07/18/2008 0930
220-5904-3	MW-X	Water	07/17/2008 1445	07/18/2008 0930
220-5904-4	MW-2	Water	07/17/2008 1515	07/18/2008 0930
220-5904-5TB	TRIP BLANK	Water	07/17/2008 0000	07/18/2008 0930

METHOD SUMMARY

Client: Malcolm Pirnie, Inc.

Job Number: 220-5904-1

Sdg Number: 220-5904

Description	Lab Location	Method	Preparation Method
Matrix: Water			
CLP Volatile Organic Compounds	TAL CT	OLM04.2	OLM04.2/Vol
Purge-and-Trap	TAL CT		SW846 5030B
ILM05.3 Metals	TAL BUF	ILM05.3	ILM05.3

Lab References:

TAL BUF = TestAmerica Buffalo

TAL CT = TestAmerica Connecticut

Method References:

ILM05.3 = U.S. Environmental Protection Agency

OLM04.2 = "Statement of Work for Organic Analysis", Multi-Media, Multi-Concentration September 1998

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Malcolm Pirnie, Inc.

Job Number: 220-5904-1

Sdg Number: 220-5904

Method	Analyst	Analyst ID
OLM04.2 OLM04.2/Vol	Humbert, Dave	DH

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5904-1

Sdg Number: 220-5904

Client Sample ID: MW-4

Lab Sample ID: 220-5904-1

Client Matrix: Water

Date Sampled: 07/17/2008 1215

Date Received: 07/18/2008 0930

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18379

Instrument ID: HP 6890/5973 GC/MS

Preparation: 5030B

Lab File ID: Y4834.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 07/23/2008 1658

Final Weight/Volume: 5 mL

Date Prepared: 07/23/2008 1658

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	10	U	0.10	10
Vinyl chloride	10	U	0.10	10
Bromomethane	10	U	0.10	10
Chloroethane	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
Carbon disulfide	10	U	0.10	10
Acetone	10	U	0.10	10
Methylene Chloride	10	U	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
Chloroform	10	U	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Benzene	10	U	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Trichloroethene	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
Toluene	10	U	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Bromoform	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
cis-1,2-Dichloroethene	10	U	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10
Dichlorodifluoromethane	10	U	0.10	10
Trichlorofluoromethane	10	U	0.10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	0.10	10
Methyl tert-butyl ether	10	U	0.10	10
1,2-Dibromoethane	10	U	0.10	10
Isopropylbenzene	10	U	0.10	10
1,3-Dichlorobenzene	10	U	0.10	10
1,4-Dichlorobenzene	10	U	0.10	10
1,2-Dichlorobenzene	10	U	0.10	10
1,2-Dibromo-3-Chloropropane	10	U	0.10	10

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5904-1

Sdg Number: 220-5904

Client Sample ID: MW-4

Lab Sample ID: 220-5904-1

Date Sampled: 07/17/2008 1215

Client Matrix: Water

Date Received: 07/18/2008 0930

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18379

Instrument ID: HP 6890/5973 GC/MS

Preparation: 5030B

Lab File ID: Y4834.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 07/23/2008 1658

Final Weight/Volume: 5 mL

Date Prepared: 07/23/2008 1658

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene	10	U	0.10	10
Methyl acetate	10	U	0.10	10
Cyclohexane	10	U	0.10	10
Methylcyclohexane	10	U	0.10	10
Surrogate	%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	102		76 - 114	
4-Bromofluorobenzene	91		86 - 115	
Toluene-d8 (Surr)	104		88 - 110	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5904-1

Sdg Number: 220-5904

Client Sample ID: MW-5

Lab Sample ID: 220-5904-2

Date Sampled: 07/17/2008 1400

Client Matrix: Water

Date Received: 07/18/2008 0930

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18379

Instrument ID: HP 6890/5973 GC/MS

Preparation: 5030B

Lab File ID: Y4835.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 07/23/2008 1724

Final Weight/Volume: 5 mL

Date Prepared: 07/23/2008 1724

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	10	U	0.10	10
Vinyl chloride	10	U	0.10	10
Bromomethane	10	U	0.10	10
Chloroethane	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
Carbon disulfide	10	U	0.10	10
Acetone	10	U	0.10	10
Methylene Chloride	10	U	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
Chloroform	10	U	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Benzene	10	U	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Trichloroethene	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
Toluene	10	U	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Bromoform	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
cis-1,2-Dichloroethene	10	U	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10
Dichlorodifluoromethane	10	U	0.10	10
Trichlorofluoromethane	10	U	0.10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	0.10	10
Methyl tert-butyl ether	10	U	0.10	10
1,2-Dibromoethane	10	U	0.10	10
Isopropylbenzene	10	U	0.10	10
1,3-Dichlorobenzene	10	U	0.10	10
1,4-Dichlorobenzene	10	U	0.10	10
1,2-Dichlorobenzene	10	U	0.10	10
1,2-Dibromo-3-Chloropropane	10	U	0.10	10

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5904-1

Sdg Number: 220-5904

Client Sample ID: MW-5

Lab Sample ID: 220-5904-2

Date Sampled: 07/17/2008 1400

Client Matrix: Water

Date Received: 07/18/2008 0930

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18379

Instrument ID: HP 6890/5973 GC/MS

Preparation: 5030B

Lab File ID: Y4835.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 07/23/2008 1724

Final Weight/Volume: 5 mL

Date Prepared: 07/23/2008 1724

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene	10	U	0.10	10
Methyl acetate	10	U	0.10	10
Cyclohexane	10	U	0.10	10
Methylcyclohexane	10	U	0.10	10
Surrogate	%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	100		76 - 114	
4-Bromofluorobenzene	91		86 - 115	
Toluene-d8 (Surr)	101		88 - 110	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5904-1

Sdg Number: 220-5904

Client Sample ID: MW-X

Lab Sample ID: 220-5904-3

Date Sampled: 07/17/2008 1445

Client Matrix: Water

Date Received: 07/18/2008 0930

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18379

Instrument ID: HP 6890/5973 GC/MS

Preparation: 5030B

Lab File ID: Y4836.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 07/23/2008 1751

Final Weight/Volume: 5 mL

Date Prepared: 07/23/2008 1751

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	10	U	0.10	10
Vinyl chloride	10	U	0.10	10
Bromomethane	10	U	0.10	10
Chloroethane	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
Carbon disulfide	10	U	0.10	10
Acetone	10	U	0.10	10
Methylene Chloride	10	U	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
Chloroform	10	U	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Benzene	10	U	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Trichloroethene	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
Toluene	10	U	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Bromoform	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
cis-1,2-Dichloroethene	10	U	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10
Dichlorodifluoromethane	10	U	0.10	10
Trichlorofluoromethane	10	U	0.10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	0.10	10
Methyl tert-butyl ether	10	U	0.10	10
1,2-Dibromoethane	10	U	0.10	10
Isopropylbenzene	10	U	0.10	10
1,3-Dichlorobenzene	10	U	0.10	10
1,4-Dichlorobenzene	10	U	0.10	10
1,2-Dichlorobenzene	10	U	0.10	10
1,2-Dibromo-3-Chloropropane	10	U	0.10	10

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5904-1

Sdg Number: 220-5904

Client Sample ID: MW-X

Lab Sample ID: 220-5904-3

Date Sampled: 07/17/2008 1445

Client Matrix: Water

Date Received: 07/18/2008 0930

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18379

Instrument ID: HP 6890/5973 GC/MS

Preparation: 5030B

Lab File ID: Y4836.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 07/23/2008 1751

Final Weight/Volume: 5 mL

Date Prepared: 07/23/2008 1751

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene	10	U	0.10	10
Methyl acetate	10	U	0.10	10
Cyclohexane	10	U	0.10	10
Methylcyclohexane	10	U	0.10	10
Surrogate	%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	102		76 - 114	
4-Bromofluorobenzene	87		86 - 115	
Toluene-d8 (Surr)	102		88 - 110	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5904-1

Sdg Number: 220-5904

Client Sample ID: MW-2

Lab Sample ID: 220-5904-4

Client Matrix: Water

Date Sampled: 07/17/2008 1515

Date Received: 07/18/2008 0930

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18379

Instrument ID: HP 6890/5973 GC/MS

Preparation: 5030B

Lab File ID: Y4837.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 07/23/2008 1818

Final Weight/Volume: 5 mL

Date Prepared: 07/23/2008 1818

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	10	U	0.10	10
Vinyl chloride	10	U	0.10	10
Bromomethane	10	U	0.10	10
Chloroethane	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
Carbon disulfide	10	U	0.10	10
Acetone	10	U	0.10	10
Methylene Chloride	10	U	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
Chloroform	10	U	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Benzene	10	U	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Trichloroethene	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
Toluene	10	U	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Bromoform	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
cis-1,2-Dichloroethene	10	U	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10
Dichlorodifluoromethane	10	U	0.10	10
Trichlorofluoromethane	10	U	0.10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	0.10	10
Methyl tert-butyl ether	10	U	0.10	10
1,2-Dibromoethane	10	U	0.10	10
Isopropylbenzene	10	U	0.10	10
1,3-Dichlorobenzene	10	U	0.10	10
1,4-Dichlorobenzene	10	U	0.10	10
1,2-Dichlorobenzene	10	U	0.10	10
1,2-Dibromo-3-Chloropropane	10	U	0.10	10

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5904-1

Sdg Number: 220-5904

Client Sample ID: MW-2

Lab Sample ID: 220-5904-4

Date Sampled: 07/17/2008 1515

Client Matrix: Water

Date Received: 07/18/2008 0930

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18379

Instrument ID: HP 6890/5973 GC/MS

Preparation: 5030B

Lab File ID: Y4837.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 07/23/2008 1818

Final Weight/Volume: 5 mL

Date Prepared: 07/23/2008 1818

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene	10	U	0.10	10
Methyl acetate	10	U	0.10	10
Cyclohexane	10	U	0.10	10
Methylcyclohexane	10	U	0.10	10
Surrogate	%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	99		76 - 114	
4-Bromofluorobenzene	89		86 - 115	
Toluene-d8 (Surr)	101		88 - 110	

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5904-1

Sdg Number: 220-5904

Client Sample ID: TRIP BLANK

Lab Sample ID: 220-5904-5TB

Client Matrix: Water

Date Sampled: 07/17/2008 0000

Date Received: 07/18/2008 0930

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18355

Instrument ID: HP 6890/5973 GC/MS

Preparation: 5030B

Lab File ID: Y4805.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 07/22/2008 1618

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1618

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	10	U	0.10	10
Vinyl chloride	10	U	0.10	10
Bromomethane	10	U	0.10	10
Chloroethane	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
Carbon disulfide	10	U	0.10	10
Acetone	10	U	0.10	10
Methylene Chloride	10	U	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
Chloroform	10	U	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Benzene	10	U	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Trichloroethene	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
Toluene	10	U	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Bromoform	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
cis-1,2-Dichloroethene	10	U	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10
Dichlorodifluoromethane	10	U	0.10	10
Trichlorofluoromethane	10	U	0.10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	0.10	10
Methyl tert-butyl ether	10	U	0.10	10
1,2-Dibromoethane	10	U	0.10	10
Isopropylbenzene	10	U	0.10	10
1,3-Dichlorobenzene	10	U	0.10	10
1,4-Dichlorobenzene	10	U	0.10	10
1,2-Dichlorobenzene	10	U	0.10	10
1,2-Dibromo-3-Chloropropane	10	U	0.10	10

Analytical Data

Client: Malcolm Pirnie, Inc.

Job Number: 220-5904-1

Sdg Number: 220-5904

Client Sample ID: TRIP BLANK

Lab Sample ID: 220-5904-5TB

Client Matrix: Water

Date Sampled: 07/17/2008 0000

Date Received: 07/18/2008 0930

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol

Analysis Batch: 220-18355

Instrument ID: HP 6890/5973 GC/MS

Preparation: 5030B

Lab File ID: Y4805.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 07/22/2008 1618

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1618

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene	10	U	0.10	10
Methyl acetate	10	U	0.10	10
Cyclohexane	10	U	0.10	10
Methylcyclohexane	10	U	0.10	10
Surrogate	%Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	99		76 - 114	
4-Bromofluorobenzene	92		86 - 115	
Toluene-d8 (Surr)	102		88 - 110	

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5904-1

Sdg Number: 220-5904

Surrogate Recovery Report

OLM04.2/Vol CLP Volatile Organic Compounds

Client Matrix: Water

Lab Sample ID	Client Sample ID	12DCE %Rec	TOL %Rec	BFB %Rec
220-5904-1	MW-4	102	104	91
220-5904-2	MW-5	100	101	91
220-5904-3	MW-X	102	102	87
220-5904-4	MW-2	99	101	89
220-5904-5	TRIP BLANK	99	102	92
MB 220-18355/2		94	103	94
MB 220-18379/3		102	104	92
LCS 220-18355/3		98	101	99
LCS 220-18379/2		100	101	99
MSB 220-18379/9		101	98	99

Surrogate	Acceptance Limits
12DCE = 1,2-Dichloroethane-d4 (Surr)	76-114
TOL = Toluene-d8 (Surr)	88-110
BFB = 4-Bromofluorobenzene	86-115

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5904-1

Sdg Number: 220-5904

Method Blank - Batch: 220-18355

Method: OLM04.2/Vol Preparation: 5030B

Lab Sample ID: MB 220-18355/2

Analysis Batch: 220-18355

Instrument ID: HP 6890/5973 GC/MS

Client Matrix: Water

Prep Batch: N/A

Lab File ID: Y4797.D

Dilution: 1.0

Units: ug/L

Initial Weight/Volume: 5 mL

Date Analyzed: 07/22/2008 1112

Final Weight/Volume: 5 mL

Date Prepared: 07/22/2008 1112

Analyte	Result	Qual	MDL	RL
Chloromethane	10	U	0.10	10
Vinyl chloride	10	U	0.10	10
Bromomethane	10	U	0.10	10
Chloroethane	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
Carbon disulfide	10	U	0.10	10
Acetone	10	U	0.10	10
Methylene Chloride	0.82	J	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
Chloroform	10	U	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Benzene	10	U	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Trichloroethene	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
Toluene	10	U	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Bromoform	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
cis-1,2-Dichloroethene	10	U	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10
Dichlorodifluoromethane	10	U	0.10	10
Trichlorofluoromethane	10	U	0.10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	0.10	10
Methyl tert-butyl ether	10	U	0.10	10
1,2-Dibromoethane	10	U	0.10	10
Isopropylbenzene	10	U	0.10	10
1,3-Dichlorobenzene	10	U	0.10	10

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5904-1

Sdg Number: 220-5904

Method Blank - Batch: 220-18355

Method: OLM04.2/Vol
Preparation: 5030B

Lab Sample ID: MB 220-18355/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/22/2008 1112
Date Prepared: 07/22/2008 1112

Analysis Batch: 220-18355
Prep Batch: N/A
Units: ug/L

Instrument ID: HP 6890/5973 GC/MS
Lab File ID: Y4797.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
1,4-Dichlorobenzene	10	U	0.10	10
1,2-Dichlorobenzene	10	U	0.10	10
1,2-Dibromo-3-Chloropropane	10	U	0.10	10
1,2,4-Trichlorobenzene	10	U	0.10	10
Methyl acetate	10	U	0.10	10
Cyclohexane	10	U	0.10	10
Methylcyclohexane	10	U	0.10	10

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94	76 - 114
4-Bromofluorobenzene	94	86 - 115
Toluene-d8 (Surr)	103	88 - 110

Lab Control Spike - Batch: 220-18355

Method: OLM04.2/Vol
Preparation: 5030B

Lab Sample ID: LCS 220-18355/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/22/2008 1334
Date Prepared: 07/22/2008 1334

Analysis Batch: 220-18355
Prep Batch: N/A
Units: ug/L

Instrument ID: HP 6890/5973 GC/MS
Lab File ID: Y4800.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1-Dichloroethene	20.0	21.7	108	61 - 145	
Benzene	20.0	21.2	106	76 - 127	
Trichloroethene	20.0	21.8	109	71 - 120	
Toluene	20.0	20.7	104	76 - 125	
Chlorobenzene	20.0	20.6	103	75 - 130	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98	76 - 114
4-Bromofluorobenzene	99	86 - 115
Toluene-d8 (Surr)	101	88 - 110

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5904-1

Sdg Number: 220-5904

Method Blank - Batch: 220-18379

Method: OLM04.2/Vol Preparation: 5030B

Lab Sample ID: MB 220-18379/3

Analysis Batch: 220-18379

Instrument ID: HP 6890/5973 GC/MS

Client Matrix: Water

Prep Batch: N/A

Lab File ID: Y4824.D

Dilution: 1.0

Units: ug/L

Initial Weight/Volume: 5 mL

Date Analyzed: 07/23/2008 1137

Final Weight/Volume: 5 mL

Date Prepared: 07/23/2008 1137

Analyte	Result	Qual	MDL	RL
Chloromethane	10	U	0.10	10
Vinyl chloride	10	U	0.10	10
Bromomethane	10	U	0.10	10
Chloroethane	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
Carbon disulfide	10	U	0.10	10
Acetone	10	U	0.10	10
Methylene Chloride	0.73	J	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
Chloroform	10	U	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Benzene	10	U	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Trichloroethene	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
Toluene	10	U	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Bromoform	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
cis-1,2-Dichloroethene	10	U	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10
Dichlorodifluoromethane	10	U	0.10	10
Trichlorofluoromethane	10	U	0.10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	0.10	10
Methyl tert-butyl ether	10	U	0.10	10
1,2-Dibromoethane	10	U	0.10	10
Isopropylbenzene	10	U	0.10	10
1,3-Dichlorobenzene	10	U	0.10	10

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5904-1

Sdg Number: 220-5904

Method Blank - Batch: 220-18379

Method: OLM04.2/Vol Preparation: 5030B

Lab Sample ID: MB 220-18379/3

Analysis Batch: 220-18379

Instrument ID: HP 6890/5973 GC/MS

Client Matrix: Water

Prep Batch: N/A

Lab File ID: Y4824.D

Dilution: 1.0

Units: ug/L

Initial Weight/Volume: 5 mL

Date Analyzed: 07/23/2008 1137

Final Weight/Volume: 5 mL

Date Prepared: 07/23/2008 1137

Analyte	Result	Qual	MDL	RL
1,4-Dichlorobenzene	10	U	0.10	10
1,2-Dichlorobenzene	10	U	0.10	10
1,2-Dibromo-3-Chloropropane	10	U	0.10	10
1,2,4-Trichlorobenzene	10	U	0.10	10
Methyl acetate	10	U	0.10	10
Cyclohexane	10	U	0.10	10
Methylcyclohexane	10	U	0.10	10
Surrogate	% Rec	Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	102	76 - 114		
4-Bromofluorobenzene	92	86 - 115		
Toluene-d8 (Surr)	104	88 - 110		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Malcolm Pirnie, Inc.

Job Number: 220-5904-1

Sdg Number: 220-5904

Lab Control Spike - Batch: 220-18379

Method: OLM04.2/Vol
Preparation: 5030B

Lab Sample ID: LCS 220-18379/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/23/2008 1043
Date Prepared: 07/23/2008 1043

Analysis Batch: 220-18379
Prep Batch: N/A
Units: ug/L

Instrument ID: HP 6890/5973 GC/MS
Lab File ID: Y4822.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1-Dichloroethene	20.0	21.4	107	61 - 145	
Benzene	20.0	21.2	106	76 - 127	
Trichloroethene	20.0	21.2	106	71 - 120	
Toluene	20.0	21.4	107	76 - 125	
Chlorobenzene	20.0	21.1	105	75 - 130	
Surrogate	% Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	100		76 - 114		
4-Bromofluorobenzene	99		86 - 115		
Toluene-d8 (Surr)	101		88 - 110		

Matrix Spike Blank - Batch: 220-18379

Method: OLM04.2/Vol
Preparation: 5030B

Lab Sample ID: MSB 220-18379/9
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/23/2008 1445
Date Prepared: 07/23/2008 1445

Analysis Batch: 220-18379
Prep Batch: N/A
Units: ug/L

Instrument ID: HP 6890/5973 GC/MS
Lab File ID: Y4830.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1-Dichloroethene	50.0	46.1	92	61 - 145	
Benzene	50.0	47.9	96	76 - 127	
Trichloroethene	50.0	47.5	95	71 - 120	
Toluene	50.0	47.8	96	76 - 125	
Chlorobenzene	50.0	47.5	95	75 - 130	
Surrogate	% Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	101		76 - 114		
4-Bromofluorobenzene	99		86 - 115		
Toluene-d8 (Surr)	98		88 - 110		

Calculations are performed before rounding to avoid round-off errors in calculated results.

DATA REPORTING QUALIFIERS

Client: Malcolm Pirnie, Inc.

Job Number: 220-5904-1

Sdg Number: 220-5904

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	*	Surrogate exceeds the control limit



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

REPORT DATE 7/29/2008

MALCOLM PIRNIE - LATHAM, NY
43 BRITISH AMERICAN BOULEVARD
LATHAM, NY 12110-1402
ATTN: JEREMY WYCKOFF

CONTRACT NUMBER:
PURCHASE ORDER NUMBER: 0266362

PROJECT NUMBER: 0266362

ANALYTICAL SUMMARY

LIMS BAT #: LIMS-17841

JOB NUMBER: 0266362

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: OWEGO-NY-NYSDEC TIOGA CASTINGS

FIELD SAMPLE #	LAB ID	MATRIX	SAMPLE DESCRIPTION	TEST	Subcontract Lab (if any) Cert. Nos.
AA-1	08B27502	AIR	Ambient Air	to-15 ppbv	
AA-1	08B27502	AIR	Ambient Air	to-15 ug/m3	
SV-1	08B27497	AIR	Soil Vapor	to-15 ppbv	
SV-1	08B27497	AIR	Soil Vapor	to-15 ug/m3	
SV-2	08B27498	AIR	Soil Vapor	to-15 ppbv	
SV-2	08B27498	AIR	Soil Vapor	to-15 ug/m3	
SV-3	08B27499	AIR	Soil Vapor	to-15 ppbv	
SV-3	08B27499	AIR	Soil Vapor	to-15 ug/m3	
SV-4	08B27500	AIR	Soil Vapor	to-15 ppbv	
SV-4	08B27500	AIR	Soil Vapor	to-15 ug/m3	
SV-5	08B27501	AIR	Soil Vapor	to-15 ppbv	
SV-5	08B27501	AIR	Soil Vapor	to-15 ug/m3	



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REPORT DATE 7/29/2008

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LATHAM, NY 12110-1402
ATTN: JEREMY WYCKOFF

CONTRACT NUMBER:
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ANALYTICAL SUMMARY

LIMS BAT #: LIMIT-17841

JOB NUMBER: 0266362

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Comments :

LIMS BATCH NO. : LIMIT-17841

CASE NARRATIVE SUMMARY

In method TO-15, method blank-120631 associated with samples 08B27497 - 08B27502 contained acetone at 0.42 ppbv = 0.99 ug/m3 and 2-butanone(MEK) at 0.09 ppbv = 0.28 ug/m3.

In method TO-15, any reported result for trichlorofluoromethane is estimated and likely to be biased on the high side based on continuing calibration bias.

In method TO-15, any reported result for trichlorofluoromethane is likely to be biased on the high side based on laboratory fortified blank recovery bias.

In method TO-15 for sample 08B27502, reported result for ethanol is estimated. Value is reported over the verified linear calibration range.

In method TO-15, for sample 08B27498, surrogate standard recovery is outside of control limits and biased on the high side due to an obvious sample matrix interference.

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

METHOD TO-15 - ADDITIONAL DETAILS

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

Sample	Dilution	Compound(s)
08B27497	1x	All
08B27498	1x	Most
	20x	acetone, hexane, 1,1,1-trichloroethane, toluene
08B27499	1x	Most
	20x	hexane, heptane
08B27500	1x	All
08B27501	1x	Most
	20x	acetone
08B27502	0.7x = 570ml	All
blank-120631	0.7x = 570ml	All

In method TO-15, data is not affected by laboratory fortified blank recovery outliers for bromoform, 1,2-dichlorobenzene, 1,2,4-trichlorobenzene and hexachlorobutadiene since all results are "not detected" and recovery bias is on the high side.

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)	



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REPORT DATE 7/29/2008

MALCOLM PIRNIE - LATHAM, NY
43 BRITISH AMERICAN BOULEVARD
LATHAM, NY 12110-1402
ATTN: JEREMY WYCKOFF

CONTRACT NUMBER:
PURCHASE ORDER NUMBER: 0266362

PROJECT NUMBER: 0266362

ANALYTICAL SUMMARY

LIMS BAT #: LIMIT-17841

JOB NUMBER: 0266362

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.

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 7/29/08
SIGNATURE DATE

Tod Kopyscinski
Air Laboratory Manager

Douglas Sheeley
Laboratory Manager

Edward Denson
Technical Director

Daren Damboragian
Organics Department Supervisor

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

JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

7/29/2008

Page 1 of 37

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: AA-1

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

Sample ID: 08B27502

‡Sampled: 7/17/2008

Ambient Air

Sample Matrix: AIR

Sample Medium: SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	PPBv	9.4	07/21/08	WSD	0.04		
Benzene	PPBv	0.91	07/21/08	WSD	0.04		
Benzyl Chloride	PPBv	ND	07/21/08	WSD	0.04		
Bromodichloromethane	PPBv	ND	07/21/08	WSD	0.04		
Bromoform	PPBv	ND	07/21/08	WSD	0.04		
Bromomethane	PPBv	ND	07/21/08	WSD	0.04		
1,3-Butadiene	PPBv	ND	07/21/08	WSD	0.04		
2-Butanone (MEK)	PPBv	1.4	07/21/08	WSD	0.04		
Carbon Disulfide	PPBv	ND	07/21/08	WSD	0.04		
Carbon Tetrachloride	PPBv	0.09	07/21/08	WSD	0.04		
Chlorobenzene	PPBv	ND	07/21/08	WSD	0.04		
Chlorodibromomethane	PPBv	ND	07/21/08	WSD	0.04		
Chloroethane	PPBv	ND	07/21/08	WSD	0.04		
Chloroform	PPBv	ND	07/21/08	WSD	0.04		
Chloromethane	PPBv	0.48	07/21/08	WSD	0.04		
Cyclohexane	PPBv	0.29	07/21/08	WSD	0.04		
1,2-Dibromoethane	PPBv	ND	07/21/08	WSD	0.04		
1,2-Dichlorobenzene	PPBv	ND	07/21/08	WSD	0.04		
1,3-Dichlorobenzene	PPBv	ND	07/21/08	WSD	0.04		
1,4-Dichlorobenzene	PPBv	ND	07/21/08	WSD	0.04		
Dichlorodifluoromethane	PPBv	0.61	07/21/08	WSD	0.04		
1,1-Dichloroethane	PPBv	ND	07/21/08	WSD	0.04		
1,2-Dichloroethane	PPBv	ND	07/21/08	WSD	0.04		
1,1-Dichloroethylene	PPBv	ND	07/21/08	WSD	0.04		
cis-1,2-Dichloroethylene	PPBv	ND	07/21/08	WSD	0.04		
t-1,2-Dichloroethylene	PPBv	ND	07/21/08	WSD	0.04		
1,2-Dichloropropane	PPBv	ND	07/21/08	WSD	0.04		
cis-1,3-Dichloropropene	PPBv	ND	07/21/08	WSD	0.04		
trans-1,3-Dichloropropene	PPBv	ND	07/21/08	WSD	0.04		

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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.

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

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

JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: AA-1

7/29/2008

Page 2 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

Sample ID: 08B27502

‡Sampled: 7/17/2008

Ambient Air

Sample Matrix: AIR

Sample Medium: SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	07/21/08	WSD	0.04		
Ethanol	PPBv	42	07/21/08	WSD	0.04		
Ethyl Acetate	PPBv	ND	07/21/08	WSD	0.07		
Ethylbenzene	PPBv	0.86	07/21/08	WSD	0.04		
4-Ethyl Toluene	PPBv	0.48	07/21/08	WSD	0.04		
n-Heptane	PPBv	0.50	07/21/08	WSD	0.04		
Hexachlorobutadiene	PPBv	ND	07/21/08	WSD	0.07		
Hexane	PPBv	2.4	07/21/08	WSD	0.04		
2-Hexanone	PPBv	ND	07/21/08	WSD	0.04		
Isopropanol	PPBv	0.75	07/21/08	WSD	0.04		
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	07/21/08	WSD	0.04		
Methylene Chloride	PPBv	1.0	07/21/08	WSD	0.04		
4-Methyl-2-Pentanone (MIBK)	PPBv	0.11	07/21/08	WSD	0.04		
Propene	PPBv	ND	07/21/08	WSD	0.07		
Styrene	PPBv	ND	07/21/08	WSD	0.04		
1,1,2,2-Tetrachloroethane	PPBv	ND	07/21/08	WSD	0.04		
Tetrachloroethylene	PPBv	ND	07/21/08	WSD	0.04		
Tetrahydrofuran	PPBv	0.08	07/21/08	WSD	0.04		
Toluene	PPBv	3.4	07/21/08	WSD	0.04		
1,2,4-Trichlorobenzene	PPBv	ND	07/21/08	WSD	0.04		
1,1,1-Trichloroethane	PPBv	ND	07/21/08	WSD	0.04		
1,1,2-Trichloroethane	PPBv	ND	07/21/08	WSD	0.04		
Trichloroethylene	PPBv	ND	07/21/08	WSD	0.04		
Trichlorofluoromethane (Freon 11)	PPBv	0.38	07/21/08	WSD	0.04		
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	0.09	07/21/08	WSD	0.04		
1,2,4-Trimethylbenzene	PPBv	1.8	07/21/08	WSD	0.04		
1,3,5-Trimethylbenzene	PPBv	0.53	07/21/08	WSD	0.04		
Vinyl Acetate	PPBv	ND	07/21/08	WSD	0.14		
Vinyl Chloride	PPBv	ND	07/21/08	WSD	0.04		

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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

7/29/2008

Page 3 of 37

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: AA-1

Sample ID: 08B27502

‡Sampled: 7/17/2008

Ambient Air

Sample Matrix: AIR

Sample Medium: SUMMA

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
m/p-Xylene	PPBv	3.0	07/21/08	WSD	0.07		
o-Xylene	PPBv	1.3	07/21/08	WSD	0.04		

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

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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-1

7/29/2008

Page 4 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

Sample ID: 08B27497

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	PPBv	8.4	07/22/08	WSD	0.05		
Benzene	PPBv	2.0	07/22/08	WSD	0.05		
Benzyl Chloride	PPBv	ND	07/22/08	WSD	0.05		
Bromodichloromethane	PPBv	ND	07/22/08	WSD	0.05		
Bromoform	PPBv	ND	07/22/08	WSD	0.05		
Bromomethane	PPBv	ND	07/22/08	WSD	0.05		
1,3-Butadiene	PPBv	ND	07/22/08	WSD	0.05		
2-Butanone (MEK)	PPBv	2.1	07/22/08	WSD	0.05		
Carbon Disulfide	PPBv	4.5	07/22/08	WSD	0.05		
Carbon Tetrachloride	PPBv	ND	07/22/08	WSD	0.05		
Chlorobenzene	PPBv	ND	07/22/08	WSD	0.05		
Chlorodibromomethane	PPBv	ND	07/22/08	WSD	0.05		
Chloroethane	PPBv	ND	07/22/08	WSD	0.05		
Chloroform	PPBv	ND	07/22/08	WSD	0.05		
Chloromethane	PPBv	0.09	07/22/08	WSD	0.05		
Cyclohexane	PPBv	0.76	07/22/08	WSD	0.05		
1,2-Dibromoethane	PPBv	ND	07/22/08	WSD	0.05		
1,2-Dichlorobenzene	PPBv	ND	07/22/08	WSD	0.05		
1,3-Dichlorobenzene	PPBv	ND	07/22/08	WSD	0.05		
1,4-Dichlorobenzene	PPBv	0.07	07/22/08	WSD	0.05		
Dichlorodifluoromethane	PPBv	1.4	07/22/08	WSD	0.05		
1,1-Dichloroethane	PPBv	ND	07/22/08	WSD	0.05		
1,2-Dichloroethane	PPBv	ND	07/22/08	WSD	0.05		
1,1-Dichloroethylene	PPBv	ND	07/22/08	WSD	0.05		
cis-1,2-Dichloroethylene	PPBv	ND	07/22/08	WSD	0.05		
t-1,2-Dichloroethylene	PPBv	ND	07/22/08	WSD	0.05		
1,2-Dichloropropane	PPBv	ND	07/22/08	WSD	0.05		
cis-1,3-Dichloropropene	PPBv	ND	07/22/08	WSD	0.05		
trans-1,3-Dichloropropene	PPBv	ND	07/22/08	WSD	0.05		

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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-1

7/29/2008

Page 5 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

Sample ID: 08B27497

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	07/22/08	WSD	0.05		
Ethanol	PPBv	7.6	07/22/08	WSD	0.05		
Ethyl Acetate	PPBv	ND	07/22/08	WSD	0.10		
Ethylbenzene	PPBv	1.2	07/22/08	WSD	0.05		
4-Ethyl Toluene	PPBv	0.63	07/22/08	WSD	0.05		
n-Heptane	PPBv	12	07/22/08	WSD	0.05		
Hexachlorobutadiene	PPBv	ND	07/22/08	WSD	0.10		
Hexane	PPBv	25	07/22/08	WSD	0.05		
2-Hexanone	PPBv	ND	07/22/08	WSD	0.05		
Isopropanol	PPBv	0.74	07/22/08	WSD	0.05		
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	07/22/08	WSD	0.05		
Methylene Chloride	PPBv	0.74	07/22/08	WSD	0.05		
4-Methyl-2-Pentanone (MIBK)	PPBv	ND	07/22/08	WSD	0.05		
Propene	PPBv	ND	07/22/08	WSD	0.10		
Styrene	PPBv	0.10	07/22/08	WSD	0.05		
1,1,2,2-Tetrachloroethane	PPBv	ND	07/22/08	WSD	0.05		
Tetrachloroethylene	PPBv	0.40	07/22/08	WSD	0.05		
Tetrahydrofuran	PPBv	ND	07/22/08	WSD	0.05		
Toluene	PPBv	6.1	07/22/08	WSD	0.05		
1,2,4-Trichlorobenzene	PPBv	ND	07/22/08	WSD	0.05		
1,1,1-Trichloroethane	PPBv	0.20	07/22/08	WSD	0.05		
1,1,2-Trichloroethane	PPBv	ND	07/22/08	WSD	0.05		
Trichloroethylene	PPBv	0.16	07/22/08	WSD	0.05		
Trichlorofluoromethane (Freon 11)	PPBv	0.41	07/22/08	WSD	0.05		
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	0.16	07/22/08	WSD	0.05		
1,2,4-Trimethylbenzene	PPBv	2.3	07/22/08	WSD	0.05		
1,3,5-Trimethylbenzene	PPBv	0.66	07/22/08	WSD	0.05		
Vinyl Acetate	PPBv	ND	07/22/08	WSD	0.20		
Vinyl Chloride	PPBv	ND	07/22/08	WSD	0.05		

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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-1

Sample ID: 08B27497

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

7/29/2008

Page 6 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
m/p-Xylene	PPBv	4.0	07/22/08	WSD	0.10		
o-Xylene	PPBv	2.0	07/22/08	WSD	0.05		

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

JEREMY WYCKOFF
MALCOLM PIRNIE - LATHAM, NY
43 BRITISH AMERICAN BOULEVARD
LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS
Date Received: 7/18/2008

Field Sample #: SV-2

Sample ID: 08B27498

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

7/29/2008

Page 7 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	PPBv	100	07/22/08	WSD	0.05		
Benzene	PPBv	6.1	07/22/08	WSD	0.05		
Benzyl Chloride	PPBv	ND	07/22/08	WSD	0.05		
Bromodichloromethane	PPBv	ND	07/22/08	WSD	0.05		
Bromoform	PPBv	ND	07/22/08	WSD	0.05		
Bromomethane	PPBv	ND	07/22/08	WSD	0.05		
1,3-Butadiene	PPBv	ND	07/22/08	WSD	0.05		
2-Butanone (MEK)	PPBv	11	07/22/08	WSD	0.05		
Carbon Disulfide	PPBv	23	07/22/08	WSD	0.05		
Carbon Tetrachloride	PPBv	ND	07/22/08	WSD	0.05		
Chlorobenzene	PPBv	ND	07/22/08	WSD	0.05		
Chlorodibromomethane	PPBv	ND	07/22/08	WSD	0.05		
Chloroethane	PPBv	ND	07/22/08	WSD	0.05		
Chloroform	PPBv	ND	07/22/08	WSD	0.05		
Chloromethane	PPBv	0.24	07/22/08	WSD	0.05		
Cyclohexane	PPBv	2.3	07/22/08	WSD	0.05		
1,2-Dibromoethane	PPBv	ND	07/22/08	WSD	0.05		
1,2-Dichlorobenzene	PPBv	ND	07/22/08	WSD	0.05		
1,3-Dichlorobenzene	PPBv	ND	07/22/08	WSD	0.05		
1,4-Dichlorobenzene	PPBv	ND	07/22/08	WSD	0.05		
Dichlorodifluoromethane	PPBv	1.0	07/22/08	WSD	0.05		
1,1-Dichloroethane	PPBv	4.9	07/22/08	WSD	0.05		
1,2-Dichloroethane	PPBv	ND	07/22/08	WSD	0.05		
1,1-Dichloroethylene	PPBv	ND	07/22/08	WSD	0.05		
cis-1,2-Dichloroethylene	PPBv	ND	07/22/08	WSD	0.05		
t-1,2-Dichloroethylene	PPBv	ND	07/22/08	WSD	0.05		
1,2-Dichloropropane	PPBv	ND	07/22/08	WSD	0.05		
cis-1,3-Dichloropropene	PPBv	ND	07/22/08	WSD	0.05		
trans-1,3-Dichloropropene	PPBv	ND	07/22/08	WSD	0.05		

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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

7/29/2008

Page 8 of 37

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-2

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

Sample ID: 08B27498

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	07/22/08	WSD	0.05		
Ethanol	PPBv	16	07/22/08	WSD	0.05		
Ethyl Acetate	PPBv	ND	07/22/08	WSD	0.10		
Ethylbenzene	PPBv	3.8	07/22/08	WSD	0.05		
4-Ethyl Toluene	PPBv	1.1	07/22/08	WSD	0.05		
n-Heptane	PPBv	34	07/22/08	WSD	0.05		
Hexachlorobutadiene	PPBv	ND	07/22/08	WSD	0.10		
Hexane	PPBv	83	07/22/08	WSD	0.05		
2-Hexanone	PPBv	ND	07/22/08	WSD	0.05		
Isopropanol	PPBv	2.1	07/22/08	WSD	0.05		
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	07/22/08	WSD	0.05		
Methylene Chloride	PPBv	0.69	07/22/08	WSD	0.05		
4-Methyl-2-Pentanone (MIBK)	PPBv	ND	07/22/08	WSD	0.05		
Propene	PPBv	ND	07/22/08	WSD	0.10		
Styrene	PPBv	0.19	07/22/08	WSD	0.05		
1,1,2,2-Tetrachloroethane	PPBv	ND	07/22/08	WSD	0.05		
Tetrachloroethylene	PPBv	0.83	07/22/08	WSD	0.05		
Tetrahydrofuran	PPBv	ND	07/22/08	WSD	0.05		
Toluene	PPBv	94	07/22/08	WSD	0.05		
1,2,4-Trichlorobenzene	PPBv	ND	07/22/08	WSD	0.05		
1,1,1-Trichloroethane	PPBv	210	07/22/08	WSD	0.05		
1,1,2-Trichloroethane	PPBv	ND	07/22/08	WSD	0.05		
Trichloroethylene	PPBv	0.07	07/22/08	WSD	0.05		
Trichlorofluoromethane (Freon 11)	PPBv	0.34	07/22/08	WSD	0.05		
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	0.11	07/22/08	WSD	0.05		
1,2,4-Trimethylbenzene	PPBv	3.5	07/22/08	WSD	0.05		
1,3,5-Trimethylbenzene	PPBv	1.1	07/22/08	WSD	0.05		
Vinyl Acetate	PPBv	ND	07/22/08	WSD	0.20		
Vinyl Chloride	PPBv	ND	07/22/08	WSD	0.05		

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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

7/29/2008

Page 9 of 37

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-2

Sample ID: 08B27498

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
m/p-Xylene	PPBv	11	07/22/08	WSD	0.10		
o-Xylene	PPBv	4.8	07/22/08	WSD	0.05		

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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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

7/29/2008

Page 10 of 37

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-3

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

Sample ID: 08B27499

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	PPBv	12	07/22/08	WSD	0.05		
Benzene	PPBv	2.8	07/22/08	WSD	0.05		
Benzyl Chloride	PPBv	ND	07/22/08	WSD	0.05		
Bromodichloromethane	PPBv	ND	07/22/08	WSD	0.05		
Bromoform	PPBv	ND	07/22/08	WSD	0.05		
Bromomethane	PPBv	ND	07/22/08	WSD	0.05		
1,3-Butadiene	PPBv	ND	07/22/08	WSD	0.05		
2-Butanone (MEK)	PPBv	4.8	07/22/08	WSD	0.05		
Carbon Disulfide	PPBv	6.1	07/22/08	WSD	0.05		
Carbon Tetrachloride	PPBv	0.13	07/22/08	WSD	0.05		
Chlorobenzene	PPBv	ND	07/22/08	WSD	0.05		
Chlorodibromomethane	PPBv	ND	07/22/08	WSD	0.05		
Chloroethane	PPBv	ND	07/22/08	WSD	0.05		
Chloroform	PPBv	ND	07/22/08	WSD	0.05		
Chloromethane	PPBv	0.06	07/22/08	WSD	0.05		
Cyclohexane	PPBv	ND	07/22/08	WSD	0.05		
1,2-Dibromoethane	PPBv	ND	07/22/08	WSD	0.05		
1,2-Dichlorobenzene	PPBv	ND	07/22/08	WSD	0.05		
1,3-Dichlorobenzene	PPBv	ND	07/22/08	WSD	0.05		
1,4-Dichlorobenzene	PPBv	0.17	07/22/08	WSD	0.05		
Dichlorodifluoromethane	PPBv	0.83	07/22/08	WSD	0.05		
1,1-Dichloroethane	PPBv	ND	07/22/08	WSD	0.05		
1,2-Dichloroethane	PPBv	ND	07/22/08	WSD	0.05		
1,1-Dichloroethylene	PPBv	ND	07/22/08	WSD	0.05		
cis-1,2-Dichloroethylene	PPBv	ND	07/22/08	WSD	0.05		
t-1,2-Dichloroethylene	PPBv	ND	07/22/08	WSD	0.05		
1,2-Dichloropropane	PPBv	ND	07/22/08	WSD	0.05		
cis-1,3-Dichloropropene	PPBv	ND	07/22/08	WSD	0.05		
trans-1,3-Dichloropropene	PPBv	ND	07/22/08	WSD	0.05		

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MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-3

7/29/2008

Page 11 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

Sample ID: 08B27499

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	07/22/08	WSD	0.05		
Ethanol	PPBv	16	07/22/08	WSD	0.05		
Ethyl Acetate	PPBv	ND	07/22/08	WSD	0.10		
Ethylbenzene	PPBv	2.0	07/22/08	WSD	0.05		
4-Ethyl Toluene	PPBv	0.68	07/22/08	WSD	0.05		
n-Heptane	PPBv	74	07/22/08	WSD	0.05		
Hexachlorobutadiene	PPBv	ND	07/22/08	WSD	0.10		
Hexane	PPBv	110	07/22/08	WSD	0.05		
2-Hexanone	PPBv	ND	07/22/08	WSD	0.05		
Isopropanol	PPBv	0.74	07/22/08	WSD	0.05		
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	07/22/08	WSD	0.05		
Methylene Chloride	PPBv	0.61	07/22/08	WSD	0.05		
4-Methyl-2-Pentanone (MIBK)	PPBv	ND	07/22/08	WSD	0.05		
Propene	PPBv	ND	07/22/08	WSD	0.10		
Styrene	PPBv	0.13	07/22/08	WSD	0.05		
1,1,2,2-Tetrachloroethane	PPBv	ND	07/22/08	WSD	0.05		
Tetrachloroethylene	PPBv	0.12	07/22/08	WSD	0.05		
Tetrahydrofuran	PPBv	ND	07/22/08	WSD	0.05		
Toluene	PPBv	11	07/22/08	WSD	0.05		
1,2,4-Trichlorobenzene	PPBv	ND	07/22/08	WSD	0.05		
1,1,1-Trichloroethane	PPBv	10.0	07/22/08	WSD	0.05		
1,1,2-Trichloroethane	PPBv	ND	07/22/08	WSD	0.05		
Trichloroethylene	PPBv	ND	07/22/08	WSD	0.05		
Trichlorofluoromethane (Freon 11)	PPBv	2.7	07/22/08	WSD	0.05		
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	0.26	07/22/08	WSD	0.05		
1,2,4-Trimethylbenzene	PPBv	2.1	07/22/08	WSD	0.05		
1,3,5-Trimethylbenzene	PPBv	0.74	07/22/08	WSD	0.05		
Vinyl Acetate	PPBv	ND	07/22/08	WSD	0.20		
Vinyl Chloride	PPBv	ND	07/22/08	WSD	0.05		

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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-3

Sample ID: 08B27499

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

7/29/2008

Page 12 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
m/p-Xylene	PPBv	4.1	07/22/08	WSD	0.10		
o-Xylene	PPBv	2.0	07/22/08	WSD	0.05		

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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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-4

7/29/2008

Page 13 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

Sample ID: 08B27500

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	PPBv	8.4	07/22/08	WSD	0.05		
Benzene	PPBv	2.5	07/22/08	WSD	0.05		
Benzyl Chloride	PPBv	ND	07/22/08	WSD	0.05		
Bromodichloromethane	PPBv	ND	07/22/08	WSD	0.05		
Bromoform	PPBv	ND	07/22/08	WSD	0.05		
Bromomethane	PPBv	ND	07/22/08	WSD	0.05		
1,3-Butadiene	PPBv	ND	07/22/08	WSD	0.05		
2-Butanone (MEK)	PPBv	1.4	07/22/08	WSD	0.05		
Carbon Disulfide	PPBv	0.86	07/22/08	WSD	0.05		
Carbon Tetrachloride	PPBv	ND	07/22/08	WSD	0.05		
Chlorobenzene	PPBv	ND	07/22/08	WSD	0.05		
Chlorodibromomethane	PPBv	ND	07/22/08	WSD	0.05		
Chloroethane	PPBv	ND	07/22/08	WSD	0.05		
Chloroform	PPBv	ND	07/22/08	WSD	0.05		
Chloromethane	PPBv	ND	07/22/08	WSD	0.05		
Cyclohexane	PPBv	2.5	07/22/08	WSD	0.05		
1,2-Dibromoethane	PPBv	ND	07/22/08	WSD	0.05		
1,2-Dichlorobenzene	PPBv	ND	07/22/08	WSD	0.05		
1,3-Dichlorobenzene	PPBv	ND	07/22/08	WSD	0.05		
1,4-Dichlorobenzene	PPBv	0.20	07/22/08	WSD	0.05		
Dichlorodifluoromethane	PPBv	0.76	07/22/08	WSD	0.05		
1,1-Dichloroethane	PPBv	ND	07/22/08	WSD	0.05		
1,2-Dichloroethane	PPBv	ND	07/22/08	WSD	0.05		
1,1-Dichloroethylene	PPBv	ND	07/22/08	WSD	0.05		
cis-1,2-Dichloroethylene	PPBv	ND	07/22/08	WSD	0.05		
t-1,2-Dichloroethylene	PPBv	ND	07/22/08	WSD	0.05		
1,2-Dichloropropane	PPBv	ND	07/22/08	WSD	0.05		
cis-1,3-Dichloropropene	PPBv	ND	07/22/08	WSD	0.05		
trans-1,3-Dichloropropene	PPBv	ND	07/22/08	WSD	0.05		

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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-4

7/29/2008

Page 14 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

Sample ID: 08B27500

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	07/22/08	WSD	0.05		
Ethanol	PPBv	7.2	07/22/08	WSD	0.05		
Ethyl Acetate	PPBv	ND	07/22/08	WSD	0.10		
Ethylbenzene	PPBv	0.66	07/22/08	WSD	0.05		
4-Ethyl Toluene	PPBv	0.18	07/22/08	WSD	0.05		
n-Heptane	PPBv	3.1	07/22/08	WSD	0.05		
Hexachlorobutadiene	PPBv	ND	07/22/08	WSD	0.10		
Hexane	PPBv	3.9	07/22/08	WSD	0.05		
2-Hexanone	PPBv	ND	07/22/08	WSD	0.05		
Isopropanol	PPBv	0.30	07/22/08	WSD	0.05		
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	07/22/08	WSD	0.05		
Methylene Chloride	PPBv	0.66	07/22/08	WSD	0.05		
4-Methyl-2-Pentanone (MIBK)	PPBv	ND	07/22/08	WSD	0.05		
Propene	PPBv	9.0	07/22/08	WSD	0.05		
Styrene	PPBv	0.07	07/22/08	WSD	0.05		
1,1,2,2-Tetrachloroethane	PPBv	ND	07/22/08	WSD	0.05		
Tetrachloroethylene	PPBv	0.19	07/22/08	WSD	0.05		
Tetrahydrofuran	PPBv	ND	07/22/08	WSD	0.05		
Toluene	PPBv	21	07/22/08	WSD	0.05		
1,2,4-Trichlorobenzene	PPBv	ND	07/22/08	WSD	0.05		
1,1,1-Trichloroethane	PPBv	2.4	07/22/08	WSD	0.05		
1,1,2-Trichloroethane	PPBv	ND	07/22/08	WSD	0.05		
Trichloroethylene	PPBv	ND	07/22/08	WSD	0.05		
Trichlorofluoromethane (Freon 11)	PPBv	2.0	07/22/08	WSD	0.05		
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	0.23	07/22/08	WSD	0.05		
1,2,4-Trimethylbenzene	PPBv	1.0	07/22/08	WSD	0.05		
1,3,5-Trimethylbenzene	PPBv	0.38	07/22/08	WSD	0.05		
Vinyl Acetate	PPBv	ND	07/22/08	WSD	0.20		
Vinyl Chloride	PPBv	ND	07/22/08	WSD	0.05		

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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-4

Sample ID: 08B27500

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

7/29/2008

Page 15 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
m/p-Xylene	PPBv	3.1	07/22/08	WSD	0.10		
o-Xylene	PPBv	1.8	07/22/08	WSD	0.05		

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

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‡ = 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.

JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-5

Sample ID: 08B27501

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

7/29/2008

Page 16 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	PPBv	66	07/22/08	WSD	0.05		
Benzene	PPBv	3.7	07/22/08	WSD	0.05		
Benzyl Chloride	PPBv	ND	07/22/08	WSD	0.05		
Bromodichloromethane	PPBv	ND	07/22/08	WSD	0.05		
Bromoform	PPBv	ND	07/22/08	WSD	0.05		
Bromomethane	PPBv	ND	07/22/08	WSD	0.05		
1,3-Butadiene	PPBv	ND	07/22/08	WSD	0.05		
2-Butanone (MEK)	PPBv	5.6	07/22/08	WSD	0.05		
Carbon Disulfide	PPBv	9.0	07/22/08	WSD	0.05		
Carbon Tetrachloride	PPBv	ND	07/22/08	WSD	0.05		
Chlorobenzene	PPBv	ND	07/22/08	WSD	0.05		
Chlorodibromomethane	PPBv	ND	07/22/08	WSD	0.05		
Chloroethane	PPBv	ND	07/22/08	WSD	0.05		
Chloroform	PPBv	0.16	07/22/08	WSD	0.05		
Chloromethane	PPBv	ND	07/22/08	WSD	0.05		
Cyclohexane	PPBv	ND	07/22/08	WSD	0.05		
1,2-Dibromoethane	PPBv	ND	07/22/08	WSD	0.05		
1,2-Dichlorobenzene	PPBv	ND	07/22/08	WSD	0.05		
1,3-Dichlorobenzene	PPBv	ND	07/22/08	WSD	0.05		
1,4-Dichlorobenzene	PPBv	0.20	07/22/08	WSD	0.05		
Dichlorodifluoromethane	PPBv	4.2	07/22/08	WSD	0.05		
1,1-Dichloroethane	PPBv	ND	07/22/08	WSD	0.05		
1,2-Dichloroethane	PPBv	ND	07/22/08	WSD	0.05		
1,1-Dichloroethylene	PPBv	ND	07/22/08	WSD	0.05		
cis-1,2-Dichloroethylene	PPBv	ND	07/22/08	WSD	0.05		
t-1,2-Dichloroethylene	PPBv	ND	07/22/08	WSD	0.05		
1,2-Dichloropropane	PPBv	ND	07/22/08	WSD	0.05		
cis-1,3-Dichloropropene	PPBv	ND	07/22/08	WSD	0.05		
trans-1,3-Dichloropropene	PPBv	ND	07/22/08	WSD	0.05		

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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-5

7/29/2008

Page 17 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

Sample ID: 08B27501

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	07/22/08	WSD	0.05		
Ethanol	PPBv	7.6	07/22/08	WSD	0.05		
Ethyl Acetate	PPBv	ND	07/22/08	WSD	0.10		
Ethylbenzene	PPBv	1.4	07/22/08	WSD	0.05		
4-Ethyl Toluene	PPBv	0.33	07/22/08	WSD	0.05		
n-Heptane	PPBv	11	07/22/08	WSD	0.05		
Hexachlorobutadiene	PPBv	ND	07/22/08	WSD	0.10		
Hexane	PPBv	17	07/22/08	WSD	0.05		
2-Hexanone	PPBv	ND	07/22/08	WSD	0.05		
Isopropanol	PPBv	1.1	07/22/08	WSD	0.05		
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	07/22/08	WSD	0.05		
Methylene Chloride	PPBv	1.4	07/22/08	WSD	0.05		
4-Methyl-2-Pentanone (MIBK)	PPBv	0.26	07/22/08	WSD	0.05		
Propene	PPBv	ND	07/22/08	WSD	0.10		
Styrene	PPBv	0.11	07/22/08	WSD	0.05		
1,1,2,2-Tetrachloroethane	PPBv	ND	07/22/08	WSD	0.05		
Tetrachloroethylene	PPBv	0.67	07/22/08	WSD	0.05		
Tetrahydrofuran	PPBv	ND	07/22/08	WSD	0.05		
Toluene	PPBv	35	07/22/08	WSD	0.05		
1,2,4-Trichlorobenzene	PPBv	ND	07/22/08	WSD	0.05		
1,1,1-Trichloroethane	PPBv	0.92	07/22/08	WSD	0.05		
1,1,2-Trichloroethane	PPBv	ND	07/22/08	WSD	0.05		
Trichloroethylene	PPBv	ND	07/22/08	WSD	0.05		
Trichlorofluoromethane (Freon 11)	PPBv	3.8	07/22/08	WSD	0.05		
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	0.19	07/22/08	WSD	0.05		
1,2,4-Trimethylbenzene	PPBv	1.2	07/22/08	WSD	0.05		
1,3,5-Trimethylbenzene	PPBv	0.52	07/22/08	WSD	0.05		
Vinyl Acetate	PPBv	ND	07/22/08	WSD	0.20		
Vinyl Chloride	PPBv	ND	07/22/08	WSD	0.05		

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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-5

Sample ID: 08B27501

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

7/29/2008

Page 18 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
m/p-Xylene	PPBv	5.0	07/22/08	WSD	0.10		
o-Xylene	PPBv	2.2	07/22/08	WSD	0.05		

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

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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

7/29/2008

Page 19 of 37

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: AA-1

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

Sample ID: *08B27502

‡Sampled: 7/17/2008

Ambient Air

Sample Matrix: AIR

Sample Medium: SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	ug/m3	22	07/21/08	WSD	0.09		
Benzene	ug/m3	2.9	07/21/08	WSD	0.12		
Benzyl Chloride	ug/m3	ND	07/21/08	WSD	0.19		
Bromodichloromethane	ug/m3	ND	07/21/08	WSD	0.24		
Bromoform	ug/m3	ND	07/21/08	WSD	0.36		
Bromomethane	ug/m3	ND	07/21/08	WSD	0.14		
1,3-Butadiene	ug/m3	ND	07/21/08	WSD	0.08		
2-Butanone (MEK)	ug/m3	4.1	07/21/08	WSD	0.17		
Carbon Disulfide	ug/m3	ND	07/21/08	WSD	0.12		
Carbon Tetrachloride	ug/m3	0.56	07/21/08	WSD	0.22		
Chlorobenzene	ug/m3	ND	07/21/08	WSD	0.17		
Chlorodibromomethane	ug/m3	ND	07/21/08	WSD	0.31		
Chloroethane	ug/m3	ND	07/21/08	WSD	0.10		
Chloroform	ug/m3	ND	07/21/08	WSD	0.17		
Chloromethane	ug/m3	1.0	07/21/08	WSD	0.07		
Cyclohexane	ug/m3	0.99	07/21/08	WSD	0.12		
1,2-Dibromoethane	ug/m3	ND	07/21/08	WSD	0.27		
1,2-Dichlorobenzene	ug/m3	ND	07/21/08	WSD	0.21		
1,3-Dichlorobenzene	ug/m3	ND	07/21/08	WSD	0.21		
1,4-Dichlorobenzene	ug/m3	ND	07/21/08	WSD	0.21		
Dichlorodifluoromethane	ug/m3	3.0	07/21/08	WSD	0.18		
1,1-Dichloroethane	ug/m3	ND	07/21/08	WSD	0.14		
1,2-Dichloroethane	ug/m3	ND	07/21/08	WSD	0.14		
1,1-Dichloroethylene	ug/m3	ND	07/21/08	WSD	0.14		
cis-1,2-Dichloroethylene	ug/m3	ND	07/21/08	WSD	0.14		
t-1,2-Dichloroethylene	ug/m3	ND	07/21/08	WSD	0.14		
1,2-Dichloropropane	ug/m3	ND	07/21/08	WSD	0.17		
cis-1,3-Dichloropropene	ug/m3	ND	07/21/08	WSD	0.16		
trans-1,3-Dichloropropene	ug/m3	ND	07/21/08	WSD	0.16		

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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: AA-1

7/29/2008

Page 20 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

Sample ID: *08B27502

‡Sampled: 7/17/2008

Ambient Air

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	07/21/08	WSD	0.25		
Ethanol	ug/m3	80	07/21/08	WSD	0.07		
Ethyl Acetate	ug/m3	ND	07/21/08	WSD	0.26		
Ethylbenzene	ug/m3	3.7	07/21/08	WSD	0.16		
4-Ethyl Toluene	ug/m3	2.4	07/21/08	WSD	0.18		
n-Heptane	ug/m3	2.1	07/21/08	WSD	0.14		
Hexachlorobutadiene	ug/m3	ND	07/21/08	WSD	0.75		
Hexane	ug/m3	8.3	07/21/08	WSD	0.13		
2-Hexanone	ug/m3	ND	07/21/08	WSD	0.14		
Isopropanol	ug/m3	1.8	07/21/08	WSD	0.09		
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	07/21/08	WSD	0.13		
Methylene Chloride	ug/m3	3.6	07/21/08	WSD	0.12		
4-Methyl-2-Pentanone (MIBK)	ug/m3	0.44	07/21/08	WSD	0.14		
Propene	ug/m3	ND	07/21/08	WSD	0.13		
Styrene	ug/m3	ND	07/21/08	WSD	0.15		
1,1,2,2-Tetrachloroethane	ug/m3	ND	07/21/08	WSD	0.24		
Tetrachloroethylene	ug/m3	ND	07/21/08	WSD	0.24		
Tetrahydrofuran	ug/m3	0.23	07/21/08	WSD	0.11		
Toluene	ug/m3	13	07/21/08	WSD	0.14		
1,2,4-Trichlorobenzene	ug/m3	ND	07/21/08	WSD	0.26		
1,1,1-Trichloroethane	ug/m3	ND	07/21/08	WSD	0.19		
1,1,2-Trichloroethane	ug/m3	ND	07/21/08	WSD	0.19		
Trichloroethylene	ug/m3	ND	07/21/08	WSD	0.19		
Trichlorofluoromethane	ug/m3	2.2	07/21/08	WSD	0.20		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	0.71	07/21/08	WSD	0.27		
1,2,4-Trimethylbenzene	ug/m3	9.0	07/21/08	WSD	0.18		
1,3,5-Trimethylbenzene	ug/m3	2.6	07/21/08	WSD	0.18		
Vinyl Acetate	ug/m3	ND	07/21/08	WSD	0.50		
Vinyl Chloride	ug/m3	ND	07/21/08	WSD	0.10		

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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: AA-1

Sample ID: *08B27502

‡Sampled: 7/17/2008

Ambient Air

Sample Matrix: AIR

Sample Medium: SUMMA

7/29/2008

Page 21 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
m/p-Xylene	ug/m3	13	07/21/08	WSD	0.31		
o-Xylene	ug/m3	5.5	07/21/08	WSD	0.16		

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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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-1

7/29/2008

Page 22 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

Sample ID: 08B27497

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	ug/m3	20	07/22/08	WSD	0.12		
Benzene	ug/m3	6.5	07/22/08	WSD	0.16		
Benzyl Chloride	ug/m3	ND	07/22/08	WSD	0.26		
Bromodichloromethane	ug/m3	ND	07/22/08	WSD	0.33		
Bromoform	ug/m3	ND	07/22/08	WSD	0.51		
Bromomethane	ug/m3	ND	07/22/08	WSD	0.19		
1,3-Butadiene	ug/m3	ND	07/22/08	WSD	0.11		
2-Butanone (MEK)	ug/m3	6.3	07/22/08	WSD	0.23		
Carbon Disulfide	ug/m3	14	07/22/08	WSD	0.16		
Carbon Tetrachloride	ug/m3	ND	07/22/08	WSD	0.31		
Chlorobenzene	ug/m3	ND	07/22/08	WSD	0.23		
Chlorodibromomethane	ug/m3	ND	07/22/08	WSD	0.43		
Chloroethane	ug/m3	ND	07/22/08	WSD	0.13		
Chloroform	ug/m3	ND	07/22/08	WSD	0.24		
Chloromethane	ug/m3	0.19	07/22/08	WSD	0.10		
Cyclohexane	ug/m3	2.6	07/22/08	WSD	0.17		
1,2-Dibromoethane	ug/m3	ND	07/22/08	WSD	0.38		
1,2-Dichlorobenzene	ug/m3	ND	07/22/08	WSD	0.30		
1,3-Dichlorobenzene	ug/m3	ND	07/22/08	WSD	0.30		
1,4-Dichlorobenzene	ug/m3	0.42	07/22/08	WSD	0.30		
Dichlorodifluoromethane	ug/m3	7.1	07/22/08	WSD	0.25		
1,1-Dichloroethane	ug/m3	ND	07/22/08	WSD	0.20		
1,2-Dichloroethane	ug/m3	ND	07/22/08	WSD	0.20		
1,1-Dichloroethylene	ug/m3	ND	07/22/08	WSD	0.20		
cis-1,2-Dichloroethylene	ug/m3	ND	07/22/08	WSD	0.20		
t-1,2-Dichloroethylene	ug/m3	ND	07/22/08	WSD	0.20		
1,2-Dichloropropane	ug/m3	ND	07/22/08	WSD	0.23		
cis-1,3-Dichloropropene	ug/m3	ND	07/22/08	WSD	0.22		
trans-1,3-Dichloropropene	ug/m3	ND	07/22/08	WSD	0.22		

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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-1

7/29/2008

Page 23 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

Sample ID: 08B27497

‡Sampled: 7/17/2008

Soil Vapor

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	07/22/08	WSD	0.35		
Ethanol	ug/m3	14	07/22/08	WSD	0.09		
Ethyl Acetate	ug/m3	ND	07/22/08	WSD	0.37		
Ethylbenzene	ug/m3	5.4	07/22/08	WSD	0.22		
4-Ethyl Toluene	ug/m3	3.1	07/22/08	WSD	0.25		
n-Heptane	ug/m3	48	07/22/08	WSD	0.20		
Hexachlorobutadiene	ug/m3	ND	07/22/08	WSD	1.1		
Hexane	ug/m3	90	07/22/08	WSD	0.18		
2-Hexanone	ug/m3	ND	07/22/08	WSD	0.20		
Isopropanol	ug/m3	1.8	07/22/08	WSD	0.12		
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	07/22/08	WSD	0.18		
Methylene Chloride	ug/m3	2.6	07/22/08	WSD	0.17		
4-Methyl-2-Pentanone (MIBK)	ug/m3	ND	07/22/08	WSD	0.20		
Propene	ug/m3	ND	07/22/08	WSD	0.18		
Styrene	ug/m3	0.41	07/22/08	WSD	0.21		
1,1,2,2-Tetrachloroethane	ug/m3	ND	07/22/08	WSD	0.34		
Tetrachloroethylene	ug/m3	2.7	07/22/08	WSD	0.34		
Tetrahydrofuran	ug/m3	ND	07/22/08	WSD	0.15		
Toluene	ug/m3	23	07/22/08	WSD	0.19		
1,2,4-Trichlorobenzene	ug/m3	ND	07/22/08	WSD	0.37		
1,1,1-Trichloroethane	ug/m3	1.1	07/22/08	WSD	0.27		
1,1,2-Trichloroethane	ug/m3	ND	07/22/08	WSD	0.27		
Trichloroethylene	ug/m3	0.88	07/22/08	WSD	0.27		
Trichlorofluoromethane	ug/m3	2.3	07/22/08	WSD	0.28		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.2	07/22/08	WSD	0.38		
1,2,4-Trimethylbenzene	ug/m3	12	07/22/08	WSD	0.25		
1,3,5-Trimethylbenzene	ug/m3	3.2	07/22/08	WSD	0.25		
Vinyl Acetate	ug/m3	ND	07/22/08	WSD	0.71		
Vinyl Chloride	ug/m3	ND	07/22/08	WSD	0.13		

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

JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-1

Sample ID: 08B27497

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

7/29/2008

Page 24 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
m/p-Xylene	ug/m3	17	07/22/08	WSD	0.43		
o-Xylene	ug/m3	8.5	07/22/08	WSD	0.22		

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

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NM = Not Measured

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‡ = 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.

JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-2

Sample ID: 08B27498

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

7/29/2008

Page 25 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	ug/m3	240	07/22/08	WSD	0.12		
Benzene	ug/m3	19	07/22/08	WSD	0.16		
Benzyl Chloride	ug/m3	ND	07/22/08	WSD	0.26		
Bromodichloromethane	ug/m3	ND	07/22/08	WSD	0.33		
Bromoform	ug/m3	ND	07/22/08	WSD	0.51		
Bromomethane	ug/m3	ND	07/22/08	WSD	0.19		
1,3-Butadiene	ug/m3	ND	07/22/08	WSD	0.11		
2-Butanone (MEK)	ug/m3	31	07/22/08	WSD	0.23		
Carbon Disulfide	ug/m3	71	07/22/08	WSD	0.16		
Carbon Tetrachloride	ug/m3	ND	07/22/08	WSD	0.31		
Chlorobenzene	ug/m3	ND	07/22/08	WSD	0.23		
Chlorodibromomethane	ug/m3	ND	07/22/08	WSD	0.43		
Chloroethane	ug/m3	ND	07/22/08	WSD	0.13		
Chloroform	ug/m3	ND	07/22/08	WSD	0.24		
Chloromethane	ug/m3	0.50	07/22/08	WSD	0.10		
Cyclohexane	ug/m3	8.0	07/22/08	WSD	0.17		
1,2-Dibromoethane	ug/m3	ND	07/22/08	WSD	0.38		
1,2-Dichlorobenzene	ug/m3	ND	07/22/08	WSD	0.30		
1,3-Dichlorobenzene	ug/m3	ND	07/22/08	WSD	0.30		
1,4-Dichlorobenzene	ug/m3	ND	07/22/08	WSD	0.30		
Dichlorodifluoromethane	ug/m3	5.0	07/22/08	WSD	0.25		
1,1-Dichloroethane	ug/m3	20	07/22/08	WSD	0.20		
1,2-Dichloroethane	ug/m3	ND	07/22/08	WSD	0.20		
1,1-Dichloroethylene	ug/m3	ND	07/22/08	WSD	0.20		
cis-1,2-Dichloroethylene	ug/m3	ND	07/22/08	WSD	0.20		
t-1,2-Dichloroethylene	ug/m3	ND	07/22/08	WSD	0.20		
1,2-Dichloropropane	ug/m3	ND	07/22/08	WSD	0.23		
cis-1,3-Dichloropropene	ug/m3	ND	07/22/08	WSD	0.22		
trans-1,3-Dichloropropene	ug/m3	ND	07/22/08	WSD	0.22		

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

JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-2

7/29/2008

Page 26 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

Sample ID: 08B27498

‡Sampled: 7/17/2008

Soil Vapor

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	07/22/08	WSD	0.35		
Ethanol	ug/m3	30	07/22/08	WSD	0.09		
Ethyl Acetate	ug/m3	ND	07/22/08	WSD	0.37		
Ethylbenzene	ug/m3	16	07/22/08	WSD	0.22		
4-Ethyl Toluene	ug/m3	5.2	07/22/08	WSD	0.25		
n-Heptane	ug/m3	140	07/22/08	WSD	0.20		
Hexachlorobutadiene	ug/m3	ND	07/22/08	WSD	1.1		
Hexane	ug/m3	290	07/22/08	WSD	0.18		
2-Hexanone	ug/m3	ND	07/22/08	WSD	0.20		
Isopropanol	ug/m3	5.3	07/22/08	WSD	0.12		
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	07/22/08	WSD	0.18		
Methylene Chloride	ug/m3	2.4	07/22/08	WSD	0.17		
4-Methyl-2-Pentanone (MIBK)	ug/m3	ND	07/22/08	WSD	0.20		
Propene	ug/m3	ND	07/22/08	WSD	0.18		
Styrene	ug/m3	0.79	07/22/08	WSD	0.21		
1,1,2,2-Tetrachloroethane	ug/m3	ND	07/22/08	WSD	0.34		
Tetrachloroethylene	ug/m3	5.7	07/22/08	WSD	0.34		
Tetrahydrofuran	ug/m3	ND	07/22/08	WSD	0.15		
Toluene	ug/m3	350	07/22/08	WSD	0.19		
1,2,4-Trichlorobenzene	ug/m3	ND	07/22/08	WSD	0.37		
1,1,1-Trichloroethane	ug/m3	1100	07/22/08	WSD	0.27		
1,1,2-Trichloroethane	ug/m3	ND	07/22/08	WSD	0.27		
Trichloroethylene	ug/m3	0.40	07/22/08	WSD	0.27		
Trichlorofluoromethane	ug/m3	1.9	07/22/08	WSD	0.28		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	0.87	07/22/08	WSD	0.38		
1,2,4-Trimethylbenzene	ug/m3	17	07/22/08	WSD	0.25		
1,3,5-Trimethylbenzene	ug/m3	5.4	07/22/08	WSD	0.25		
Vinyl Acetate	ug/m3	ND	07/22/08	WSD	0.71		
Vinyl Chloride	ug/m3	ND	07/22/08	WSD	0.13		

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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-2

Sample ID: 08B27498

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

7/29/2008

Page 27 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
m/p-Xylene	ug/m3	48	07/22/08	WSD	0.43		
o-Xylene	ug/m3	21	07/22/08	WSD	0.22		

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

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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-3

7/29/2008

Page 28 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

Sample ID: 08B27499

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	ug/m3	29	07/22/08	WSD	0.12		
Benzene	ug/m3	8.8	07/22/08	WSD	0.16		
Benzyl Chloride	ug/m3	ND	07/22/08	WSD	0.26		
Bromodichloromethane	ug/m3	ND	07/22/08	WSD	0.33		
Bromoform	ug/m3	ND	07/22/08	WSD	0.51		
Bromomethane	ug/m3	ND	07/22/08	WSD	0.19		
1,3-Butadiene	ug/m3	ND	07/22/08	WSD	0.11		
2-Butanone (MEK)	ug/m3	14	07/22/08	WSD	0.23		
Carbon Disulfide	ug/m3	19	07/22/08	WSD	0.16		
Carbon Tetrachloride	ug/m3	0.82	07/22/08	WSD	0.31		
Chlorobenzene	ug/m3	ND	07/22/08	WSD	0.23		
Chlorodibromomethane	ug/m3	ND	07/22/08	WSD	0.43		
Chloroethane	ug/m3	ND	07/22/08	WSD	0.13		
Chloroform	ug/m3	ND	07/22/08	WSD	0.24		
Chloromethane	ug/m3	0.11	07/22/08	WSD	0.10		
Cyclohexane	ug/m3	ND	07/22/08	WSD	0.17		
1,2-Dibromoethane	ug/m3	ND	07/22/08	WSD	0.38		
1,2-Dichlorobenzene	ug/m3	ND	07/22/08	WSD	0.30		
1,3-Dichlorobenzene	ug/m3	ND	07/22/08	WSD	0.30		
1,4-Dichlorobenzene	ug/m3	1.0	07/22/08	WSD	0.30		
Dichlorodifluoromethane	ug/m3	4.1	07/22/08	WSD	0.25		
1,1-Dichloroethane	ug/m3	ND	07/22/08	WSD	0.20		
1,2-Dichloroethane	ug/m3	ND	07/22/08	WSD	0.20		
1,1-Dichloroethylene	ug/m3	ND	07/22/08	WSD	0.20		
cis-1,2-Dichloroethylene	ug/m3	ND	07/22/08	WSD	0.20		
t-1,2-Dichloroethylene	ug/m3	ND	07/22/08	WSD	0.20		
1,2-Dichloropropane	ug/m3	ND	07/22/08	WSD	0.23		
cis-1,3-Dichloropropene	ug/m3	ND	07/22/08	WSD	0.22		
trans-1,3-Dichloropropene	ug/m3	ND	07/22/08	WSD	0.22		

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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-3

Sample ID: 08B27499

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

7/29/2008

Page 29 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	07/22/08	WSD	0.35		
Ethanol	ug/m3	30	07/22/08	WSD	0.09		
Ethyl Acetate	ug/m3	ND	07/22/08	WSD	0.37		
Ethylbenzene	ug/m3	8.6	07/22/08	WSD	0.22		
4-Ethyl Toluene	ug/m3	3.3	07/22/08	WSD	0.25		
n-Heptane	ug/m3	300	07/22/08	WSD	0.20		
Hexachlorobutadiene	ug/m3	ND	07/22/08	WSD	1.1		
Hexane	ug/m3	380	07/22/08	WSD	0.18		
2-Hexanone	ug/m3	ND	07/22/08	WSD	0.20		
Isopropanol	ug/m3	1.8	07/22/08	WSD	0.12		
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	07/22/08	WSD	0.18		
Methylene Chloride	ug/m3	2.1	07/22/08	WSD	0.17		
4-Methyl-2-Pentanone (MIBK)	ug/m3	ND	07/22/08	WSD	0.20		
Propene	ug/m3	ND	07/22/08	WSD	0.18		
Styrene	ug/m3	0.54	07/22/08	WSD	0.21		
1,1,2,2-Tetrachloroethane	ug/m3	ND	07/22/08	WSD	0.34		
Tetrachloroethylene	ug/m3	0.84	07/22/08	WSD	0.34		
Tetrahydrofuran	ug/m3	ND	07/22/08	WSD	0.15		
Toluene	ug/m3	41	07/22/08	WSD	0.19		
1,2,4-Trichlorobenzene	ug/m3	ND	07/22/08	WSD	0.37		
1,1,1-Trichloroethane	ug/m3	54	07/22/08	WSD	0.27		
1,1,2-Trichloroethane	ug/m3	ND	07/22/08	WSD	0.27		
Trichloroethylene	ug/m3	ND	07/22/08	WSD	0.27		
Trichlorofluoromethane	ug/m3	15	07/22/08	WSD	0.28		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	2.0	07/22/08	WSD	0.38		
1,2,4-Trimethylbenzene	ug/m3	10	07/22/08	WSD	0.25		
1,3,5-Trimethylbenzene	ug/m3	3.6	07/22/08	WSD	0.25		
Vinyl Acetate	ug/m3	ND	07/22/08	WSD	0.71		
Vinyl Chloride	ug/m3	ND	07/22/08	WSD	0.13		

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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-3

Sample ID: 08B27499

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

7/29/2008

Page 30 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
m/p-Xylene	ug/m3	18	07/22/08	WSD	0.43		
o-Xylene	ug/m3	8.6	07/22/08	WSD	0.22		

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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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-4

7/29/2008

Page 31 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

Sample ID: 08B27500

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	ug/m3	20	07/22/08	WSD	0.12		
Benzene	ug/m3	8.1	07/22/08	WSD	0.16		
Benzyl Chloride	ug/m3	ND	07/22/08	WSD	0.26		
Bromodichloromethane	ug/m3	ND	07/22/08	WSD	0.33		
Bromoform	ug/m3	ND	07/22/08	WSD	0.51		
Bromomethane	ug/m3	ND	07/22/08	WSD	0.19		
1,3-Butadiene	ug/m3	ND	07/22/08	WSD	0.11		
2-Butanone (MEK)	ug/m3	4.2	07/22/08	WSD	0.23		
Carbon Disulfide	ug/m3	2.7	07/22/08	WSD	0.16		
Carbon Tetrachloride	ug/m3	ND	07/22/08	WSD	0.31		
Chlorobenzene	ug/m3	ND	07/22/08	WSD	0.23		
Chlorodibromomethane	ug/m3	ND	07/22/08	WSD	0.43		
Chloroethane	ug/m3	ND	07/22/08	WSD	0.13		
Chloroform	ug/m3	ND	07/22/08	WSD	0.24		
Chloromethane	ug/m3	ND	07/22/08	WSD	0.10		
Cyclohexane	ug/m3	8.6	07/22/08	WSD	0.17		
1,2-Dibromoethane	ug/m3	ND	07/22/08	WSD	0.38		
1,2-Dichlorobenzene	ug/m3	ND	07/22/08	WSD	0.30		
1,3-Dichlorobenzene	ug/m3	ND	07/22/08	WSD	0.30		
1,4-Dichlorobenzene	ug/m3	1.2	07/22/08	WSD	0.30		
Dichlorodifluoromethane	ug/m3	3.8	07/22/08	WSD	0.25		
1,1-Dichloroethane	ug/m3	ND	07/22/08	WSD	0.20		
1,2-Dichloroethane	ug/m3	ND	07/22/08	WSD	0.20		
1,1-Dichloroethylene	ug/m3	ND	07/22/08	WSD	0.20		
cis-1,2-Dichloroethylene	ug/m3	ND	07/22/08	WSD	0.20		
t-1,2-Dichloroethylene	ug/m3	ND	07/22/08	WSD	0.20		
1,2-Dichloropropane	ug/m3	ND	07/22/08	WSD	0.23		
cis-1,3-Dichloropropene	ug/m3	ND	07/22/08	WSD	0.22		
trans-1,3-Dichloropropene	ug/m3	ND	07/22/08	WSD	0.22		

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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-4

7/29/2008

Page 32 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

Sample ID: 08B27500

‡Sampled: 7/17/2008

Soil Vapor

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	07/22/08	WSD	0.35		
Ethanol	ug/m3	14	07/22/08	WSD	0.09		
Ethyl Acetate	ug/m3	ND	07/22/08	WSD	0.37		
Ethylbenzene	ug/m3	2.9	07/22/08	WSD	0.22		
4-Ethyl Toluene	ug/m3	0.88	07/22/08	WSD	0.25		
n-Heptane	ug/m3	13	07/22/08	WSD	0.20		
Hexachlorobutadiene	ug/m3	ND	07/22/08	WSD	1.1		
Hexane	ug/m3	14	07/22/08	WSD	0.18		
2-Hexanone	ug/m3	ND	07/22/08	WSD	0.20		
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	07/22/08	WSD	0.18		
Methylene Chloride	ug/m3	2.3	07/22/08	WSD	0.17		
4-Methyl-2-Pentanone (MIBK)	ug/m3	ND	07/22/08	WSD	0.20		
Propene	ug/m3	16	07/22/08	WSD	0.09		
Styrene	ug/m3	0.28	07/22/08	WSD	0.21		
1,1,2,2-Tetrachloroethane	ug/m3	ND	07/22/08	WSD	0.34		
Tetrachloroethylene	ug/m3	1.3	07/22/08	WSD	0.34		
Tetrahydrofuran	ug/m3	ND	07/22/08	WSD	0.15		
Toluene	ug/m3	80	07/22/08	WSD	0.19		
1,2,4-Trichlorobenzene	ug/m3	ND	07/22/08	WSD	0.37		
1,1,1-Trichloroethane	ug/m3	13	07/22/08	WSD	0.27		
1,1,2-Trichloroethane	ug/m3	ND	07/22/08	WSD	0.27		
Trichloroethylene	ug/m3	ND	07/22/08	WSD	0.27		
Trichlorofluoromethane	ug/m3	11	07/22/08	WSD	0.28		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.7	07/22/08	WSD	0.38		
1,2,4-Trimethylbenzene	ug/m3	5.1	07/22/08	WSD	0.25		
1,3,5-Trimethylbenzene	ug/m3	1.9	07/22/08	WSD	0.25		
Vinyl Acetate	ug/m3	ND	07/22/08	WSD	0.71		
Vinyl Chloride	ug/m3	ND	07/22/08	WSD	0.13		
m/p-Xylene	ug/m3	13	07/22/08	WSD	0.43		

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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

JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY
43 BRITISH AMERICAN BOULEVARD
LATHAM, NY 12110-1402

7/29/2008

Page 33 of 37

Purchase Order No.: 0266362

Project Number: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

LIMS-BAT #: LIMI-17841

Date Received: 7/18/2008

Job Number: 0266362

Field Sample #: SV-4

Sample ID: 08B27500

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
o-Xylene	ug/m3	7.9	07/22/08	WSD	0.22		

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

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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.

JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-5

7/29/2008

Page 34 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

Sample ID: 08B27501

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	ug/m3	160	07/22/08	WSD	0.12		
Benzene	ug/m3	12	07/22/08	WSD	0.16		
Benzyl Chloride	ug/m3	ND	07/22/08	WSD	0.26		
Bromodichloromethane	ug/m3	ND	07/22/08	WSD	0.33		
Bromoform	ug/m3	ND	07/22/08	WSD	0.51		
Bromomethane	ug/m3	ND	07/22/08	WSD	0.19		
1,3-Butadiene	ug/m3	ND	07/22/08	WSD	0.11		
2-Butanone (MEK)	ug/m3	17	07/22/08	WSD	0.23		
Carbon Disulfide	ug/m3	28	07/22/08	WSD	0.16		
Carbon Tetrachloride	ug/m3	ND	07/22/08	WSD	0.31		
Chlorobenzene	ug/m3	ND	07/22/08	WSD	0.23		
Chlorodibromomethane	ug/m3	ND	07/22/08	WSD	0.43		
Chloroethane	ug/m3	ND	07/22/08	WSD	0.13		
Chloroform	ug/m3	0.79	07/22/08	WSD	0.24		
Chloromethane	ug/m3	ND	07/22/08	WSD	0.10		
Cyclohexane	ug/m3	ND	07/22/08	WSD	0.17		
1,2-Dibromoethane	ug/m3	ND	07/22/08	WSD	0.38		
1,2-Dichlorobenzene	ug/m3	ND	07/22/08	WSD	0.30		
1,3-Dichlorobenzene	ug/m3	ND	07/22/08	WSD	0.30		
1,4-Dichlorobenzene	ug/m3	1.2	07/22/08	WSD	0.30		
Dichlorodifluoromethane	ug/m3	21	07/22/08	WSD	0.25		
1,1-Dichloroethane	ug/m3	ND	07/22/08	WSD	0.20		
1,2-Dichloroethane	ug/m3	ND	07/22/08	WSD	0.20		
1,1-Dichloroethylene	ug/m3	ND	07/22/08	WSD	0.20		
cis-1,2-Dichloroethylene	ug/m3	ND	07/22/08	WSD	0.20		
t-1,2-Dichloroethylene	ug/m3	ND	07/22/08	WSD	0.20		
1,2-Dichloropropane	ug/m3	ND	07/22/08	WSD	0.23		
cis-1,3-Dichloropropene	ug/m3	ND	07/22/08	WSD	0.22		
trans-1,3-Dichloropropene	ug/m3	ND	07/22/08	WSD	0.22		

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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.

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

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

JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-5

Sample ID: 08B27501

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

7/29/2008

Page 35 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	07/22/08	WSD	0.35		
Ethanol	ug/m3	14	07/22/08	WSD	0.09		
Ethyl Acetate	ug/m3	ND	07/22/08	WSD	0.37		
Ethylbenzene	ug/m3	6.0	07/22/08	WSD	0.22		
4-Ethyl Toluene	ug/m3	1.6	07/22/08	WSD	0.25		
n-Heptane	ug/m3	47	07/22/08	WSD	0.20		
Hexachlorobutadiene	ug/m3	ND	07/22/08	WSD	1.1		
Hexane	ug/m3	60	07/22/08	WSD	0.18		
2-Hexanone	ug/m3	ND	07/22/08	WSD	0.20		
Isopropanol	ug/m3	2.7	07/22/08	WSD	0.12		
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	07/22/08	WSD	0.18		
Methylene Chloride	ug/m3	4.9	07/22/08	WSD	0.17		
4-Methyl-2-Pentanone (MIBK)	ug/m3	1.1	07/22/08	WSD	0.20		
Propene	ug/m3	ND	07/22/08	WSD	0.18		
Styrene	ug/m3	0.45	07/22/08	WSD	0.21		
1,1,2,2-Tetrachloroethane	ug/m3	ND	07/22/08	WSD	0.34		
Tetrachloroethylene	ug/m3	4.6	07/22/08	WSD	0.34		
Tetrahydrofuran	ug/m3	ND	07/22/08	WSD	0.15		
Toluene	ug/m3	130	07/22/08	WSD	0.19		
1,2,4-Trichlorobenzene	ug/m3	ND	07/22/08	WSD	0.37		
1,1,1-Trichloroethane	ug/m3	5.0	07/22/08	WSD	0.27		
1,1,2-Trichloroethane	ug/m3	ND	07/22/08	WSD	0.27		
Trichloroethylene	ug/m3	ND	07/22/08	WSD	0.27		
Trichlorofluoromethane	ug/m3	21	07/22/08	WSD	0.28		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.4	07/22/08	WSD	0.38		
1,2,4-Trimethylbenzene	ug/m3	6.1	07/22/08	WSD	0.25		
1,3,5-Trimethylbenzene	ug/m3	2.5	07/22/08	WSD	0.25		
Vinyl Acetate	ug/m3	ND	07/22/08	WSD	0.71		
Vinyl Chloride	ug/m3	ND	07/22/08	WSD	0.13		

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JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

Field Sample #: SV-5

Sample ID: 08B27501

‡Sampled: 7/17/2008

Soil Vapor

Sample Matrix: AIR

Sample Medium: SUMMA

7/29/2008

Page 36 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
m/p-Xylene	ug/m3	22	07/22/08	WSD	0.43		
o-Xylene	ug/m3	9.7	07/22/08	WSD	0.22		

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

JEREMY WYCKOFF

MALCOLM PIRNIE - LATHAM, NY

43 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110-1402

Purchase Order No.: 0266362

Project Location: OWEGO-NY-NYSDEC TIOGA CASTINGS

Date Received: 7/18/2008

The following notes were attached to the reported analysis :

7/29/2008

Page 37 of 37

Project Number: 0266362

LIMS-BAT #: LIMIT-17841

Job Number: 0266362

Sample ID: * 08B27502

Analysis: Ethanol

REPORTED RESULT IS ESTIMATED. VALUE REPORTED OVER VERIFIED CALIBRATION RANGE.

** 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: 7/29/2008

Lims Bat # : LIMIT-17841

Page 1 of 8

QC Batch Number: BATCH-14676

Sample Id	Analysis	QC Analysis	Values	Units	Limits
08B27497	4-Bromofluorobenzene	Surrogate Recovery	100.00	%	70-130
08B27498	4-Bromofluorobenzene	Surrogate Recovery	137.12	%	70-130
08B27499	4-Bromofluorobenzene	Surrogate Recovery	108.37	%	70-130
08B27500	4-Bromofluorobenzene	Surrogate Recovery	95.37	%	70-130
08B27501	4-Bromofluorobenzene	Surrogate Recovery	96.62	%	70-130
08B27502	4-Bromofluorobenzene	Surrogate Recovery	101.37	%	70-130
BLANK-120631	Acetone	Blank	0.99	ug/m3	
	Benzene	Blank	<0.12	ug/m3	
	Carbon Tetrachloride	Blank	<0.22	ug/m3	
	Chloroform	Blank	<0.17	ug/m3	
	1,2-Dichloroethane	Blank	<0.14	ug/m3	
	1,4-Dichlorobenzene	Blank	<0.21	ug/m3	
	Ethyl Acetate	Blank	<0.26	ug/m3	
	Ethylbenzene	Blank	<0.16	ug/m3	
	Hexane	Blank	<0.13	ug/m3	
	Isopropanol	Blank	<0.18	ug/m3	
	2-Butanone (MEK)	Blank	0.28	ug/m3	
	4-Methyl-2-Pentanone (MIBK)	Blank	<0.14	ug/m3	
	Styrene	Blank	<0.15	ug/m3	
	Tetrachloroethylene	Blank	<0.24	ug/m3	
	Toluene	Blank	<0.14	ug/m3	
	1,1,1-Trichloroethane	Blank	<0.19	ug/m3	
	Trichloroethylene	Blank	<0.19	ug/m3	
	1,1,2-Trichloro-1,2,2-Trifluoroethane	Blank	<0.27	ug/m3	
	Trichlorofluoromethane	Blank	<0.20	ug/m3	
	o-Xylene	Blank	<0.16	ug/m3	
	m/p-Xylene	Blank	<0.31	ug/m3	
	1,2-Dichlorobenzene	Blank	<0.21	ug/m3	
	1,3-Dichlorobenzene	Blank	<0.21	ug/m3	
	1,1-Dichloroethane	Blank	<0.14	ug/m3	
	1,1-Dichloroethylene	Blank	<0.14	ug/m3	
	Ethanol	Blank	<0.14	ug/m3	
	4-Ethyl Toluene	Blank	<0.18	ug/m3	
	Methyl tert-Butyl Ether (MTBE)	Blank	<0.13	ug/m3	
	t-1,2-Dichloroethylene	Blank	<0.14	ug/m3	
	Vinyl Chloride	Blank	<0.10	ug/m3	
	Methylene Chloride	Blank	<0.25	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: 7/29/2008

Lims Bat # : LIMIT-17841

Page 2 of 8

QC Batch Number: BATCH-14676

Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-120631					
	Chlorobenzene	Blank	<0.17	ug/m3	
	Chloromethane	Blank	<0.07	ug/m3	
	Bromomethane	Blank	<0.14	ug/m3	
	Chloroethane	Blank	<0.10	ug/m3	
	cis-1,3-Dichloropropene	Blank	<0.16	ug/m3	
	trans-1,3-Dichloropropene	Blank	<0.16	ug/m3	
	Chlorodibromomethane	Blank	<0.31	ug/m3	
	1,1,2-Trichloroethane	Blank	<0.19	ug/m3	
	Bromoform	Blank	<0.36	ug/m3	
	1,1,2,2-Tetrachloroethane	Blank	<0.24	ug/m3	
	Hexachlorobutadiene	Blank	<0.75	ug/m3	
	1,2,4-Trichlorobenzene	Blank	<0.26	ug/m3	
	1,2,4-Trimethylbenzene	Blank	<0.18	ug/m3	
	1,3,5-Trimethylbenzene	Blank	<0.18	ug/m3	
	Cyclohexane	Blank	<0.12	ug/m3	
	cis-1,2-Dichloroethylene	Blank	<0.14	ug/m3	
	1,2-Dichloropropane	Blank	<0.17	ug/m3	
	Dichlorodifluoromethane	Blank	<0.18	ug/m3	
	Benzyl Chloride	Blank	<0.19	ug/m3	
	Carbon Disulfide	Blank	<0.12	ug/m3	
	Vinyl Acetate	Blank	<0.50	ug/m3	
	2-Hexanone	Blank	<0.14	ug/m3	
	Bromodichloromethane	Blank	<0.24	ug/m3	
	1,2-Dibromoethane	Blank	<0.27	ug/m3	
	n-Heptane	Blank	<0.14	ug/m3	
	1,2-Dichlorotetrafluoroethane (114)	Blank	<0.25	ug/m3	
	Tetrahydrofuran	Blank	<0.11	ug/m3	
	Propene	Blank	<0.13	ug/m3	
	1,3-Butadiene	Blank	<0.08	ug/m3	
LFBLANK-82277					
	Acetone	Lab Fort Blank Amt.	11.87	ug/m3	
		Lab Fort Blk. Found	12.90	ug/m3	
		Lab Fort Blk. % Rec.	108.66	%	50-150
	Benzene	Lab Fort Blank Amt.	15.95	ug/m3	
		Lab Fort Blk. Found	14.26	ug/m3	
		Lab Fort Blk. % Rec.	89.39	%	70-130
	Carbon Tetrachloride	Lab Fort Blank Amt.	31.45	ug/m3	
		Lab Fort Blk. Found	37.13	ug/m3	
		Lab Fort Blk. % Rec.	118.06	%	70-130
	Chloroform	Lab Fort Blank Amt.	24.33	ug/m3	
		Lab Fort Blk. Found	30.63	ug/m3	
		Lab Fort Blk. % Rec.	125.88	%	70-130
	1,2-Dichloroethane	Lab Fort Blank Amt.	20.24	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: 7/29/2008

Lims Bat # : LIMIT-17841

Page 3 of 8

QC Batch Number: BATCH-14676

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-82277					
1,2-Dichloroethane		Lab Fort Blk. Found	26.05	ug/m3	70-130
		Lab Fort Blk. % Rec.	128.72	%	
1,4-Dichlorobenzene		Lab Fort Blank Amt.	30.06	ug/m3	70-130
		Lab Fort Blk. Found	38.91	ug/m3	
Ethyl Acetate		Lab Fort Blk. % Rec.	129.46	%	70-130
		Lab Fort Blank Amt.	18.01	ug/m3	
Ethylbenzene		Lab Fort Blk. Found	18.28	ug/m3	50-150
		Lab Fort Blk. % Rec.	101.50	%	
Hexane		Lab Fort Blank Amt.	21.67	ug/m3	70-130
		Lab Fort Blk. Found	22.52	ug/m3	
Isopropanol		Lab Fort Blk. % Rec.	103.92	%	70-130
		Lab Fort Blank Amt.	17.62	ug/m3	
2-Butanone (MEK)		Lab Fort Blk. Found	18.30	ug/m3	70-130
		Lab Fort Blk. % Rec.	103.88	%	
4-Methyl-2-Pentanone (MIBK)		Lab Fort Blank Amt.	12.28	ug/m3	50-150
		Lab Fort Blk. Found	13.68	ug/m3	
Styrene		Lab Fort Blk. % Rec.	111.38	%	70-130
		Lab Fort Blank Amt.	14.74	ug/m3	
Tetrachloroethylene		Lab Fort Blk. Found	14.98	ug/m3	70-130
		Lab Fort Blk. % Rec.	101.66	%	
Toluene		Lab Fort Blank Amt.	20.48	ug/m3	70-130
		Lab Fort Blk. Found	18.68	ug/m3	
1,1,1-Trichloroethane		Lab Fort Blk. % Rec.	91.21	%	70-130
		Lab Fort Blank Amt.	21.26	ug/m3	
Trichloroethylene		Lab Fort Blk. Found	21.73	ug/m3	70-130
		Lab Fort Blk. % Rec.	102.18	%	
1,1,2-Trichloro-1,2,2-Trifluoroethane		Lab Fort Blank Amt.	33.90	ug/m3	70-130
		Lab Fort Blk. Found	37.95	ug/m3	
Trichlorofluoromethane		Lab Fort Blk. % Rec.	111.94	%	70-130
		Lab Fort Blank Amt.	18.81	ug/m3	
		Lab Fort Blk. Found	18.31	ug/m3	70-130
		Lab Fort Blk. % Rec.	97.36	%	
		Lab Fort Blank Amt.	27.28	ug/m3	70-130
		Lab Fort Blk. Found	30.07	ug/m3	
		Lab Fort Blk. % Rec.	110.26	%	70-130
		Lab Fort Blank Amt.	26.87	ug/m3	
		Lab Fort Blk. Found	27.99	ug/m3	70-130
		Lab Fort Blk. % Rec.	104.18	%	
		Lab Fort Blank Amt.	38.31	ug/m3	70-130
		Lab Fort Blk. Found	49.63	ug/m3	
		Lab Fort Blk. % Rec.	129.54	%	70-130
		Lab Fort Blank Amt.	28.09	ug/m3	
		Lab Fort Blk. Found	39.94	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: 7/29/2008

Lims Bat # : LIMIT-17841

Page 4 of 8

QC Batch Number: BATCH-14676

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-82277					
o-Xylene	Trichlorofluoromethane	Lab Fort Blk. % Rec.	142.18	%	70-130
		Lab Fort Blank Amt.	21.71	ug/m3	
		Lab Fort Blk. Found	24.01	ug/m3	
m/p-Xylene	o-Xylene	Lab Fort Blk. % Rec.	110.60	%	70-130
		Lab Fort Blank Amt.	43.43	ug/m3	
		Lab Fort Blk. Found	45.00	ug/m3	
1,2-Dichlorobenzene	m/p-Xylene	Lab Fort Blk. % Rec.	103.62	%	70-130
		Lab Fort Blank Amt.	30.06	ug/m3	
		Lab Fort Blk. Found	39.10	ug/m3	
1,3-Dichlorobenzene	1,2-Dichlorobenzene	Lab Fort Blk. % Rec.	130.08	%	70-130
		Lab Fort Blank Amt.	30.06	ug/m3	
		Lab Fort Blk. Found	38.85	ug/m3	
1,1-Dichloroethane	1,3-Dichlorobenzene	Lab Fort Blk. % Rec.	129.24	%	70-130
		Lab Fort Blank Amt.	20.24	ug/m3	
		Lab Fort Blk. Found	22.22	ug/m3	
1,1-Dichloroethylene	1,1-Dichloroethane	Lab Fort Blk. % Rec.	109.78	%	70-130
		Lab Fort Blank Amt.	19.83	ug/m3	
		Lab Fort Blk. Found	23.80	ug/m3	
Ethanol	1,1-Dichloroethylene	Lab Fort Blk. % Rec.	120.00	%	70-130
		Lab Fort Blank Amt.	9.42	ug/m3	
		Lab Fort Blk. Found	10.79	ug/m3	
4-Ethyl Toluene	Ethanol	Lab Fort Blk. % Rec.	114.54	%	50-150
		Lab Fort Blank Amt.	24.58	ug/m3	
		Lab Fort Blk. Found	29.57	ug/m3	
Methyl tert-Butyl Ether (MTBE)	4-Ethyl Toluene	Lab Fort Blk. % Rec.	120.32	%	50-150
		Lab Fort Blank Amt.	18.02	ug/m3	
		Lab Fort Blk. Found	21.83	ug/m3	
t-1,2-Dichloroethylene	Methyl tert-Butyl Ether (MTBE)	Lab Fort Blk. % Rec.	121.11	%	70-130
		Lab Fort Blank Amt.	19.82	ug/m3	
		Lab Fort Blk. Found	22.31	ug/m3	
Vinyl Chloride	t-1,2-Dichloroethylene	Lab Fort Blk. % Rec.	112.58	%	70-130
		Lab Fort Blank Amt.	12.78	ug/m3	
		Lab Fort Blk. Found	13.56	ug/m3	
Methylene Chloride	Vinyl Chloride	Lab Fort Blk. % Rec.	106.16	%	70-130
		Lab Fort Blank Amt.	17.36	ug/m3	
		Lab Fort Blk. Found	18.13	ug/m3	
Chlorobenzene	Methylene Chloride	Lab Fort Blk. % Rec.	104.46	%	70-130
		Lab Fort Blank Amt.	23.02	ug/m3	
		Lab Fort Blk. Found	23.71	ug/m3	
Chloromethane	Chlorobenzene	Lab Fort Blk. % Rec.	103.00	%	70-130
		Lab Fort Blank Amt.	10.32	ug/m3	
		Lab Fort Blk. Found	9.81	ug/m3	
		Lab Fort Blk. % Rec.	95.08	%	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: 7/29/2008

Lims Bat # : LIMIT-17841

Page 5 of 8

QC Batch Number: BATCH-14676

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-82277					
Bromomethane		Lab Fort Blank Amt.	19.40	ug/m3	70-130
		Lab Fort Blk. Found	23.97	ug/m3	
		Lab Fort Blk. % Rec.	123.54	%	
Chloroethane		Lab Fort Blank Amt.	13.19	ug/m3	70-130
		Lab Fort Blk. Found	15.25	ug/m3	
		Lab Fort Blk. % Rec.	115.63	%	
cis-1,3-Dichloropropene		Lab Fort Blank Amt.	22.69	ug/m3	70-130
		Lab Fort Blk. Found	22.73	ug/m3	
		Lab Fort Blk. % Rec.	100.14	%	
trans-1,3-Dichloropropene		Lab Fort Blank Amt.	22.69	ug/m3	70-130
		Lab Fort Blk. Found	24.43	ug/m3	
		Lab Fort Blk. % Rec.	107.64	%	
Chlorodibromomethane		Lab Fort Blank Amt.	42.59	ug/m3	70-130
		Lab Fort Blk. Found	52.74	ug/m3	
		Lab Fort Blk. % Rec.	123.82	%	
1,1,2-Trichloroethane		Lab Fort Blank Amt.	27.28	ug/m3	70-130
		Lab Fort Blk. Found	26.84	ug/m3	
		Lab Fort Blk. % Rec.	98.41	%	
Bromoform		Lab Fort Blank Amt.	51.69	ug/m3	70-130
		Lab Fort Blk. Found	73.21	ug/m3	
		Lab Fort Blk. % Rec.	141.62	%	
1,1,2,2-Tetrachloroethane		Lab Fort Blank Amt.	34.33	ug/m3	70-130
		Lab Fort Blk. Found	37.14	ug/m3	
		Lab Fort Blk. % Rec.	108.18	%	
Hexachlorobutadiene		Lab Fort Blank Amt.	53.33	ug/m3	70-130
		Lab Fort Blk. Found	75.48	ug/m3	
		Lab Fort Blk. % Rec.	141.54	%	
1,2,4-Trichlorobenzene		Lab Fort Blank Amt.	37.10	ug/m3	70-130
		Lab Fort Blk. Found	64.89	ug/m3	
		Lab Fort Blk. % Rec.	174.88	%	
1,2,4-Trimethylbenzene		Lab Fort Blank Amt.	24.58	ug/m3	70-130
		Lab Fort Blk. Found	29.33	ug/m3	
		Lab Fort Blk. % Rec.	119.36	%	
1,3,5-Trimethylbenzene		Lab Fort Blank Amt.	24.58	ug/m3	70-130
		Lab Fort Blk. Found	29.22	ug/m3	
		Lab Fort Blk. % Rec.	118.88	%	
Cyclohexane		Lab Fort Blank Amt.	17.21	ug/m3	50-150
		Lab Fort Blk. Found	14.77	ug/m3	
		Lab Fort Blk. % Rec.	85.86	%	
cis-1,2-Dichloroethylene		Lab Fort Blank Amt.	19.82	ug/m3	70-130
		Lab Fort Blk. Found	22.26	ug/m3	
		Lab Fort Blk. % Rec.	112.32	%	
1,2-Dichloropropane		Lab Fort Blank Amt.	23.10	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: 7/29/2008

Lims Bat # : LIMIT-17841

Page 6 of 8

QC Batch Number: BATCH-14676

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-82277					
1,2-Dichloropropane		Lab Fort Blk. Found	19.87	ug/m3	
		Lab Fort Blk. % Rec.	86.01	%	70-130
Dichlorodifluoromethane		Lab Fort Blank Amt.	24.72	ug/m3	
		Lab Fort Blk. Found	31.94	ug/m3	
		Lab Fort Blk. % Rec.	129.19	%	70-130
Benzyl Chloride		Lab Fort Blank Amt.	25.88	ug/m3	
		Lab Fort Blk. Found	34.40	ug/m3	
		Lab Fort Blk. % Rec.	132.90	%	70-130
Carbon Disulfide		Lab Fort Blank Amt.	15.57	ug/m3	
		Lab Fort Blk. Found	17.32	ug/m3	
		Lab Fort Blk. % Rec.	111.26	%	70-130
Vinyl Acetate		Lab Fort Blank Amt.	17.60	ug/m3	
		Lab Fort Blk. Found	18.91	ug/m3	
		Lab Fort Blk. % Rec.	107.42	%	70-130
2-Hexanone		Lab Fort Blank Amt.	20.48	ug/m3	
		Lab Fort Blk. Found	18.96	ug/m3	
		Lab Fort Blk. % Rec.	92.60	%	50-150
Bromodichloromethane		Lab Fort Blank Amt.	33.50	ug/m3	
		Lab Fort Blk. Found	37.91	ug/m3	
		Lab Fort Blk. % Rec.	113.16	%	70-130
1,2-Dibromoethane		Lab Fort Blank Amt.	38.42	ug/m3	
		Lab Fort Blk. Found	40.16	ug/m3	
		Lab Fort Blk. % Rec.	104.52	%	70-130
n-Heptane		Lab Fort Blank Amt.	20.49	ug/m3	
		Lab Fort Blk. Found	18.27	ug/m3	
		Lab Fort Blk. % Rec.	89.17	%	50-150
1,2-Dichlorotetrafluoroethane (114)		Lab Fort Blank Amt.	34.95	ug/m3	
		Lab Fort Blk. Found	43.49	ug/m3	
		Lab Fort Blk. % Rec.	124.42	%	70-130
Tetrahydrofuran		Lab Fort Blank Amt.	14.74	ug/m3	
		Lab Fort Blk. Found	14.85	ug/m3	
		Lab Fort Blk. % Rec.	100.76	%	50-150
Propene		Lab Fort Blank Amt.	8.60	ug/m3	
		Lab Fort Blk. Found	6.42	ug/m3	
		Lab Fort Blk. % Rec.	74.64	%	50-150
1,3-Butadiene		Lab Fort Blank Amt.	11.06	ug/m3	
		Lab Fort Blk. Found	11.04	ug/m3	
		Lab Fort Blk. % Rec.	99.86	%	70-130

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: 7/29/2008

Lims Bat # : LIMIT-17841

Page 7 of 8

NOTES:

QC Batch No. : BATCH-14676

Sample ID : 08B27498

Analysis : 4-Bromofluorobenzene

SURROGATE RECOVERY OUTSIDE OF CONTROL LIMITS DUE TO SAMPLE MATRIX INTERFERENCE.

QC Batch No. : BATCH-14676

Sample ID : LFBLANK-82277

Analysis : 1,2,4-Trichlorobenzene

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 Batch No. : BATCH-14676

Sample ID : LFBLANK-82277

Analysis : 1,2-Dichlorobenzene

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 Batch No. : BATCH-14676

Sample ID : LFBLANK-82277

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 Batch No. : BATCH-14676

Sample ID : LFBLANK-82277

Analysis : Bromoform

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 Batch No. : BATCH-14676

Sample ID : LFBLANK-82277

Analysis : Hexachlorobutadiene

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 Batch No. : BATCH-14676

Sample ID : LFBLANK-82277

Analysis : Trichlorofluoromethane

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 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: 7/29/2008

Lims Bat #: LIMIT-17841

Page 8 of 8

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



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

www.contestlabs.com

Company Name: Malcolm Pirnie, Inc.
Address: 43 British American Blvd

Attention: Jeremy Wickett

Project Location: Orange, NY Toga Castings
Sampled By: J. Wickett

Proposal Provided? (For Billing purposes)

yes ☒ no ☐

AIR SAMPLE CHAIN OF CUSTODY

RECORD

Telephone: (518) 782-2100
Project # 0366362

Client PO # 0266362

DATA DELIVERY (check one):
☒ FAX ☒ EMAIL ☐ WEBSITE CLIENT

Fax #: Jeremy Wickett @ pirnie.com

Email: Jeremy Wickett @ pirnie.com

Format: ☒ EXCEL ☐ PDF ☐ GIS KEY ☐ OTHER

39 SPRUCE ST

EAST LONGMEADOW, MA 01028

Page 1 of 1

ANALYSIS REQUESTED	Hg		Please fill out completely, sign, date and retain the yellow copy for your record.
	I n t e r p r e t a t i o n	L a b o r a t o r y	
			Summa canisters and flow controllers must be returned within 14 days of receipt or rental fees will apply.
			Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.

Field ID	Sample Description	Media	Lab #	Date	Stop	Total	Flow Rate	Volume	Matrix	Summa Canister ID	Flow Controller ID
SV-1	soil vapor	Air	06027497	7/7/08	7/17/08				SS	1481	3171
SV-2	"	"	98						SS	1508	3214
SV-3	"	"	99						SS	1016	3316
SV-4	"	"	08327500						SS	1110	3041
SV-5	"	"	01						SS	1651	3125
AA-1	Ambient Air		02						Amb	1844	3212
SV-1	FAILED SAMPLES	LOST							NO ANALYSIS	1227	3207

Laboratory Comments:

CLIENT COMMENTS:
OK regulation/canister of canister vacuum in 30 minutes. Regulation was tight.

Turnaround *90

Relinquished by: (signature) Jeremy Wickett
Date/Time: 7/17/08 1030

Received by: (signature) [Signature]
Date/Time: 7/18/08 0948

Relinquished by: (signature) [Signature]
Date/Time: 7/18/08 0948

Received by: (signature) [Signature]
Date/Time: 7/18/08 0948

Regulations: ☒ 7-Day ☐ 10-Day ☐ Other ☐ RUSH *
☐ *24-Hr ☐ *48-Hr ☐ *72-Hr ☐ *4-Day

Special Requirements
Regulations: ☒ NYS DEC ASP Package
Data Enhancement/RCP? ☐ Y ☐ N
Enhanced Data Package ☐ Y ☐ N
(Surcharge Applies)
Required Detection Limits: Per Contract
Other: Per Contract

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

** 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.

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Tracking number 864564313109
Signed for by W.DONET
Ship date Jul 17, 2008
Delivery date Jul 18, 2008 9:48 AM

Reference 0266362
Delivered to Shipping/Receiving
Service type Priority Overnight - Direct
Signature Required
Master tracking number 864564313109
Total Shipment Weight 52.0 lbs.

W
R
E

T
S
G

Status Delivered

Signature image available [Yes](#)

Date/Time	Activity	Location	Details
Jul 18, 2008	9:48 AM	Delivered	
	7:42 AM	On FedEx vehicle for delivery	WINDSOR LOCKS, CT
	7:26 AM	At local FedEx facility	WINDSOR LOCKS, CT
	4:39 AM	Departed FedEx location	NEWARK, NJ
Jul 17, 2008	7:20 PM	Left FedEx origin facility	BINGHAMTON, NY
	4:58 PM	Picked up	BINGHAMTON, NY

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	English	☐	☐

Select format: ☒ HTML ☐ Text ☐ Wireless

Add personal message:

Not available for Wireless or non-English characters.

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39 Spruce St.
East Longmeadow, MA.
01028
P: 413-525-2332
F: 413-525-6405

Sample Receipt Checklist

CLIENT NAME: MALCOLM PERCIVAL

RECEIVED BY: 12m

DATE: 07/18/08

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) 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:

AIR

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		Brass Sleeves	
Colisure / bacteria bottle		Tubes	
Dissolved Oxygen bottle		Summa Cans	7
Flashpoint bottle		Regulators	7
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