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

Site Number 7-54-012

Tioga Castings Site Quarterly Report

Fourth Quarter 2010

Foundry Street
Owego, New York

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

May 2011

Report Prepared By:

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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 Castings Site (NYSDEC site number 7-54-012) in New York State. Malcolm Pirnie has prepared this Quarterly Report in accordance with the NYSDEC-approved Site Management Plan (SMP) to summarize site activities, including fourth quarter 2010 operation and maintenance (O&M) activities. In addition, this Report includes a summary of the results from supplemental groundwater sampling and soil vapor intrusion (SVI) sampling events requested by the NYSDEC.

2. Site Description

The Tioga Castings 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.

3. Operation and Maintenance

O&M activities were performed on December 29, 2010 in accordance with the NYSDEC-approved SMP. A Post Closure O&M Checklist (O&M Checklist) (Appendix A) was used to document the current status of the landfill, including landfill security and landfill cap maintenance.

3.1. Landfill Security

The landfill perimeter fence, entry gate, and locks, were inspected for proper operation and signs of deterioration. As indicated in the O&M Checklist, no problems were observed with the integrity of these components. In addition, the Foundry Street entry gate warning sign was in place and in acceptable condition.

3.2. Landfill Cap Maintenance

A visual inspection of the landfill cap was performed to assess the landfill for burrowing rodents, erosion, woody vegetation, and settlement. Based on discussions with the NYSDEC, the burrowing rodent holes that were observed on the north and south side of the landfill cap during the May 25, 2010 landfill cap inspection were subsequently filled and marked with orange pin flags by NYSDEC personnel. Based on a visual inspection, no burrowing rodent activity has occurred since the holes were filled and marked. Small trees and brush were present in the drainage swales and on the perimeter slopes of the landfill cap. No additional problems were observed with the condition of the landfill.

As indicated in the SMP, the landfill cap is currently mowed by the NYSDEC Operations Department. As shown in the accompanying site photographs (Appendix A), the landfill had a light dusting of snow during the inspection but appeared to have been mowed during the 2010 growing season.

4. Groundwater Monitoring

At the request of the NYSDEC, a supplementary groundwater sampling event was performed on October 28, 2010 to support reclassification of the site from Class 2 to Class 4 on the NYSDEC Registry of Inactive Hazardous Waste Sites. The purpose of the groundwater monitoring event was to provide additional information on groundwater quality, monitor contaminant migration in the groundwater at the site, and assess hydrogeologic site conditions, including groundwater flow and velocity.

4.1. Well Survey

The elevations of groundwater monitoring wells MW-1R, MW-3D, MW-7 and MW-8 were measured on October 28, 2010 using an automatic level with a precision of 0.01 feet. Figure 4-1 shows the location of the groundwater monitoring wells. The reference datum for the well elevations was based on the existing elevation data for monitoring wells MW-2, MW-3, and/or MW-5. A summary of monitoring well elevation data is presented in Appendix B.

4.2. Water Level Survey

Prior to collecting groundwater samples, water levels were measured to the nearest hundredth of a foot and recorded on a groundwater level data form (Appendix C).

Table 4-1 summarizes the groundwater levels and elevations from the site. As shown in Table 4-1, groundwater elevations ranged from 794.05 (MW-1R and MW-7) feet above mean sea level (amsl) to 796.29 (MW-4) feet amsl. A potentiometric surface map is presented on Figure 4-2. As shown on Figure 4-2, the direction of groundwater flow in the vicinity of the landfill is generally towards the east. Figure 4-2 also shows that the water table is relatively flat in the eastern portion of the site compared to the area of the landfill and the direction of groundwater flow trends toward the northeast. This data is contrary to historical groundwater flow direction data that indicated the direction of groundwater flow across the site was generally toward the south (Malcolm Pirnie, 2007). However, the historical data was based elevation data from fewer groundwater monitoring wells.

4.3. Groundwater Sampling

Groundwater samples were collected from eight groundwater monitoring wells (MW-1R, MW-2, MW-3, MW-3D, MW-4, MW-5, MW-7, and MW-8) using low-flow groundwater purging and sampling procedures in accordance with the SMP. Proposed

groundwater monitoring well MW-6 (Figure 4-1) will be installed during the first quarter 2011.

Prior to collecting groundwater samples, pH, conductivity, turbidity, dissolved oxygen (DO), temperature, salinity, total dissolved solids (TDS), and oxidation-reduction potential (REDOX) were measured using a Horiba U-52 water quality meter and recorded on groundwater sampling purge logs. Groundwater sampling purge logs are presented in Appendix D.

Groundwater samples collected during the groundwater monitoring program were sent to Test America – Connecticut (formerly STL-Connecticut) by chain-of-custody procedures and analyzed for volatile organic compounds (VOCs) by USEPA Method 8260B, semi-volatile organic compounds (SVOCs) by USEPA Method 8270C, and Target Analyte List (TAL) metals by USEPA Method 6010B. Analytical data packages are provided in Appendix E.

4.4. Groundwater Sampling Results

Groundwater sample results from the October 28, 2010 groundwater sampling event are summarized in Table 4-2 (VOCs), Table 4-3 (SVOCs) and Table 4-4 (metals).

4.4.1. VOCs and SVOCs

As shown in Table 4-2 and Table 4-3, no VOCs or SVOCs were detected in any of the groundwater samples above the indicated quantitation limits.

4.4.2. Metals

As shown in Table 4-4, sodium was detected in groundwater samples MW-1R (23,300 micrograms per liter (ug/L)), MW-2 (35,000 ug/L), MW-7 (20,700 ug/L), and MW-8 (21,300 ug/L) at concentrations above the corresponding NYSDEC Class GA Standard of 20,000 ug/L. Table 4-4 shows that the October 28, 2010 sodium concentration in the sample from MW-7 is significantly less than the April 13, 2009 and March 18, 2010 results of 57,500 ug/L and 58,900 ug/L, respectively. As shown in Table 4-4, the sodium concentrations in the samples from MW-1, MW-2, and MW-8 are within the range of sodium results reported in samples from these wells during previous sampling events. It is anticipated that the elevated concentrations of sodium may be related to the local application of road de-icing agents.

Table 4-4 shows that no other metals were detected at concentrations greater than the applicable NYSDEC Class GA Standards. These data support the conclusion made in the first quarter 2010 Tioga Castings Site Quarterly Report (Malcolm Pirnie, 2010),

suggesting that the presence of the elevated concentrations of iron, lead, and/or manganese in several of the April 13, 2009 samples may be an anomaly.

5. Soil Vapor Intrusion Sampling

At the request of the NYSDEC, a limited SVI investigation was performed on December 9, 2010. The purpose of the investigation was to evaluate potential sources of VOCs identified in sub-surface soil and air samples during a 2008 investigation of the site. According to the Investigation Report (Malcolm Pirnie, 2008), photo-ionization detector (PID) field-screening results from sub-surface soil cores SB-6 and SB-14 (Figure 5-1) indicated the presence of VOCs. In addition, the concentration of 1,1,1-trichloroethane (1,1,1-TCA) in the sub-slab air sample from SV-2 was greater than the action level in the NYSDOH Guidance for Evaluating Soil Vapor Intrusion, Soil Vapor / Indoor Air Matrix 2.

5.1. Sampling Locations

The December 9, 2010 SVI sampling locations were selected in consultation with the NYSDEC and New York State Department of Health (NYSDOH). Figure 5-1 shows the approximate sampling locations. As shown in Figure 5-1, one sub-slab soil vapor sample (SV-6) was collected down-gradient (based on groundwater elevation data) of soil boring SB-6 and one sub-slab soil vapor sample (SV-8) was collected down-gradient of soil boring SB-14. As shown in Figure 5-1, sub-slab soil vapor sample SV-7 and its duplicate sample SV-X were collected down gradient of soil vapor sample SV-02. One outdoor ambient air sample (AA-2) was collected concurrently with the soil vapor samples. Based on the direction of prevailing wind during the sampling event (toward the southeast), the ambient air sample was collected northwest of sub-slab sample SV-6.

5.2. Sampling Procedures

Soil vapor samples were collected in accordance with the NYSDEC and NYSDOH-approved sampling procedures described below.

5.2.1. Sub-Slab Vapor Sampling Procedures

- The condition of the concrete slab was visually assessed and sampling locations were selected that were away from major cracks and other floor penetrations.
- A one inch diameter hole was drilled approximately one inch into the concrete slab using an electric hammer drill.
- A 1/4-inch diameter hole was drilled through the one inch hole completely through the concrete slab.

- Concrete dust was swept away from the drill hole and the slab was wiped with a dampened towel.

- Teflon tubing (¼-inch outside diameter [OD]) approximately 3 feet long was inserted into the hole drilled through the slab, extending no further than two inches below the bottom of the slab.

- Hydrated bentonite clay was placed around the tubing at the concrete penetration to form the sub-slab vapor point seal.

- Helium tracer gas was used to verify the integrity of the sub-slab vapor point seal. Prior to sampling the sub-slab vapor, the atmosphere in the immediate vicinity of the area where the vapor point tubing intersects the ground was enriched with helium. This was accomplished by using an inverted plastic pail to keep the tracer gas in contact with the vapor point during testing. A portable monitoring device was used to analyze a sample of sub-slab vapor for the tracer gas prior to sampling for VOCs. None of the samples contained any evidence of helium. Therefore, it was concluded that the probes were sealed and none of the vapor samples were diluted by surface air.

- A syringe was attached to the sampling tube and approximately 60 mL of air/vapor was purged at a consistent flow rate that is less than or equal to 0.2 liters per minute. The air in the syringe was released into a Tedlar® bag as to not influence the air quality in the vicinity of the sampling locations.

- 6-Liter (L) Summa canisters with one-half hour flow controllers were used to collect the air samples. The canisters were batch-certified (in accordance with EPA Method TO-15) and under a vacuum pressure of no more than -25 inches of mercury (in Hg). Samples were collected at a consistent flow rate less than 0.2 liters per minute.

- Canister serial numbers, vacuum gauge readings, and associated sample identification were recorded on the chain of custody (COC) and field notebook/sample form.

- Sample tubing was connected to the canister inlet fitting. The canister valve was opened in accordance with manufacturer and laboratory protocols to initiate sample collection at the laboratory's preset flow rate.

- The sampling start time was recorded on the COC in the field notebook/sample form. Digital photographs were taken to document canister setup and the surrounding area.

Termination of Sample Collection

- The canister valve was closed and the stop time and final gauge pressure were recorded on the COC and in the field notebook/sample form.
- The sample tubing and pressure gauge/flow controller were disconnected from canister.
- A plug was installed on canister inlet fitting and the canister and gauge/flow controller was placed the sample container shipping box.
- The sample collection log was completed with the appropriate information along with a log of each sample on the COC form.
- Each temporary subsurface probe was removed and the hole in the slab sealed with cement.
- All canisters were returned at the completion of the field sampling to the laboratory by overnight shipment in accordance with any laboratory specifications (i.e. holding time requirements).

5.3. Laboratory Data Analysis

Air samples were submitted following chain-of-custody procedures to Contest Analytical Laboratory, East Longmeadow, Massachusetts and analyzed for VOCs by USEPA Method TO-15. The analytical data received from the laboratory was submitted to Data Validation Services, North Creek, New York for third-party data validation and preparation of a Data Usability Summary Report (DUSR). A copy of the DUSR is provided in Appendix F. As indicated in the DUSR, many of the sample results were edited to non-detect with elevated detection limits. However, none of the data were rejected.

5.4. Sampling Results

A summary of the SVI sampling results is presented in Table 5-1. As shown in Table 5-1, none of the samples collected during the December 9, 2010 sampling event contained VOCs at concentrations greater than the indicated action levels in the NYSDOH Guidance for Evaluating Soil Vapor Intrusion, Soil Vapor / Indoor Air Matrix 2. Table 5-1 shows that the concentration of 1,1,1-TCA in the samples collected from soil vapor samples SV-7 and its duplicate SV-X (both 1.7ug/m3), were two orders of magnitude less than the result for this compound in the 2008 sample collected from SV-2.

5.5. Conclusion

Based on the sampling results presented in Section 5.4, SVI does not appear to be an exposure pathway for VOCs in the vicinity of soil borings SB-6 and SB-14, or former soil vapor sampling point SV-2. The concentrations of 1,1,1-TCA in soil vapor samples SV-7 and duplicate sample SV-X were significantly less than the concentrations reported in soil vapor samples collected from soil vapor sample SV-2 during the 2008 SVI investigation. These data, coupled with the groundwater sampling data in Section 4.1.5.1 that indicates that no VOCs were present in any of the groundwater samples, suggest that the elevated concentration of 1,1,1-TCA in the 2008 sample from SV-2 may be anomalous.

6. Recommendations

Brush and woody vegetation should be removed from the landfill cap and drainage ditches to reduce the potential for their root systems to compromise the integrity of the landfill cover system.

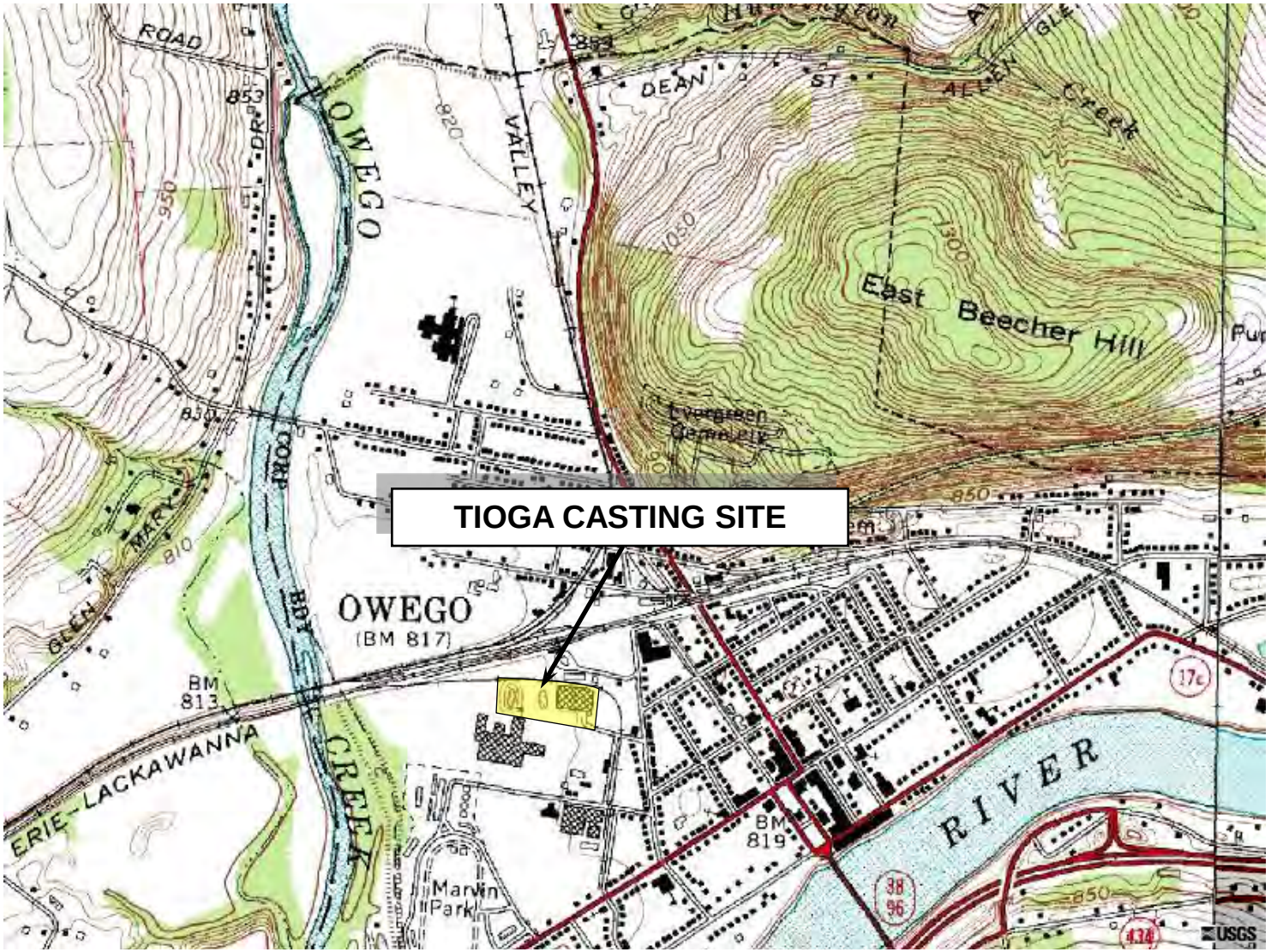
7. Summary

O&M activities were conducted in accordance with the SMP during the fourth quarter 2010. No significant issues were reported with the security or integrity of the landfill.

A supplemental groundwater sampling event was conducted to support reclassification of the site on the NYSDEC Registry of Inactive Hazardous Waste Sites. Groundwater monitoring wells were reported to be in acceptable condition. The elevation of groundwater monitoring wells MW-1R, MW-3D, MW-7, and MW-8 were measured using an automatic level. The direction of groundwater flow in the vicinity of the landfill is toward the east and the direction of groundwater flow in the eastern portion of the site is toward the northeast. None of the groundwater samples contained concentrations of VOCs or SVOCs above the respective laboratory reporting limits. With the exception of sodium, none of the samples contained concentrations of metals greater than the applicable NYSDEC Class GA Standards. Sodium concentrations exceeded the NYSDEC Class GA Standard in four of the eight samples collected during the supplemental groundwater monitoring event. The sodium exceedances may be related to the localized application of road de-icing agents.

A supplemental SVI sampling event was conducted to evaluate potential sources of VOCs in beneath the concrete slab of the razed foundry building. None of the samples contained concentrations of VOCs above the action levels presented the NYSDOH SVI Guidance.

Brush and woody vegetation should be removed from the landfill cap and drainage ditches to maintain the integrity of the landfill cover system.



SCALE IN FEET

0 500 1000 2000

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

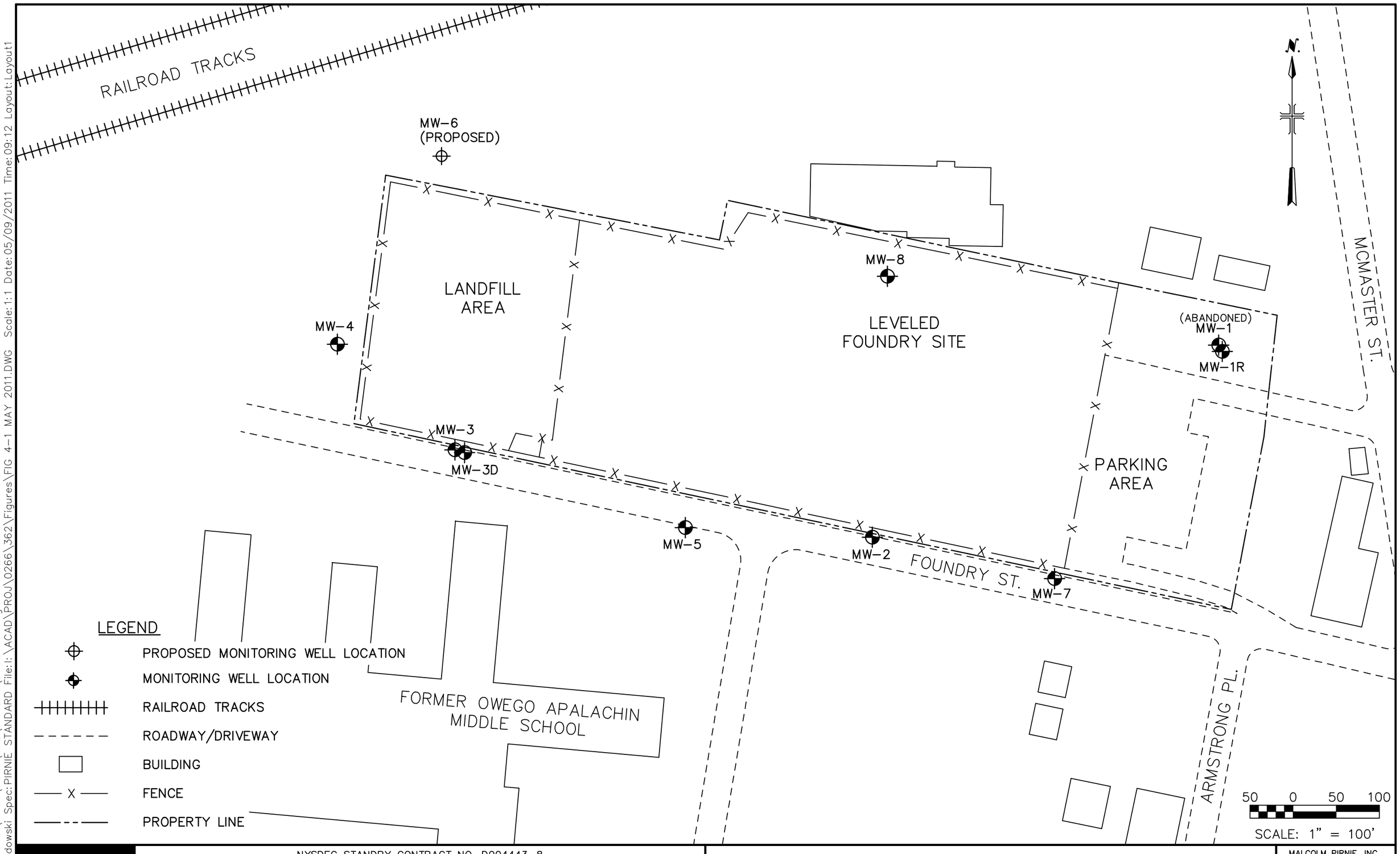
MALCOLM PIRNIE

NYSDEC STANDBY CONTRACT NO. D004443
TIOGA CASTING FACILITIES
OWEGO, NEW YORK

TIOGA CASTING SITE LOCATION

FIGURE 2-1

F:\PROJECT\0266362\FILE\Reports\2007\3rd qtr 07\Figure 2-1



MALCOLM PIRNIE

NYSDEC STANDBY CONTRACT NO. D004443-8
NYSDEC SITE NO. 7-54-012
TIOGA CASTING FACILITY
OWEGO, NEW YORK

MONITORING WELL LOCATIONS
SCALE: 1" = 100'

MALCOLM PIRNIE, INC.
MAY 2011
FIGURE 4-1

RAILROAD TRACKS

MW-6
(PROPOSED)

793.69
MW-8

LANDFILL
AREA

796.29
MW-4

796

795.5

795

794.5

794

LEVELED
FOUNDRY SITE

(ABANDONED)
MW-1

MW-1R
794.05

MCMASTER ST.

N.

795.87
MW-3

MW-3D
795.84

PARKING
AREA

MW-5
794.17

MW-2
794.09

FOUNDRY ST.

MW-7
794.05

FORMER OWEGO APALACHIN
MIDDLE SCHOOL

ARMSTRONG PL.

LEGEND

- PROPOSED MONITORING WELL LOCATION
- MONITORING WELL LOCATION
- RAILROAD TRACKS
- ROADWAY/DRIVEWAY
- BUILDING
- FENCE
- PROPERTY LINE
- POTENTIOMETRIC CONTOUR
- 794.17 GROUNDWATER ELEVATION
- GROUNDWATER FLOW DIRECTION

50 0 50 100

SCALE: 1" = 100'

MALCOLM PIRNIE

NYSDEC STANDBY CONTRACT NO. D004443-8
NYSDEC SITE NO. 7-54-012

TIOGA CASTING FACILITY
OWEGO, NEW YORK

POTENTIOMETRIC CONTOUR MAP (10/28/10)

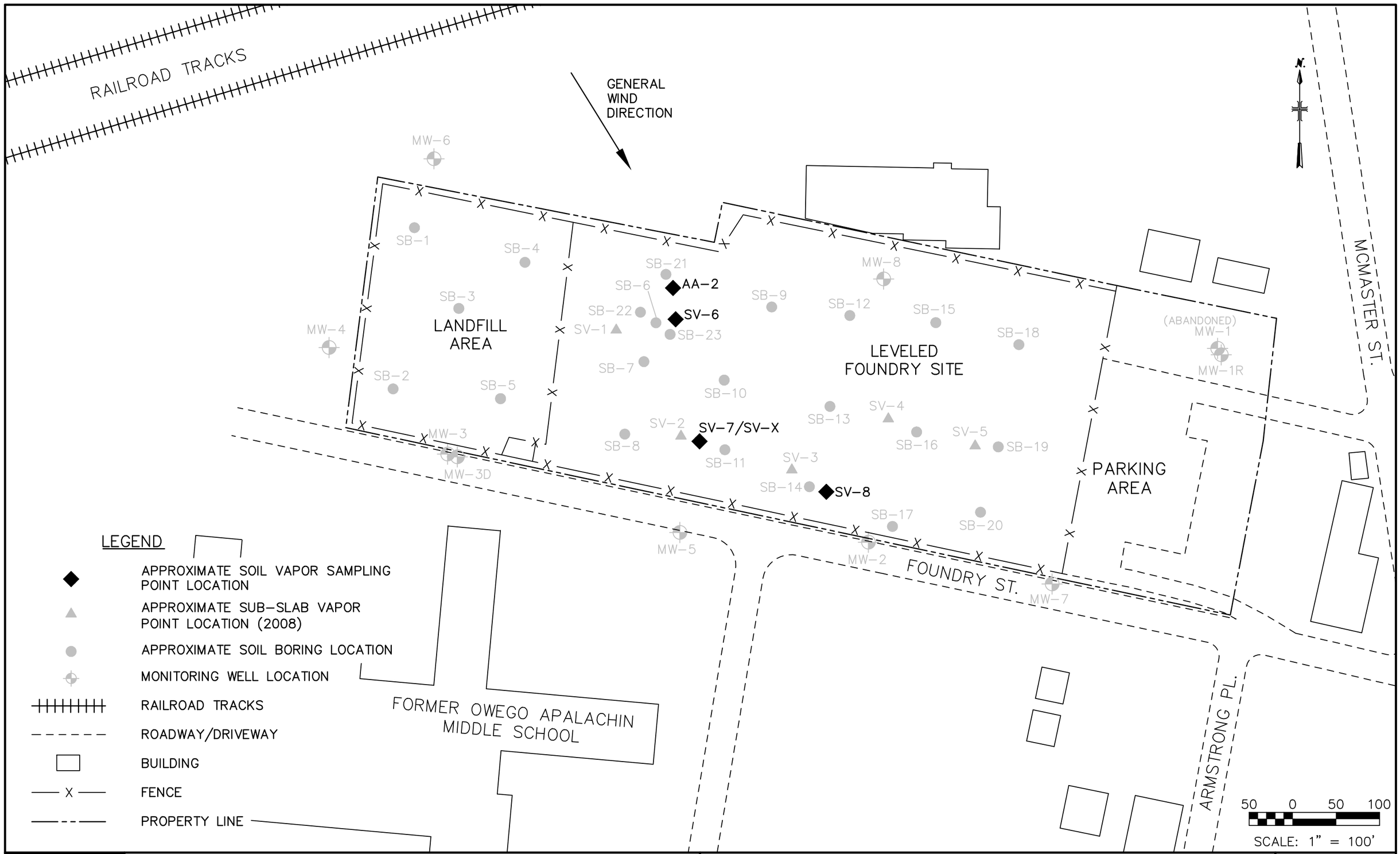
SCALE: 1" = 100'

MALCOLM PIRNIE, INC.

MAY 2011

FIGURE 4-2

XREFS: I: \ACAD\PROJ\0266\362\X-REFS\BASEMAP.dwg IMAGES: None
User: lewandowski Spec: PIRNIE STANDARD File: I: \ACAD\PROJ\0266\362\Figures\FIG 4-2 MAY 2011.DWG Scale: 1:1 Date: 05/09/2011 Time: 09:13 Layout: Layout1



MALCOLM PIRNIE

NYSDEC STANDBY CONTRACT NO. D004443-8
NYSDEC SITE NO. 7-54-012
TIOGA CASTING FACILITY
OWEGO, NEW YORK

APPROXIMATE SAMPLING LOCATONS
SCALE: 1" = 100'

MALCOLM PIRNIE, INC.
MAY 2011
FIGURE 5-1

Table 4-1
Summary of Groundwater Elevations
Tioga Casting
Owego, New York
NYSDEC Site No. 7-54-012

Well	Measuring Point Elevation (feet)		11/24/2008		5/18/2010		10/28/2010	
			DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)
MW-1R	813.82	(2)	20.90		17.03		19.77	794.05
MW-2	807.68	(1)	14.56	793.12	10.69	796.99	13.59	794.09
MW-3	812.61	(2)	17.51	795.10	14.35	798.26	16.74	795.87
MW-3D	812.42	(2)	17.52		14.17		16.58	795.84
MW-4	806.33	(1)	10.87	795.46	7.81	798.52	10.04	796.29
MW-5	803.89	(1)	10.74	793.15	6.60	797.29	9.72	794.17
MW-7	807.12	(2)	14.17		10.30		13.07	794.05
MW-8	813.73	(2)	20.98		17.05		20.04	793.69

(1) - Source: Monitoring Plan: Tioga Casting (NYSDEC, April 25, 2005)
(2) - From Malcolm Pirnie, Inc. level survey performed 10/28/2010

Table 4-2
Groundwater Sample Results - VOCs
Tioga Castings Site
NYSDEC Site Number 7-54-012

Well Date Units	NYSDEC Class GA Standards	MW-1R 4/2/2009 ug/L	MW-1R 10/28/2010 ug/L	MW-2 7/17/2008 ug/L	MW-2 4/2/2009 ug/L	MW-2 10/28/2010 ug/L	MW-3 4/2/2009 ug/L
1,1,1-Trichloroethane	5	10 U	0.4 U	10 U	10 U	0.4 U	10 U
1,1,2,2,-Tetrachloroethane	5	10 U	0.31 U	10 U	10 U	0.31 U	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	NA	0.38 U	10 U	NA	0.38 U	NA
1,1,2-Trichloroethane	1	10 U	0.45 U	10 U	10 U	0.45 U	10 U
1,1-Dichloroethane	5	10 U	0.36 U	10 U	10 U	0.36 U	10 U
1,1-Dichloroethene	5	10 U	0.47 U	10 U	10 U	0.47 U	10 U
1,2,3-Trichlorobenzene	5*	10 U	NA	NA	10 U	NA	10 U
1,2,4-Trichlorobenzene	5	10 U	0.2 U	10 U	10 U	0.2 U	10 U
1,2-Dibromo-3-Chloropropane	0.04	NA	0.46 U	10 U	NA	0.46 U	NA
1,2-Dibromoethane		NA	0.41 U	10 U	NA	0.41 U	NA
1,2-Dichlorobenzene	3	10 U	0.45 U	10 U	10 U	0.45 U	10 U
1,2-Dichloroethane	0.6	10 U	0.48 U	10 U	10 U	0.48 U	10 U
1,2-Dichloropropane	1	10 U	0.46 U	10 U	10 U	0.46 U	10 U
1,3-Dichlorobenzene	3	10 U	0.43 U	10 U	10 U	0.43 U	10 U
1,4-Dichlorobenzene	3	10 U	0.32 U	10 U	10 U	0.32 U	10 U
2-Chlorotoluene	5*	10 U	NA	NA	10 U	NA	10 U
2-Hexanone	50*	10 U	1.9 U	10 U	10 U	1.9 U	10 U
4-Chlorotoluene	5*	10 U	NA	NA	10 U	NA	10 U
Acetone		15 U	0.5 U	10 U	15 U	0.5 U	15 U
Benzene	1	10 U	0.32 U	10 U	10 U	0.32 U	10 U
Bromodichloromethane	50	10 U	0.36 U	10 U	10 U	0.36 U	10 U
Bromoform	50*	10 U	0.47 U	10 U	10 U	0.47 U	10 U
Bromomethane	5	10 U	0.2 U	10 U	10 U	0.2 U	10 U
Carbon Disulfide	60	10 U	0.2 U	10 U	10 U	0.2 U	10 U
Carbon Tetrachloride	5	10 U	0.2 U	10 U	10 U	0.2 U	10 U
Chlorobenzene	5	10 U	0.49 U	10 U	10 U	0.49 U	10 U
Chloroethane	5	10 U	0.2 U	10 U	10 U	0.2 U	10 U
Chloroform	7	10 U	0.34 U	10 U	10 U	0.34 U	10 U
Chloromethane		10 U	0.2 U	10 U	10 U	0.2 U	10 U
cis 1,2-Dichloroethene	5	10 U	0.35 U	10 U	10 U	0.35 U	10 U
cis-1,3-Dichloropropene	0.4	10 U	0.31 U	10 U	10 U	0.31 U	10 U
Cyclohexane		NA	0.2 U	10 U	NA	0.2 U	NA
Dibromochloromethane	5	10 U	0.2 U	10 U	10 U	0.2 U	10 U
Dichlorodifluoromethane	5	10 U	0.2 U	10 U	10 U	0.2 U	10 U
Ethylbenzene	5	10 U	0.2 U	10 U	10 U	0.2 U	10 U
Isopropylbenzene	5	NA	0.45 U	10 U	NA	0.45 U	NA
m,p-Xylenes	5	10 U	0.95 U	NA	10 U	0.95 U	10 U
Methyl acetate		NA	0.2 U	10 U	NA	0.2 U	NA
Methyl Ethyl Ketone	50	10 U	1.3 U	10 U	10 U	1.3 U	10 U
Methyl isobutyl ketone		10 U	2.1 U	10 U	10 U	2.1 U	10 U
Methylcyclohexane		NA	0.2 U	10 U	NA	0.2 U	NA
Methylene Chloride	5	10 U	0.41 U	10 U	10 U	0.41 U	10 U
Methyl-tert butyl ether	10	10 U	0.35 U	10 U	10 U	0.35 U	10 U
o-Xylene	5	10 U	0.43 U	NA	10 U	0.43 U	10 U
Styrene	5	10 U	0.36 U	10 U	10 U	0.36 U	10 U
Tetrachloroethene	5	10 U	0.27 U	10 U	10 U	0.27 U	10 U
Toluene	5	10 U	0.37 U	10 U	10 U	0.37 U	10 U
trans 1,2-Dichloroethene	5	10 U	0.41 U	10 U	10 U	0.41 U	10 U
trans-1,3-Dichloropropene	0.4	10 U	0.29 U	10 U	10 U	0.29 U	10 U
Trichloroethene	5	10 U	0.28 U	10 U	10 U	0.28 U	10 U
Trichlorofluromethane	5	10 U	0.35 U	10 U	10 U	0.35 U	10 U
Vinyl Acetate		10 U	NA	NA	10 U	NA	10 U
Vinyl Chloride	2	10 U	0.34 U	10 U	10 U	0.34 U	10 U
Xylenes, Total		NA	NA	10 U	NA	NA	NA

U - Analyte not detected at indicated quantitation limit.
J - Estimated.
NA - Not Analyzed

Table 4-2
Groundwater Sample Results - VOCs
Tioga Castings Site
NYSDEC Site Number 7-54-012

Well Date Units	NYSDEC Class GA Standards	MW-3 10/28/2010 ug/L	MW-3D 4/2/2009 ug/L	MW-3D 10/28/2010 ug/L	MW-4 7/17/2008 ug/L	MW-4 4/2/2009 ug/L	MW-4 10/28/2010 ug/L
1,1,1-Trichloroethane	5	0.4 U	10 U	0.4 U	10 U	10 U	0.4 U
1,1,2,2,-Tetrachloroethane	5	0.31 U	10 U	0.31 U	10 U	10 U	0.31 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	0.38 U	NA	0.38 U	10 U	NA	0.38 U
1,1,2-Trichloroethane	1	0.45 U	10 U	0.45 U	10 U	10 U	0.45 U
1,1-Dichloroethane	5	0.36 U	10 U	0.36 U	10 U	10 U	0.36 U
1,1-Dichloroethene	5	0.47 U	10 U	0.47 U	10 U	10 U	0.47 U
1,2,3-Trichlorobenzene	5*	NA	10 U	NA	NA	10 U	NA
1,2,4-Trichlorobenzene	5	0.2 U	10 U	0.2 U	10 U	10 U	0.2 U
1,2-Dibromo-3-Chloropropane	0.04	0.46 U	NA	0.46 U	10 U	NA	0.46 U
1,2-Dibromoethane		0.41 U	NA	0.41 U	10 U	NA	0.41 U
1,2-Dichlorobenzene	3	0.45 U	10 U	0.45 U	10 U	10 U	0.45 U
1,2-Dichloroethane	0.6	0.48 U	10 U	0.48 U	10 U	10 U	0.48 U
1,2-Dichloropropane	1	0.46 U	10 U	0.46 U	10 U	10 U	0.46 U
1,3-Dichlorobenzene	3	0.43 U	10 U	0.43 U	10 U	10 U	0.43 U
1,4-Dichlorobenzene	3	0.32 U	10 U	0.32 U	10 U	10 U	0.32 U
2-Chlorotoluene	5*	NA	10 U	NA	NA	10 U	NA
2-Hexanone	50*	1.9 U	10 U	1.9 U	10 U	10 U	1.9 U
4-Chlorotoluene	5*	NA	10 U	NA	NA	10 U	NA
Acetone		0.5 U	15 U	0.5 U	10 U	15 U	0.5 U
Benzene	1	0.32 U	10 U	0.32 U	10 U	10 U	0.32 U
Bromodichloromethane	50	0.36 U	10 U	0.36 U	10 U	10 U	0.36 U
Bromoform	50*	0.47 U	10 U	0.47 U	10 U	10 U	0.47 U
Bromomethane	5	0.2 U	10 U	0.2 U	10 U	10 U	0.2 U
Carbon Disulfide	60	0.2 U	10 U	0.2 U	10 U	10 U	0.2 U
Carbon Tetrachloride	5	0.2 U	10 U	0.2 U	10 U	10 U	0.2 U
Chlorobenzene	5	0.49 U	10 U	0.49 U	10 U	10 U	0.49 U
Chloroethane	5	0.2 U	10 U	0.2 U	10 U	10 U	0.2 U
Chloroform	7	0.34 U	10 U	0.34 U	10 U	10 U	0.34 U
Chloromethane		0.2 U	10 U	0.2 U	10 U	10 U	0.2 U
cis 1,2-Dichloroethene	5	0.35 U	10 U	0.35 U	10 U	10 U	0.35 U
cis-1,3-Dichloropropene	0.4	0.31 U	10 U	0.31 U	10 U	10 U	0.31 U
Cyclohexane		0.2 U	NA	0.2 U	10 U	NA	0.2 U
Dibromochloromethane	5	0.2 U	10 U	0.2 U	10 U	10 U	0.2 U
Dichlorodifluoromethane	5	0.2 U	10 U	0.2 U	10 U	10 U	0.2 U
Ethylbenzene	5	0.2 U	10 U	0.2 U	10 U	10 U	0.2 U
Isopropylbenzene	5	0.45 U	NA	0.45 U	10 U	NA	0.45 U
m,p-Xylenes	5	0.95 U	10 U	0.95 U	NA	10 U	0.95 U
Methyl acetate		0.2 U	NA	0.2 U	10 U	NA	0.2 U
Methyl Ethyl Ketone	50	1.3 U	10 U	1.3 U	10 U	10 U	1.3 U
Methyl isobutyl ketone		2.1 U	10 U	2.1 U	10 U	10 U	2.1 U
Methylcyclohexane		0.2 U	NA	0.2 U	10 U	NA	0.2 U
Methylene Chloride	5	0.41 U	10 U	0.41 U	10 U	10 U	0.41 U
Methyl-tert butyl ether	10	0.35 U	10 U	0.35 U	10 U	10 U	0.35 U
o-Xylene	5	0.43 U	10 U	0.43 U	NA	10 U	0.43 U
Styrene	5	0.36 U	10 U	0.36 U	10 U	10 U	0.36 U
Tetrachloroethene	5	0.27 U	10 U	0.27 U	10 U	10 U	0.27 U
Toluene	5	0.37 U	10 U	0.37 U	10 U	10 U	0.37 U
trans 1,2-Dichloroethene	5	0.41 U	10 U	0.41 U	10 U	10 U	0.41 U
trans-1,3-Dichloropropene	0.4	0.29 U	10 U	0.29 U	10 U	10 U	0.29 U
Trichloroethene	5	0.28 U	10 U	0.28 U	10 U	10 U	0.28 U
Trichlorofluromethane	5	0.35 U	10 U	0.35 U	10 U	10 U	0.35 U
Vinyl Acetate		NA	10 U	NA	NA	10 U	NA
Vinyl Chloride	2	0.34 U	10 U	0.34 U	10 U	10 U	0.34 U
Xylenes, Total		NA	NA	NA	10 U	NA	NA

U - Analyte not detected at indicated quantitation limit.
J - Estimated.
NA - Not Analyzed

Table 4-2
Groundwater Sample Results - VOCs
Tioga Castings Site
NYSDEC Site Number 7-54-012

Well Date Units	NYSDEC Class GA Standards	MW-5 7/17/2008 ug/L	MW-5 4/2/2009 ug/L	MW-5 10/28/2010 ug/L	MW-7 4/2/2009 ug/L	MW-7 10/28/2010 ug/L	MW-8 4/2/2009 ug/L
1,1,1-Trichloroethane	5	10 U	10 U	0.4 U	10 U	0.4 U	10 U
1,1,2,2,-Tetrachloroethane	5	10 U	10 U	0.31 U	10 U	0.31 U	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	10 U	NA	0.38 U	NA	0.38 U	NA
1,1,2-Trichloroethane	1	10 U	10 U	0.45 U	10 U	0.45 U	10 U
1,1-Dichloroethane	5	10 U	10 U	0.36 U	10 U	0.36 U	10 U
1,1-Dichloroethene	5	10 U	10 U	0.47 U	10 U	0.47 U	10 U
1,2,3-Trichlorobenzene	5*	NA	10 U	NA	10 U	NA	10 U
1,2,4-Trichlorobenzene	5	10 U	10 U	0.2 U	10 U	0.2 U	10 U
1,2-Dibromo-3-Chloropropane	0.04	10 U	NA	0.46 U	NA	0.46 U	NA
1,2-Dibromoethane		10 U	NA	0.41 U	NA	0.41 U	NA
1,2-Dichlorobenzene	3	10 U	10 U	0.45 U	10 U	0.45 U	10 U
1,2-Dichloroethane	0.6	10 U	10 U	0.48 U	10 U	0.48 U	10 U
1,2-Dichloropropane	1	10 U	10 U	0.46 U	10 U	0.46 U	10 U
1,3-Dichlorobenzene	3	10 U	10 U	0.43 U	10 U	0.43 U	10 U
1,4-Dichlorobenzene	3	10 U	10 U	0.32 U	10 U	0.32 U	10 U
2-Chlorotoluene	5*	NA	10 U	NA	10 U	NA	10 U
2-Hexanone	50*	10 U	10 U	1.9 U	10 U	1.9 U	10 U
4-Chlorotoluene	5*	NA	10 U	NA	10 U	NA	10 U
Acetone		10 U	15 U	0.5 U	15 U	0.5 U	15 U
Benzene	1	10 U	10 U	0.32 U	10 U	0.32 U	10 U
Bromodichloromethane	50	10 U	10 U	0.36 U	10 U	0.36 U	10 U
Bromoform	50*	10 U	10 U	0.47 U	10 U	0.47 U	10 U
Bromomethane	5	10 U	10 U	0.2 U	10 U	0.2 U	10 U
Carbon Disulfide	60	10 U	10 U	0.2 U	10 U	0.2 U	10 U
Carbon Tetrachloride	5	10 U	10 U	0.2 U	10 U	0.2 U	10 U
Chlorobenzene	5	10 U	10 U	0.49 U	10 U	0.49 U	10 U
Chloroethane	5	10 U	10 U	0.2 U	10 U	0.2 U	10 U
Chloroform	7	10 U	10 U	0.34 U	10 U	0.34 U	10 U
Chloromethane		10 U	10 U	0.2 U	10 U	0.2 U	10 U
cis 1,2-Dichloroethene	5	10 U	10 U	0.35 U	10 U	0.35 U	10 U
cis-1,3-Dichloropropene	0.4	10 U	10 U	0.31 U	10 U	0.31 U	10 U
Cyclohexane		10 U	NA	0.2 U	NA	0.2 U	NA
Dibromochloromethane	5	10 U	10 U	0.2 U	10 U	0.2 U	10 U
Dichlorodifluoromethane	5	10 U	10 U	0.2 U	10 U	0.2 U	10 U
Ethylbenzene	5	10 U	10 U	0.2 U	10 U	0.2 U	10 U
Isopropylbenzene	5	10 U	NA	0.45 U	NA	0.45 U	NA
m,p-Xylenes	5	NA	10 U	0.95 U	10 U	0.95 U	10 U
Methyl acetate		10 U	NA	0.2 U	NA	0.2 U	NA
Methyl Ethyl Ketone	50	10 U	10 U	1.3 U	10 U	1.3 U	10 U
Methyl isobutyl ketone		10 U	10 U	2.1 U	10 U	2.1 U	10 U
Methylcyclohexane		10 U	NA	0.2 U	NA	0.2 U	NA
Methylene Chloride	5	10 U	10 U	0.41 U	10 U	0.41 U	10 U
Methyl-tert butyl ether	10	10 U	10 U	0.35 U	10 U	0.35 U	10 U
o-Xylene	5	NA	10 U	0.43 U	10 U	0.43 U	10 U
Styrene	5	10 U	10 U	0.36 U	10 U	0.36 U	10 U
Tetrachloroethene	5	10 U	10 U	0.27 U	10 U	0.27 U	10 U
Toluene	5	10 U	10 U	0.37 U	4 J	0.37 U	10 U
trans 1,2-Dichloroethene	5	10 U	10 U	0.41 U	10 U	0.41 U	10 U
trans-1,3-Dichloropropene	0.4	10 U	10 U	0.29 U	10 U	0.29 U	10 U
Trichloroethene	5	10 U	10 U	0.28 U	10 U	0.28 U	10 U
Trichlorofluromethane	5	10 U	10 U	0.35 U	10 U	0.35 U	10 U
Vinyl Acetate		NA	10 U	NA	10 U	NA	10 U
Vinyl Chloride	2	10 U	10 U	0.34 U	10 U	0.34 U	10 U
Xylenes, Total		10 U	NA	NA	NA	NA	NA

U - Analyte not detected at indicated quantitation limit.
J - Estimated.
NA - Not Analyzed

Table 4-2
Groundwater Sample Results - VOCs
Tioga Castings Site
NYSDEC Site Number 7-54-012

Well Date Units	NYSDEC Class GA Standards	MW-8 10/28/2010 ug/L
1,1,1-Trichloroethane	5	0.4 U
1,1,2,2,-Tetrachloroethane	5	0.31 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	0.38 U
1,1,2-Trichloroethane	1	0.45 U
1,1-Dichloroethane	5	0.36 U
1,1-Dichloroethene	5	0.47 U
1,2,3-Trichlorobenzene	5*	NA
1,2,4-Trichlorobenzene	5	0.2 U
1,2-Dibromo-3-Chloropropane	0.04	0.46 U
1,2-Dibromoethane		0.41 U
1,2-Dichlorobenzene	3	0.45 U
1,2-Dichloroethane	0.6	0.48 U
1,2-Dichloropropane	1	0.46 U
1,3-Dichlorobenzene	3	0.43 U
1,4-Dichlorobenzene	3	0.32 U
2-Chlorotoluene	5*	NA
2-Hexanone	50*	1.9 U
4-Chlorotoluene	5*	NA
Acetone		0.5 U
Benzene	1	0.32 U
Bromodichloromethane	50	0.36 U
Bromoform	50*	0.47 U
Bromomethane	5	0.2 U
Carbon Disulfide	60	0.2 U
Carbon Tetrachloride	5	0.2 U
Chlorobenzene	5	0.49 U
Chloroethane	5	0.2 U
Chloroform	7	0.34 U
Chloromethane		0.2 U
cis 1,2-Dichloroethene	5	0.35 U
cis-1,3-Dichloropropene	0.4	0.31 U
Cyclohexane		0.2 U
Dibromochloromethane	5	0.2 U
Dichlorodifluoromethane	5	0.2 U
Ethylbenzene	5	0.2 U
Isopropylbenzene	5	0.45 U
m,p-Xylenes	5	0.95 U
Methyl acetate		0.2 U
Methyl Ethyl Ketone	50	1.3 U
Methyl isobutyl ketone		2.1 U
Methylcyclohexane		0.2 U
Methylene Chloride	5	0.41 U
Methyl-tert butyl ether	10	0.35 U
o-Xylene	5	0.43 U
Styrene	5	0.36 U
Tetrachloroethene	5	0.27 U
Toluene	5	0.37 U
trans 1,2-Dichloroethene	5	0.41 U
trans-1,3-Dichloropropene	0.4	0.29 U
Trichloroethene	5	0.28 U
Trichlorofluromethane	5	0.35 U
Vinyl Acetate		NA
Vinyl Chloride	2	0.34 U
Xylenes, Total		NA

U - Analyte not detected at indicated quantitation limit.
J - Estimated.
NA - Not Analyzed

Table 4-3
Summary of Groundwater Sample Results - SVOCs
Tioga Castings Site
NYSDEC Site Number 7-54-012

Well Date Units	NYSDEC Class GA Standard	MW-1R 4/2/2009 ug/L	MW-1R 10/28/2010 ug/L	MW-2 4/2/2009 ug/L	MW-2 10/28/2010 ug/L	MW-3 4/2/2009 ug/L	MW-3 10/28/2010 ug/L	MW-3D 4/2/2009 ug/L	MW-3D 10/28/2010 ug/L
1,1-biphenyl	5	NA	0.15 U	NA	0.15 U	NA	0.15 U	NA	0.15 U
2,2-oxybis(1-Chloropropane)		NA	0.17 U	NA	0.17 U	NA	0.17 U	NA	0.17 U
2,4,5-trichlorophenol	1	11 U	0.4 U	12 U	0.4 U	11 U	0.39 U	12 U	0.4 U
2,4,6-trichlorophenol	1	11 U	0.55 U	12 U	0.55 U	11 U	0.55 U	12 U	0.56 U
2,4-dichlorophenol	5	11 U	0.65 U	12 U	0.65 U	11 U	0.65 U	12 U	0.66 U
2,4-dimethylphenol	1	11 U	0.7 U	12 U	0.7 U	11 U	0.7 U	12 U	0.71 U
2,4-Dinitrophenol	10*	NA	2.1 U	NA	2.1 U		2.1 U	NA	2.1 U
2,4-Dinitrotoluene	5	11 U	1 U	12 U	1 U	11 U	1 U	12 U	1 U
2,6-Dinitrotoluene	5	11 U	0.32 U	12 U	0.32 U	11 U	0.31 U	12 U	0.32 U
2-chloronaphthalene	10*	11 U	0.16 U	12 U	0.16 U	11 U	0.16 U	12 U	0.16 U
2-chlorophenol		11 U	0.53 U	12 U	0.53 U	11 U	0.53 U	12 U	0.54 U
2-Methylnaphthalene		11 U	0.32 U	12 U	0.32 U	11 U	0.31 U	12 U	0.32 U
2-methylphenol		11 U	0.24 U	12 U	0.24 U	11 U	0.24 U	12 U	0.24 U
2-nitroaniline	5	23 U	0.49 U	24 U	0.49 U	22 U	0.48 U	24 U	0.49 U
2-nitrophenol		11 U	0.51 U	12 U	0.51 U	11 U	0.51 U	12 U	0.52 U
3,3'-dichlorobenzidine	5	11 U	2 U	12 U	2 U	11 U	2 U	12 U	2 U
3+4-Methylphenols		NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.38 U
3-nitroaniline	5	23 U	1.1 U	24 U	1.1 U	22 U	1.1 U	24 U	1.1 U
4,6-dinitro-2-methylphenol		23 U	0.73 U	24 U	0.73 U	22 U	0.73 U	24 U	0.74 U
4-bromophenyl phenyl ether		11 U	0.23 U	12 U	0.23 U	11 U	0.23 U	12 U	0.23 U
4-chloro-3-methylphenol		11 U	0.4 U	12 U	0.4 U	11 U	0.39 U	12 U	0.4 U
4-chloroaniline	5	11 U	2.8 U	12 U	2.8 U	11 U	2.8 U	12 U	2.9 U
4-chlorophenyl phenyl ether		11 U	0.21 U	12 U	0.21 U	11 U	0.21 U	12 U	0.21 U
4-methylphenol		11 U	NA	12 U	NA	11 U	NA	12 U	NA
4-nitroaniline	5	23 U	1.3 U	24 U	1.3 U	22 U	1.3 U	24 U	1.4 U
4-nitrophenol		23 U	2 U	24 U	2 U	22 U	2 U	24 U	2 U
acenaphthene	20*	11 U	0.21 U	12 U	0.21 U	11 U	0.21 U	12 U	0.21 U
acenaphthylene		11 U	0.69 U	12 U	0.69 U	11 U	0.69 U	12 U	0.7 U
acetophenone		NA	0.14 U	NA	0.14 U	NA	0.14 U	NA	0.14 U
anthracene	50*	11 U	0.16 U	12 U	0.16 U	11 U	0.16 U	12 U	0.16 U
atrazine	7.5	NA	0.4 U	NA	0.4 U	NA	0.39 U	NA	0.4 U
benzaldehyde		NA	0.76 U	NA	0.76 U	NA	0.75 U	NA	0.77 U
benzo(a)anthracene	0.002*	11 U	0.16 U	12 U	0.16 U	11 U	0.16 U	12 U	0.16 U
benzo(a)pyrene	ND	11 U	0.14 U	12 U	0.14 U	11 U	0.14 U	12 U	0.14 U
benzo(b)fluoranthene	0.002*	11 U	0.29 U	12 U	0.29 U	11 U	0.28 U	12 U	0.29 U
benzo(g,h,i)perylene		11 U	0.29 U	12 U	0.29 U	11 U	0.28 U	12 U	0.29 U
benzo(k)fluoranthene	0.002*	11 U	0.18 U	12 U	0.18 U	11 U	0.18 U	12 U	0.18 U
benzyl alcohol		11 U	NA	12 U	NA	11 U	NA	12 U	NA
bis(2-chloroethoxy)methane	5	11 U	0.54 U	12 U	0.54 U	11 U	0.54 U	12 U	0.55 U
bis(2-chloroethyl)ether	1	11 U	0.54 U	12 U	0.54 U	11 U	0.54 U	12 U	0.55 U
bis(2-chloroisopropyl)ether		11 U	NA	12 U	NA	11 U	NA	12 U	NA
bis(2-ethylhexyl)phthalate	5	11 U	0.16 U	12 U	0.16 U	11 U	0.16 U	12 U	0.16 U
butyl benzyl phthalate	50*	11 U	0.19 U	12 U	0.19 U	11 U	0.19 U	12 U	0.19 U
Caprolactam		NA	2 U	NA	2 U	NA	2 U	NA	2 U
carbazole		11 U	0.22 U	12 U	0.22 U	11 U	0.22 U	12 U	0.22 U
chrysene	0.002*	11 U	0.18 U	12 U	0.18 U	11 U	0.18 U	12 U	0.18 U
dibenzo(a,h)anthracene		11 U	0.42 U	12 U	0.42 U	11 U	0.41 U	12 U	0.42 U
Dibenzofuran		11 U	0.24 U	12 U	0.24 U	11 U	0.24 U	12 U	0.24 U
Diethyl phthalate	50*	11 U	0.38 U	12 U	0.38 U	11 U	0.37 U	12 U	0.38 U
dimethylphthalate	50*	11 U	0.22 U	12 U	0.22 U	11 U	0.22 U	12 U	0.22 U
di-n-butyl phthalate	50	11 U	2 U	12 U	2 U	11 U	2 U	12 U	2 U
di-n-octyl phthalate	50*	11 U	0.5 U	12 U	0.5 U	11 U	0.5 U	12 U	0.51 U
fluoranthene	50*	11 U	0.4 U	12 U	0.4 U	11 U	0.39 U	12 U	0.4 U
fluorene	50*	11 U	0.31 U	12 U	0.31 U	11 U	0.3 U	12 U	0.31 U
Hexachlorobenzene	0.04	11 U	0.18 U	12 U	0.18 U	11 U	0.18 U	12 U	0.18 U
Hexachlorobutadiene	0.5	11 U	0.25 U	12 U	0.25 U	11 U	0.25 U	12 U	0.25 U
Hexachlorocyclopentadiene	5	11 U	0.24 U	12 U	0.24 U	11 U	0.24 U	12 U	0.24 U
Hexachloroethane	5	11 U	0.25 U	12 U	0.25 U	11 U	0.25 U	12 U	0.25 U
indeno(1,2,3-cd)pyrene	0.002*	11 U	0.15 U	12 U	0.15 U	11 U	0.15 U	12 U	0.15 U
Isophorone	50*	11 U	0.3 U	12 U	0.3 U	11 U	0.29 U	12 U	0.3 U
Naphthalene	10*	11 U	0.12 U	12 U	0.12 U	11 U	0.12 U	12 U	0.12 U
Nitrobenzene	0.4	11 U	0.67 U	12 U	0.67 U	11 U	0.67 U	12 U	0.68 U
N-nitros-di-n-propylamine		11 U	0.2 U	12 U	0.2 U	11 U	0.2 U	12 U	0.2 U
N-nitrosodiphenylamine	50*	11 U	0.59 U	12 U	0.59 U	11 U	0.59 U	12 U	0.6 U
pentachlorophenol	1	23 U	1.7 U	24 U	1.7 U	22 U	1.7 U	24 U	1.7 U
phenanthrene	50	11 U	0.26 U	12 U	0.26 U	11 U	0.25 U	12 U	0.26 U
phenol	1	11 U	0.21 U	12 U	0.21 U	11 U	0.21 U	12 U	0.21 U
pyrene	50	11 U	0.2 U	12 U	0.2 U	11 U	0.2 U	12 U	0.2 U

* - Guidance Value.
U - Analyte not detected at indicated quantitation limit.
ND - Non-detect.

Table 4-3
Summary of Groundwater Sample Results - SVOCs
Tioga Castings Site
NYSDEC Site Number 7-54-012

Well Date Units	NYSDEC Class GA Standard	MW-4 4/2/2009 ug/L	MW-4 10/28/2010 ug/L	MW-5 4/2/2009 ug/L	MW-5 10/28/2010 ug/L	MW-7 4/2/2009 ug/L	MW-7 10/28/2010 ug/L	MW-8 4/2/2009 ug/L	MW-8 10/28/2010 ug/L
1,1-biphenyl	5	NA	0.15 U	NA	0.15 U	NA	0.15 U	NA	0.15 U
2,2-oxybis(1-Chloropropane)		NA	0.17 U	NA	0.17 U	NA	0.17 U	NA	0.17 U
2,4,5-trichlorophenol	1	12 U	0.39 U	11 U	0.39 U	11 U	0.39 U	11 U	0.39 U
2,4,6-trichlorophenol	1	12 U	0.54 U	11 U	0.54 U	11 U	0.55 U	11 U	0.55 U
2,4-dichlorophenol	5	12 U	0.64 U	11 U	0.64 U	11 U	0.65 U	11 U	0.65 U
2,4-dimethylphenol	1	12 U	0.69 U	11 U	0.69 U	11 U	0.7 U	11 U	0.7 U
2,4-Dinitrophenol	10*	NA	2 U	NA	2 U	NA	2.1 U	NA	2.1 U
2,4-Dinitrotoluene	5	12 U	1 U	11 U	1 U	11 U	1 U	11 U	1 U
2,6-Dinitrotoluene	5	12 U	0.31 U	11 U	0.31 U	11 U	0.31 U	11 U	0.31 U
2-chloronaphthalene	10*	12 U	0.16 U	11 U	0.16 U	11 U	0.16 U	11 U	0.16 U
2-chlorophenol		12 U	0.52 U	11 U	0.52 U	11 U	0.53 U	11 U	0.53 U
2-Methylnaphthalene		12 U	0.31 U	11 U	0.31 U	11 U	0.31 U	11 U	0.31 U
2-methylphenol		12 U	0.23 U	11 U	0.23 U	11 U	0.24 U	11 U	0.24 U
2-nitroaniline	5	24 U	0.48 U	23 U	0.48 U	23 U	0.48 U	22 U	0.48 U
2-nitrophenol		12 U	0.5 U	11 U	0.5 U	11 U	0.51 U	11 U	0.51 U
3,3'-dichlorobenzidine	5	12 U	1.9 U	11 U	1.9 U	11 U	2 U	11 U	2 U
3+4-Methylphenols		NA	0.37 U	NA	0.37 U	NA	0.37 U	NA	0.37 U
3-nitroaniline	5	24 U	1.1 U	23 U	1.1 U	23 U	1.1 U	22 U	1.1 U
4,6-dinitro-2-methylphenol		24 U	0.72 U	23 U	0.72 U	23 U	0.73 U	22 U	0.73 U
4-bromophenyl phenyl ether		12 U	0.22 U	11 U	0.22 U	11 U	0.23 U	11 U	0.23 U
4-chloro-3-methylphenol		12 U	0.39 U	11 U	0.39 U	11 U	0.39 U	11 U	0.39 U
4-chloroaniline	5	12 U	2.8 U	11 U	2.8 U	11 U	2.8 U	11 U	2.8 U
4-chlorophenyl phenyl ether		12 U	0.2 U	11 U	0.2 U	11 U	0.21 U	11 U	0.21 U
4-methylphenol		12 U	NA	11 U	NA	11 U	NA	11 U	NA
4-nitroaniline	5	24 U	1.3 U	23 U	1.3 U	23 U	1.3 U	22 U	1.3 U
4-nitrophenol		24 U	1.9 U	23 U	1.9 U	23 U	2 U	22 U	2 U
acenaphthene	20*	12 U	0.2 U	11 U	0.2 U	11 U	0.21 U	11 U	0.21 U
acenaphthylene		12 U	0.68 U	11 U	0.68 U	11 U	0.69 U	11 U	0.69 U
acetophenone		NA	0.14 U	NA	0.14 U	NA	0.14 U	NA	0.14 U
anthracene	50*	12 U	0.16 U	11 U	0.16 U	11 U	0.16 U	11 U	0.16 U
atrazine	7.5	NA	0.39 U	NA	0.39 U	NA	0.39 U	NA	0.39 U
benzaldehyde		NA	0.75 U	NA	0.75 U	NA	0.75 U	NA	0.75 U
benzo(a)anthracene	0.002*	12 U	0.16 U	11 U	0.16 U	11 U	0.16 U	11 U	0.16 U
benzo(a)pyrene	ND	12 U	0.14 U	11 U	0.14 U	11 U	0.14 U	11 U	0.14 U
benzo(b)fluoranthene	0.002*	12 U	0.28 U	11 U	0.28 U	11 U	0.28 U	11 U	0.28 U
benzo(g,h,i)perylene		12 U	0.28 U	11 U	0.28 U	11 U	0.28 U	11 U	0.28 U
benzo(k)fluoranthene	0.002*	12 U	0.17 U	11 U	0.17 U	11 U	0.18 U	11 U	0.18 U
benzyl alcohol		12 U	NA	11 U	NA	11 U	NA	11 U	NA
bis(2-chloroethoxy)methane	5	12 U	0.53 U	11 U	0.53 U	11 U	0.54 U	11 U	0.54 U
bis(2-chloroethyl)ether	1	12 U	0.53 U	11 U	0.53 U	11 U	0.54 U	11 U	0.54 U
bis(2-chloroisopropyl)ether		12 U	NA	11 U	NA	11 U	NA	11 U	NA
bis(2-ethylhexyl)phthalate	5	12 U	0.16 U	11 U	0.16 U	11 U	0.16 U	11 U	0.16 U
butyl benzyl phthalate	50*	12 U	0.18 U	11 U	0.18 U	11 U	0.19 U	11 U	0.19 U
Caprolactam		NA	1.9 U	NA	1.9 U	NA	2 U	NA	2 U
carbazole		12 U	0.21 U	11 U	0.21 U	11 U	0.22 U	11 U	0.22 U
chrysene	0.002*	12 U	0.17 U	11 U	0.17 U	11 U	0.18 U	11 U	0.18 U
dibenzo(a,h)anthracene		12 U	0.41 U	11 U	0.41 U	11 U	0.41 U	11 U	0.41 U
Dibenzofuran		12 U	0.23 U	11 U	0.23 U	11 U	0.24 U	11 U	0.24 U
Diethyl phthalate	50*	12 U	0.37 U	11 U	0.37 U	11 U	0.37 U	11 U	0.37 U
dimethylphthalate	50*	12 U	0.21 U	11 U	0.21 U	11 U	0.22 U	11 U	0.22 U
di-n-butyl phthalate	50	12 U	1.9 U	11 U	1.9 U	11 U	2 U	11 U	2 U
di-n-octyl phthalate	50*	12 U	0.5 U	11 U	0.5 U	11 U	0.5 U	11 U	0.5 U
fluoranthene	50*	12 U	0.39 U	11 U	0.39 U	11 U	0.39 U	11 U	0.39 U
fluorene	50*	12 U	0.3 U	11 U	0.3 U	11 U	0.3 U	11 U	0.3 U
Hexachlorobenzene	0.04	12 U	0.17 U	11 U	0.17 U	11 U	0.18 U	11 U	0.18 U
Hexachlorobutadiene	0.5	12 U	0.24 U	11 U	0.24 U	11 U	0.25 U	11 U	0.25 U
Hexachlorocyclopentadiene	5	12 U	0.23 U	11 U	0.23 U	11 U	0.24 U	11 U	0.24 U
Hexachloroethane	5	12 U	0.24 U	11 U	0.24 U	11 U	0.25 U	11 U	0.25 U
indeno(1,2,3-cd)pyrene	0.002*	12 U	0.15 U	11 U	0.15 U	11 U	0.15 U	11 U	0.15 U
Isophorone	50*	12 U	0.29 U	11 U	0.29 U	11 U	0.29 U	11 U	0.29 U
Naphthalene	10*	12 U	0.12 U	11 U	0.12 U	11 U	0.12 U	11 U	0.12 U
Nitrobenzene	0.4	12 U	0.66 U	11 U	0.66 U	11 U	0.67 U	11 U	0.67 U
N-nitros-di-n-propylamine		12 U	0.19 U	11 U	0.19 U	11 U	0.2 U	11 U	0.2 U
N-nitrosodiphenylamine	50*	12 U	0.58 U	11 U	0.58 U	11 U	0.59 U	11 U	0.59 U
pentachlorophenol	1	24 U	1.7 U	23 U	1.7 U	23 U	1.7 U	22 U	1.7 U
phenanthrene	50	12 U	0.25 U	11 U	0.25 U	11 U	0.25 U	11 U	0.25 U
phenol	1	12 U	0.2 U	11 U	0.2 U	11 U	0.21 U	11 U	0.21 U
pyrene	50	12 U	0.19 U	11 U	0.19 U	11 U	0.2 U	11 U	0.2 U

* - Guidance Value.
U - Analyte not detected at indicated quantitation limit.
ND - Non-detect.

Table 4-4
Summary of Groundwater Sample Results - Metals
Tioga Castings Site
Owego, New York
NYSDEC Site Number 7-54-012

Well Date Units	NYSDEC Class GA Standards	MW-1R 4/13/2009 ug/L		MW-1R 3/18/2010 ug/L		MW-1R 10/28/2010 ug/L		MW-2 8/2/2007 ug/L		MW-2 7/17/2008 ug/L		MW-2 4/13/2009 ug/L		MW-2 3/19/2010 ug/L		MW-2 10/28/2010 ug/L	
Aluminum		1050		41.0	BE	20.8	J	60.2	B	23.6	U	632		57.8	BE	9.2	J
Antimony	3	6.7	U	6.8	U	8.0	U	5.6	U	5.5	U	6.7	U	6.8	U	8.0	U
Arsenic	25	3.0	U	5.6	U	4.2	U	4.2	U	3.7	U	3.0	U	5.6	U	4.2	U
Barium	1000	59.8	B	51.9	BE	50.7		61.6	B	54.3	B	102		48.8	BE	78.9	
Beryllium	3*	0.5	U	0.2	BE	0.7	U	0.40	B	0.3	U	0.5	U	0.2	U	0.7	U
Cadmium	5 [10]	0.3	U	0.6	BE	0.5	U	0.36	U	0.3	U	0.3	U	0.3	BE	0.5	U
Calcium		61200		63700		58900		54500	E	48800		50900		51400		62900	
Chromium	50 [50]	10.4	B	0.9	U	1.1	U	0.84	U	0.9	U	5.8	B	0.9	U	1.1	U
Cobalt		3.8	U	0.6	U	5.8	U	1.1	B	1.1	U	3.8	U	0.6	U	5.8	U
Copper	200	181		1.3	U	2.3	J	1.3	U	1.3	U	105		1.3	U	2.0	U
Iron	300	**1410**		48.9	BE	43.7	J	19.3	U	19	U	**532**		28.6	BE	29.4	J
Lead	25 [25]	1.4	U	3.0	U	4.4	J	2.9	U	2.9	U	1.4	U	3.0	U	3.3	J
Magnesium		11500		12100		10900		8650	E	7670		8320		8290		10100	
Manganese	300	106		16.5		3.9	J	2.8	B	8.2	B	211		54.2		5.0	J
Mercury	0.7	NA		0.1	U	0.1	U	0.12	U	0.1	U	NA		0.1	U	0.1	U
Molybdenum		5.5	B	NA		NA		NA		NA		5.0	U	NA		NA	
Nickel	100	6.9	B	1.4	BE	4.2	U	1.2	U	1.0	U	7.3	B	1.3	U	4.2	U
Potassium		2070	B	1640	BE	1640		4710	BE	3900	B	4550		4550	BE	5830	
Selenium	10	11.4	U	8.7	U	4.8	U	6.1	U	6.1	U	11.4	U	8.7	U	4.8	U
Silver	50	2.2	U	1.2	U	1.5	U	1.7	B	1.3	U	2.2	U	1.2	U	1.5	U
Sodium	20000	**25600**		**25100**		**23300**		**36100**	**E**	18700		**25200**		**24000**		**35000**	
Thallium	0.5*	3.0	U	10.2	U	2.4	U	7.0	U	5.9	U	3.0	U	10.2	U	2.4	U
Tin		5.0	U	NA		NA		NA		NA		5.0	U	NA		NA	
Titanium		8.8	B	NA		NA		NA		NA		5.0	U	NA		NA	
Vanadium		4.7	U	1.1	U	6.1	U	0.80	B	1.0	U	4.7	U	1.1	U	6.1	U
Zinc	2000*	13.5	U	4.1	BE	21.1		3.6	U	3.6	U	13.5	U	2.3	BE	12.9	J

* - NYSDEC Guidance Value.
NA - Not analyzed.
U - Analyte not detected.
B - Greater than MDL but less than RL.
MDL - Method detection limit.
RL - Reporting limit.
E - Estimated value.
[25] - Site-specific cleanup goal.

Table 4-4
Summary of Groundwater Sample Results - Metals
Tioga Castings Site
Owego, New York
NYSDEC Site Number 7-54-012

Well Date Units	NYSDEC Class GA Standards	MW-3 4/13/2009 ug/L		MW-3 3/19/2010 ug/L		MW-3 10/28/2010 ug/L		MW-3D 4/13/2009 ug/L		MW-3D 3/18/2010 ug/L		MW-3D 10/28/2010 ug/L		MW-4 8/2/2007 ug/L		MW-4 7/17/2008 ug/L	
Aluminum		195.0		39.8	U	17.7	J	668		39.8	U	11.7	J	40.0	U	32.6	B
Antimony	3	6.7	U	6.8	U	8.0	U	6.7	U	6.8	U	8.0	U	5.6	U	5.5	U
Arsenic	25	3.0	U	5.6	U	4.2	U	3.0	U	5.6	U	4.2	U	4.2	U	3.7	U
Barium	1000	38.3	B	46.5	BE	57.1		39.2	B	45.3	BE	56.7		40.0	B	38.3	B
Beryllium	3*	0.5	U	0.2	U	0.7	U	0.5	U	0.2	U	0.7	U	0.27	U	0.3	U
Cadmium	5 [10]	0.3	U	0.3	U	0.5	U	0.3	U	0.3	U	0.5	U	0.36	U	0.7	B
Calcium		42900		51300		54400		42300		50000		54000		42700	E	42400	
Chromium	50 [50]	3.5	B	0.9	U	1.1	U	3.8	B	0.9	U	1.1	U	0.84	U	0.9	U
Cobalt		3.8	U	0.6	U	5.8	U	3.8	U	0.6	U	5.8	U	0.89	U	1.1	U
Copper	200	71.3		1.3	U	2.0	U	56.6		1.3	U	2.3	J	1.4	B	1.3	U
Iron	300	144	B	19.3	U	55.6		**558**		19.3	U	52.9		47.6	B	34	B
Lead	25 [25]	1.5	B	3.0	U	5.1	J	1.4	U	3.0	U	4.6	J	2.9	U	2.9	U
Magnesium		7450		9270		9550		7490		9120		9680		8190	E	7830	
Manganese	300	14.0	B	0.3	BE	3.0	J	40.3	B	0.9	BE	2.2	J	0.79	B	1.2	B
Mercury	0.7	NA		0.1	U	0.1	U	NA		0.1	U	0.1	U	0.12	U	0.1	U
Molybdenum		5.0	U	NA		NA		5.0	U	NA		NA		NA		NA	
Nickel	100	4.2	B	1.3	U	4.2	U	3.9	B	1.3	U	4.2	U	1.2	U	1.0	U
Potassium		1430	B	1890	BE	1480		1550	B	1610	BE	1490		1020	BE	1860	B
Selenium	10	11.4	U	8.7	U	4.8	U	11.4	U	8.7	U	4.8	U	6.1	U	6.1	U
Silver	50	2.2	U	1.2	U	1.5	U	2.2	U	1.2	U	1.5	U	1.0	U	1.3	U
Sodium	20000	17000		16900		17000		17300		16900		17400		12000	E	12800	
Thallium	0.5*	3.0	U	10.2	U	2.4	U	3.0	U	10.2	U	2.4	U	7.0	U	5.9	U
Tin		5.0	U	NA		NA		5.0	U	NA		NA		NA		NA	
Titanium		5.0	U	NA		NA		5.0	U	NA		NA		NA		NA	
Vanadium		4.7	U	1.1	U	6.1	U	4.7	U	1.1	U	6.1	U	0.78	U	1.0	U
Zinc	2000*	13.5	U	1.5	U	44.3		13.5	U	1.5	U	14.5	J	3.6	U	3.6	U

* - NYSDEC Guidance Value.
NA - Not analyzed.
U - Analyte not detected.
B - Greater than MDL but less than RL.
MDL - Method detection limit.
RL - Reporting limit.
E - Estimated value.
[25] - Site-specific cleanup goal.

Table 4-4
Summary of Groundwater Sample Results - Metals
Tioga Castings Site
Owego, New York
NYSDEC Site Number 7-54-012

Well Date Units	NYSDEC Class GA Standards	MW-4 4/13/2009 ug/L		MW-4 3/18/2010 ug/L		MW-4 10/28/2010 ug/L		MW-5 8/2/2007 ug/L		MW-5 7/17/2008 ug/L		MW-5 4/13/2009 ug/L		MW-5 3/18/2010 ug/L		MW-5 10/28/2010 ug/L	
Aluminum		754		39.8	U	10.6	J	79.0	B	28.9	B	102	B	39.8	U	22.4	J
Antimony	3	6.7	U	6.8	U	8.0	U	5.6	U	5.5	U	6.7	U	6.8	U	8.0	U
Arsenic	25	3.0	U	5.6	U	4.2	U	4.2	U	3.7	U	3.0	U	5.6	U	4.2	U
Barium	1000	60.9	B	42.6	BE	50.3		56.4	B	55.7	B	47.1	B	47.4	BE	67.3	
Beryllium	3*	0.5	U	0.2	U	0.7	U	0.51	B	0.3	U	0.5	U	0.2	U	0.7	U
Cadmium	5 [10]	0.3	U	0.5	BE	0.5	U	0.36	U	0.3	U	0.3	U	0.3	U	0.5	U
Calcium		40500		48000		47900		44400	E	45200		44000		45100		49500	
Chromium	50 [50]	3.4	B	0.9	U	1.1	U	0.84	U	0.9	U	3.9	B	0.9	U	1.1	U
Cobalt		3.8	U	0.6	U	5.8	U	0.89	U	1.1	U	3.8	U	0.6	U	5.8	U
Copper	200	49.7		1.3	U	2.0	U	1.3	U	1.3	U	89.3		1.3	U	2.0	U
Iron	300	**667**		22.2	BE	33.4	J	19.3	U	19	U	246		19.3	U	94.1	
Lead	25 [25]	1.4	U	3.0	U	2.6	U	2.9	U	2.9	U	6.0	B	3.0	U	7.2	
Magnesium		7080		8820		8390		7600	E	7570		7440		7330		7980	
Manganese	300	79.4		1.5	BE	2.0	J	0.90	B	0.7	B	10.1	B	0.8	BE	5.6	J
Mercury	0.7	NA		0.1	U	0.1	U	0.12	U	0.1	U	NA		0.1	U	0.1	U
Molybdenum		5.0	U	NA		NA		NA		NA		5.0	U	NA		NA	
Nickel	100	4.5	B	1.3	U	4.2	U	1.2	U	1.4	B	5.0	B	1.3	U	4.2	U
Potassium		1190	B	1130	BE	1230		3330	BE	3340	B	2880	B	3530	BE	3620	
Selenium	10	11.4	U	8.7	U	4.8	U	6.1	U	6.1	U	11.4	U	8.7	U	4.8	U
Silver	50	2.2	U	1.2	U	1.5	U	1.6	B	1.3	U	2.2	U	1.2	U	1.5	U
Sodium	20000	15200		16100		15000		14200	E	15400		13300		8320		13600	
Thallium	0.5*	3.0	U	10.2	U	2.4	U	7.0	U	5.9	U	3.0	U	10.2	U	2.4	U
Tin		5.0	U	NA		NA		NA		NA		5.0	U	NA		NA	
Titanium		5.0	U	NA		NA		NA		NA		5.0	U	NA		NA	
Vanadium		4.7	U	1.1	U	6.1	U	0.80	B	1.0	U	4.7	U	1.1	U	6.1	U
Zinc	2000*	13.5	U	1.5	U	6.5	U	3.6	U	3.6	U	13.5	U	3.6	BE	15.3	J

* - NYSDEC Guidance Value.
NA - Not analyzed.
U - Analyte not detected.
B - Greater than MDL but less than RL.
MDL - Method detection limit.
RL - Reporting limit.
E - Estimated value.
[25] - Site-specific cleanup goal.

Table 4-4
Summary of Groundwater Sample Results - Metals
Tioga Castings Site
Owego, New York
NYSDEC Site Number 7-54-012

Well Date Units	NYSDEC Class GA Standards	MW-7 4/13/2009 ug/L		MW-7 3/18/2010 ug/L		MW-7 10/28/2010 ug/L		MW-8 4/13/2009 ug/L		MW-8 3/18/2010 ug/L		MW-8 10/28/2010 ug/L	
Aluminum		1810		140	BE	28.2	J	6190		39.8	U	45.5	J
Antimony	3	6.7	U	6.8	U	8.0	U	6.7	U	6.8	U	8.0	U
Arsenic	25	3.0	U	5.6	U	4.2	U	3.0	U	5.6	U	4.2	U
Barium	1000	165		133	BE	96.0		219		64.6	BE	71.6	
Beryllium	3*	0.5	U	0.2	U	0.7	U	0.5	U	0.2	U	0.7	U
Cadmium	5 [10]	0.3	U	0.4	BE	0.5	U	0.3	U	0.3	BE	0.5	U
Calcium		64300		85600		60300		52400		52600		52800	
Chromium	50 [50]	10.4	B	0.9	U	1.1	U	8.9	B	0.9	U	1.9	J
Cobalt		5.8	B	0.6	U	5.8	U	3.8	U	0.6	U	5.8	U
Copper	200	178		3.1	BE	3.6	J	66.3		1.3	U	2.3	J
Iron	300	**2880**		192		297.0		**4530**		40.2	BE	104.0	
Lead	25 [25]	**30.2**	**B**	3.0	U	3.1	J	17.3	B	3.0	U	2.6	U
Magnesium		10000		13600		9230		8740		8870		8300	
Manganese	300	**989**		115		474.0		**524**		2.7	BE	5.0	J
Mercury	0.7	NA		0.1	U	0.1	U	NA		0.1	U	0.1	U
Molybdenum		5.0	B	NA		NA		5.0	U	NA		NA	
Nickel	100	10.6	B	2.8	BE	4.2	U	9.5	B	1.3	U	4.2	U
Potassium		4510		5190		4170		3770		2440	BE	2630	
Selenium	10	11.4	U	8.7	U	4.8	U	11.4	U	8.7	U	4.8	U
Silver	50	2.2	U	1.2	U	1.5	U	2.2	U	1.2	U	1.5	U
Sodium	20000	**57500**		**58900**		**20700**		**26700**		**23300**		**21300**	
Thallium	0.5*	3.0	U	10.2	U	2.4	U	3.0	U	10.2	U	2.4	U
Tin		5.0	U	NA		NA		5.0	U	NA		NA	
Titanium		5.0	U	NA		NA		34.4	B	NA		NA	
Vanadium		7.2	B	1.1	U	6.1	U	9.8	B	1.1	U	6.1	U
Zinc	2000*	40.4	B	10.4	BE	18.0	J	40.2	B	3.0	BE	23.8	

* - NYSDEC Guidance Value.
NA - Not analyzed.
U - Analyte not detected.
B - Greater than MDL but less than RL.
MDL - Method detection limit.
RL - Reporting limit.
E - Estimated value.
[25] - Site-specific cleanup goal.

Table 5-1
Summary of SVI Sampling Results
Tioga Castings Site
Owego, New York
NYSDEC Site No.: 7-54-012

Sample ID Date Matrix	Units	NYSDOH DECISION MATRIX	SV-1 7/17/08 Air	SV-2 7/17/2008 Air	SV-3 7/17/2008 Air	SV-4 7/17/2008 Air	SV-5 7/17/2008 Air
Acetone	µg/m³		20	240	29	20	160
Benzene	µg/m³		6.5	19	8.8	8.1	12
Benzyl chloride	µg/m³		0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	µg/m³		0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bromoform	µg/m³		0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Bromomethane	µg/m³		0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,3-Butadiene	µg/m³		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
2-Butanone (MEK)	µg/m³		6.3	31	14	4.2	17
Carbon Disulfide	µg/m³		14	71	19	2.7	28
Carbon Tetrachloride	µg/m³	Matrix 1	0.31 U	0.31 U	0.82	0.31 U	0.31 U
Chlorobenzene	µg/m³		0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	µg/m³		0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	µg/m³		0.24 U	0.24 U	0.24 U	0.24 U	0.79
Chloromethane	µg/m³		0.19	0.5	0.11	0.1 U	0.1 U
Cyclohexane	µg/m³		2.6	8	0.17 U	8.6	0.17 U
Dibromochloromethane	µg/m³						
1,2-Dibromoethane	µg/m³		0.27 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	µg/m³		0.21 U	0.3 U	0.3 U	0.3 U	0.3 U
1,3-Dichlorobenzene	µg/m³		0.21 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	µg/m³		0.21 U	0.42	0.3 U	1	1.2
Dichlorodifluoromethane	µg/m³		3	7.1	5	4.1	3.8
1,1-Dichloroethane	µg/m³		0.14 U	0.2 U	20	0.2 U	0.2 U
1,2-Dichloroethane	µg/m³		0.14 U	U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethylene	µg/m³	Matrix 2	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethylene	µg/m³	Matrix 2	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethylene	µg/m³		0.14 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	µg/m³		0.17 U	0.23 U	0.23 U	0.23 U	0.23 U
cis-1,3-Dichloropropene	µg/m³		0.16 U	0.22 U	0.22 U	0.22 U	0.22 U
trans-1,3-Dichloropropene	µg/m³		0.16 U	0.22 U	0.22 U	0.22 U	0.22 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	µg/m³		0.25 U	0.35 U	0.35 U	0.35 U	0.35 U
Ethanol	µg/m³		14	30	30	14	14
Ethyl Acetate	µg/m³		0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
Ethylbenzene	µg/m³		5.4	16	8.6	2.9	6
4-Ethyltoluene	µg/m³		3.1	5.2	3.3	0.88	1.6
Heptane	µg/m³		48	140	300	13	47

Table 5-1
Summary of SVI Sampling Results
Tioga Castings Site
Owego, New York
NYSDEC Site No.: 7-54-012

Sample ID Date Matrix	Units	NYSDOH DECISION MATRIX	SV-1 7/17/08 Air	SV-2 7/17/2008 Air	SV-3 7/17/2008 Air	SV-4 7/17/2008 Air	SV-5 7/17/2008 Air
Hexachlorobutadiene	µg/m³		1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Hexane	µg/m³		90	290	380	14	60
2-Hexanone (MBK)	µg/m³		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Isopropanol	µg/m³		1.8	5.3	1.8	0.75	2.7
Methyl tert-Butyl Ether (MTBE)	µg/m³		0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Methylene Chloride	µg/m³		2.6	2.4	2.1	2.3	4.9
4-Methyl-2-pentanone (MIBK)	µg/m³		0.2 U	0.2 U	0.2 U	0.2 U	1.1
Propene	µg/m³		0.18 U	0.18 U	0.18 U	16	0.18 U
Styrene	µg/m³		0.41	0.79	0.54	0.28	0.45
1,1,2,2-Tetrachloroethane	µg/m³		0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Tetrachloroethylene	µg/m³	Matrix 2	2.7	5.7	0.84	1.3	4.6
Tetrahydrofuran	µg/m³		0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Toluene	µg/m³		23	350	41	80	130
1,2,4-Trichlorobenzene	µg/m³		0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,1,1-Trichloroethane	µg/m³	Matrix 2	1.1	1100	54	13	5
1,1,2-Trichloroethane	µg/m³		0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Trichloroethylene	µg/m³	Matrix 1	0.88	0.4	0.27 U	0.27 U	0.27 U
Trichlorofluoromethane	µg/m³		2.3	1.9	15	11	21
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/m³		1.2	0.87	2	1.7	1.4
1,2,4-Trimethylbenzene	µg/m³		12	17	10	5.1	6.1
1,3,5-Trimethylbenzene	µg/m³		3.2	5.4	3.6	1.9	2.5
Vinyl Acetate	µg/m³		0.71 U	0.71 U	0.71 U	0.71 U	0.71 U
Vinyl Chloride	µg/m³	Matrix 1	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
m&p-Xylene	µg/m³		17	48	18	13	22
o-Xylene	µg/m³		8.5	21	8.6	7.9	9.7

Notes:
U - Analyte not detected at indicated concentration
J - Estimated concentration
UJ - Analyte not detected - Reporting limit estimated
NJ - Tentatively identified compound - Estimated concentration
Sample SV-X is a duplicate sample from SV-7

Table 5-1
Summary of SVI Sampling Results
Tioga Castings Site
Owego, New York
NYSDEC Site No.: 7-54-012

Sample ID Date Matrix	Units	NYSDOH DECISION MATRIX	SV-6 12/9/10 Air	SV-7 12/9/10 Air	SV-X 12/9/10 Air	SV-8 12/9/10 Air	AA-2 12/9/10 Air
Acetone	µg/m³		0.95 U	0.95 U	0.95 U	12 U	6.7 U
Benzene	µg/m³		1.6	1 U	0.96 NJ	0.33	0.34
Benzyl chloride	µg/m³		0.52 U	0.52 U	0.52 U	0.52 U	0.18 U
Bromodichloromethane	µg/m³		0.67 U	0.67 U	0.67 U	0.67 U	0.24 U
Bromoform	µg/m³		1 U	1 U	1 U	1 U	0.36 U
Bromomethane	µg/m³		0.39 U	0.39 U	0.39 U	0.39 U	0.14 U
1,3-Butadiene	µg/m³		0.22 U	0.22 U	0.22 U	0.22 U	0.078 U
2-Butanone (MEK)	µg/m³		4.5 U	1.8 U	0.79 U	1.4 U	1.6 U
Carbon Disulfide	µg/m³		1.1	1.8	1.7	0.31 U	0.11 U
Carbon Tetrachloride	µg/m³	Matrix 1	0.63 U	0.63 U	0.63 U	0.63 U	0.46
Chlorobenzene	µg/m³		0.46 U	0.46 U	0.46 U	0.46 U	0.16 U
Chloroethane	µg/m³		0.26 U	0.26 U	0.26 U	0.26 U	0.093 U
Chloroform	µg/m³		0.49 U	0.49 U	0.49 U	0.49 U	0.17 U
Chloromethane	µg/m³		0.21 U	0.21 U	0.21 U	0.21 U	1.1
Cyclohexane	µg/m³		1.2	1.1	1	0.78	0.12 U
Dibromochloromethane	µg/m³		0.85 U	0.85 U	0.85 U	0.85 U	0.3 U
1,2-Dibromoethane	µg/m³		0.38 U	0.77 U	0.77 U	0.77 U	0.27 U
1,2-Dichlorobenzene	µg/m³		0.3 U	0.6 U	0.6 U	0.6 U	0.21 U
1,3-Dichlorobenzene	µg/m³		0.3 U	0.6 U	0.6 U	0.6 U	0.21 U
1,4-Dichlorobenzene	µg/m³		1.2	0.6 U	0.6 U	0.6 U	0.21 U
Dichlorodifluoromethane	µg/m³		21	1.1 NJ	1.4	2.6	1.1
1,1-Dichloroethane	µg/m³		0.2 U	0.4 U	0.4 U	0.4 U	0.14 U
1,2-Dichloroethane	µg/m³		0.2 U	0.4 U	0.4 U	0.4 U	0.14 U
1,1-Dichloroethylene	µg/m³	Matrix 2	0.2 U	0.4 U	0.4 U	0.4 U	0.14 U
cis-1,2-Dichloroethylene	µg/m³	Matrix 2	0.2 U	0.4 U	0.4 U	0.4 U	0.14 U
trans-1,2-Dichloroethylene	µg/m³		0.2 U	0.4 U	0.4 U	0.4 U	0.14 U
1,2-Dichloropropane	µg/m³		0.23 U	0.46 U	0.46 U	0.46 U	0.16 U
cis-1,3-Dichloropropene	µg/m³		0.22 U	0.45 U	0.45 U	0.45 U	0.16 U
trans-1,3-Dichloropropene	µg/m³		0.22 U	0.45 U	0.45 U	0.45 U	0.16 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	µg/m³		0.35 U	0.7 U	0.7 U	0.7 U	0.25 U
Ethanol	µg/m³		3.1 UJ	1.9 UJ	1.9 UJ	2.5 UJ	1.6 UJ
Ethyl Acetate	µg/m³		0.36 U	0.36 U	0.36 U	0.36 U	0.13 U
Ethylbenzene	µg/m³		2.2 NJ	0.43 U	0.43 U	0.43 U	0.15 U
4-Ethyltoluene	µg/m³		0.49 U	0.49 U	0.49 U	0.49 U	0.17 U
Heptane	µg/m³		230	28	26	4.2	0.14 U

Table 5-1
Summary of SVI Sampling Results
Tioga Castings Site
Owego, New York
NYSDEC Site No.: 7-54-012

Sample ID Date Matrix	Units	NYSDOH DECISION MATRIX	SV-6 12/9/10 Air	SV-7 12/9/10 Air	SV-X 12/9/10 Air	SV-8 12/9/10 Air	AA-2 12/9/10 Air
Hexachlorobutadiene	µg/m³		1.1 U	1.1 U	1.1 U	1.1 U	0.37 U
Hexane	µg/m³		360	63	60	5	0.12 U
2-Hexanone (MBK)	µg/m³		0.41 U	0.41 U	0.41 U	0.41 U	0.43
Isopropanol	µg/m³		0.25 UJ	0.25 UJ	0.25 UJ	0.9 UJ	0.29 J
Methyl tert-Butyl Ether (MTBE)	µg/m³		0.36 U	0.36 U	0.36 U	0.36 U	0.13 U
Methylene Chloride	µg/m³		1.4 U	1.4 U	1.4 U	2.6	0.52
4-Methyl-2-pentanone (MIBK)	µg/m³		0.41 U	0.41 U	0.41 U	0.41 U	0.14 U
Propene	µg/m³		0.69 U	0.69 U	0.69 U	0.69 U	0.24 U
Styrene	µg/m³		0.43 U	0.43 U	0.43 U	0.43 U	0.15 U
1,1,2,2-Tetrachloroethane	µg/m³		0.69 U	0.69 U	0.69 U	0.69 U	0.24 U
Tetrachloroethylene	µg/m³	Matrix 2	0.68 U	0.68 U	0.68 U	0.68 U	0.24 U
Tetrahydrofuran	µg/m³		0.29 U	0.29 U	0.29 U	0.29 U	0.1 U
Toluene	µg/m³		2.9	1.5	1.4	0.75	0.19
1,2,4-Trichlorobenzene	µg/m³		0.74 U	0.74 U	0.74 U	0.74 U	0.26 U
1,1,1-Trichloroethane	µg/m³	Matrix 2	3.6	1.7	1.7	1.8	0.19 U
1,1,2-Trichloroethane	µg/m³		0.55 U	0.55 U	0.55 U	0.55 U	0.19 U
Trichloroethylene	µg/m³	Matrix 1	0.54 U	0.54 U	0.54 U	0.54 U	0.19 U
Trichlorofluoromethane	µg/m³		0.56 U	0.56 U	0.56 U	0.99	1
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/m³		0.84	0.77 U	0.77 U	0.77 U	0.46
1,2,4-Trimethylbenzene	µg/m³		0.49 U	0.49 U	0.49 U	0.49 U	0.17 U
1,3,5-Trimethylbenzene	µg/m³		0.49 U	0.49 U	0.49 U	0.49 U	0.17 U
Vinyl Acetate	µg/m³		0.35 U	0.35 U	0.35 U	0.35 U	0.12 U
Vinyl Chloride	µg/m³	Matrix 1	0.26 U	0.26 U	0.26 U	0.26 U	0.09 U
m&p-Xylene	µg/m³		1.7 U	0.87 U	0.87 U	0.87 U	0.3 U
o-Xylene	µg/m³		1.1 U	0.43 U	0.43 U	0.43 U	0.15 U

Notes:
U - Analyte not detected at indicated concentration
J - Estimated concentration
UJ - Analyte not detected - Reporting limit estimated
NJ - Tentatively identified compound - Estimated concentration
Sample SV-X is a duplicate sample from SV-7

New York State Department of Environmental Conservation
Tioga Castings Site Quarterly Report

Appendix A
Post-Closure Operation and Maintenance Checklist

MALCOLM PIRNIE

TIOGA CASTINGS SITE LANDFILL

Post-Closure Operation and Maintenance Checklist

Inspected by: Jeremy Wyckoff (Malcolm Pirnie, Inc.)

Date: 12/29/2010 Time: 09:35

Weather Conditions: Overcast ~ 25 degrees F.

LANDFILL COVER SYSTEM

Erosion		YES	X	NO
Holes or Cracks in Cover		YES	X	NO
Cap Settlement		YES	X	NO
Ponded Water or Wet Areas		YES	X	NO
Burrowing Rodents		YES	X	NO
Sparse Vegetation/Bare Soil		YES	X	NO
Brush or Other Woody Vegetation,	X	YES		NO
Excessive Weeds in Grass		YES	X	NO
Grass Mowed		YES	X	NO

DRAINAGE DITCHES

Erosion		YES	X	NO
Obstructions		YES	X	NO
Sediment Accumulation		YES	X	NO
Evidence of Surcharging		YES	X	NO
Presence of Brush	X	YES		NO

Comments: Burrowing rodent holes filled and marked with pin flags by NYSDEC.

Some small trees growing on slope of landfill cap. Significant brush/trees along perimter fence.

Continued

FENCING

Warning Signs	X	OK		OTHER
Gates and Locks	X	OK		OTHER
Posts	X	OK		OTHER
Top Tension Wire	X	OK		OTHER
Barbed Wire	X	OK		OTHER

Comments: _____

_____

MONITORING WELLS

Capped and Locked	X	YES		NO
Casing Damage		YES	X	NO

Comments: _____

_____

INSPECTOR' SIGNATURE _____ DATE 12/29/10

Photograph 1:
Landfill access gate and warning sign.

Photograph 2:
Burrowing rodent hole with marker flag on north side of landfill.

Photograph 3:
Landfill cap from northeast corner, facing southwest.

Photograph 4:
Landfill cap from northwest corner, facing southeast.

Photograph 5:
South edge of landfill, facing west.

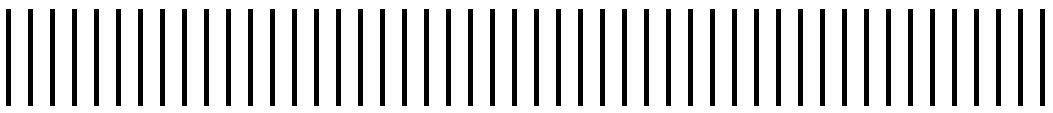
Photograph 6:
North edge of landfill, facing east.

Photograph 7:
West edge of landfill, facing south.

Photograph 8:
East edge of landfill, facing south.

New York State Department of Environmental Conservation
Tioga Castings Site Quarterly Report

Appendix B
Monitoring Well Elevation Data



0266362 / ALB

MALCOLM PIRNIE

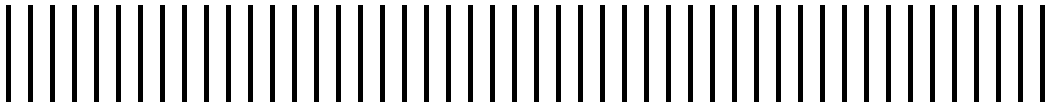
Appendix B
Monitoring Well Elevation Data
Tioga Casting
Owego, New York
NYSDEC Site No. 7-54-012

Well	Measuring Point* Elevation (feet)	
MW-1R	813.82	(2)
MW-2	807.68	(1)
MW-3	812.61	(2)
MW-3D	812.42	(2)
MW-4	806.33	(1)
MW-5	803.89	(1)
MW-7	807.12	(2)
MW-8	813.73	(2)

(1) - Source: Monitoring Plan: Tioga Casting (NYSDEC, April 25, 2005)
(2) - From Malcolm Pirnie, Inc. level survey performed 10/28/2010
* - Measuring point for all wells is top of interior casing

New York State Department of Environmental Conservation
Tioga Castings Site Quarterly Report

Appendix C
Water Level Data Form



0266362 / ALB

MALCOLM PIRNIE

GROUNDWATER LEVEL DATA FORM

PROJECT NAME: Tioga Casting
PROJECT NUMBER: 0266362
DATE: 10/28/2010
PERSONNEL: Jeremy Wyckoff

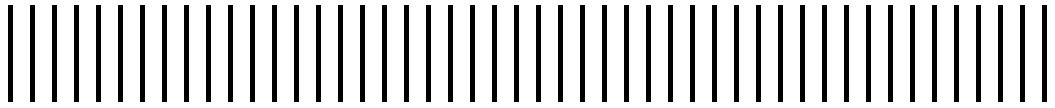
WELL ID	Date	Time	Headspace VOCs (ppm)	Depth to LNAPL (feet)	Depth to Water (feet)	Reference Point
MW-1R	10/28/2010	07:30 - 08:30	NM	-	19.77	TOC
MW-2	10/28/2010	07:30 - 08:30	NM	-	13.59	TOC
MW-3	10/28/2010	07:30 - 08:30	NM	-	16.74	TOC
MW-3D	10/28/2010	07:30 - 08:30	NM	-	16.58	TOC
MW-4	10/28/2010	07:30 - 08:30	NM	-	10.04	TOC
MW-5	10/28/2010	07:30 - 08:30	NM	-	9.72	TOC
MW-7	10/28/2010	07:30 - 08:30	NM	-	13.07	TOC
MW-8	10/28/2010	07:30 - 08:30	NM	-	20.04	TOC

Notes:

NM - Not Measured

New York State Department of Environmental Conservation
Tioga Castings Site Quarterly Report

Appendix D
Groundwater Sampling Purge Logs



0266362 / ALB

MALCOLM PIRNIE

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-1R DATE: 10/28/00

PROJECT NAME: Troy Castings
PROJECT NUMBER: 0266362
SAMPLERS: JRW

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 19.77

D: Volume of Water in Casing: _____

v = 0.0408 $(B)^2$ x (A-C) = D

v = 0.0408 ( )^2 x (-) = _____ gal.

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1555	1600	1605	1610	1615									
Gallons														
Depth to Water	19.66	19.67	19.67	19.67	19.67									
pH	7.08	7.11	7.11	7.12	7.12									
Conductivity (mohm/cm	.481	.485	.486	.486	.486									
Turbidity (ntu)	2.5	1.5	1.3	1.5	1.6									
Disolved Oxygen (mg/l)	6.83	3.95	3.81	3.81	3.83									
Temperature (°C)	13.70	13.41	13.30	13.26	13.25									
Salinity	.313													
TDS .313	142	.315	.316	.316	3.16									
Redox (mV)	142	150	155	158	160									

Notes: 1555 - Initiate Purge.
1615 - Finish Purge, collect samples
purged ~ 2.5 gallons

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-2 DATE: 10/28/10

PROJECT NAME: Trojan Castings
PROJECT NUMBER: 0266362
SAMPLERS: JLW

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 13.59

D: Volume of Water in Casing: _____

$v = 0.0408 (B)^2 \times (A-C) = D$

v = 0.0408 ( )² x (-) = _____ gal.

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1400	1405	1410	1415	1420	1425							
Gallons													
Depth to Water	13.53	13.53	13.53	13.53	13.53	13.53							
pH	6.51	6.48	6.48	6.48	6.47	6.43							
Conductivity (mohm/cm	.523	.524	.522	.524	.528	.530							
Turbidity (ntu)	1.5	0	0	0	0	0							
Disolved Oxygen (mg/l)	6.02	5.01	4.91	5.46	5.99	5.							
Temperature (°C)	15.43	15.14	15.05	15.03	14.91	14.87							
Salinity													
TDS	.335	.335	.334	.335	.338	.338							
Redox (mV)	215	219	221	221	224	226							

Notes: 1400 - Initiate Purge.
1425 - Finish purge collect samples
- Purged ~ 4 gallons

WELL DEVELOPMENT/ PURGING LOG

MALCOLM PIRNIE

WELL NUMBER: MW-3 DATE: 10/28/10

PROJECT NAME: Tioga Castings

PROJECT NUMBER: 0266362

SAMPLERS: JRW

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 16.74

D: Volume of Water in Casing: _____

v = 0.0408 $(B)^2$ x (A-C) = D

v = 0.0408 ( )^2 x (-) = _____ gal.

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1105	1110	1115	1120	1125									
Gallons														
Depth to Water	16.75	16.75	16.75	16.75	16.75									
pH	6.72	6.57	6.54	6.53	6.53									
Conductivity (mohm/cm	.447	.430	.427	.427	.427									
Turbidity (ntu)	26.4	9.7	0	0	0									
Disolved Oxygen (mg/l)	7.28	5.34	5.17	5.14	5.15									
Temperature (°C)	14.35	14.28	14.23	14.23	14.21									
Salinity														
TDS	.294	.279	.278	.278	.278									
Redox (mV)	179	189	195	197	200									

Notes: 1105 - Initiate purge

1125 - Finish purge, Collect samples.

- Purge ~ 2.5 gallons

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-3D DATE: 10/28/10

PROJECT NAME: Tioga Castings
PROJECT NUMBER: 6266362
SAMPLERS: JRW

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: 16.58

D: Volume of Water in Casing: _____

$v = 0.0408 (B)^2 \times (A-C) = D$

v = 0.0408 ( )² x (-) = _____ gal.

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1135	1140	1145	1150	1155	1200	1205						
Gallons													
Depth to Water	16.54	16.55	16.55	16.55	16.55	16.55	16.55						
pH	6.62	6.55	6.53	6.53	6.53	6.53	6.52						
Conductivity (mohm/cm	.431	.429	.429	.428	.428	.428	.427						
Turbidity (ntu)	9.1	2.0	3.1	2.0	0.0	0.0	0.0						
Disolved Oxygen (mg/l)	5.25	5.54	5.25	5.31	5.14	5.34	5.16						
Temperature (°C)	14.17	14.21	14.17	14.19	14.19	14.20	14.18						
Salinity													
TDS	.280	.280	.279	.278	.278	.278	.278						
Redox (mV)	194	203	204	206	207	209	210						

Notes: 1135- Initiate purge.
1205- Finish purge, collect samples, collect Duplicate MW-3X
[redacted]- Purged ~ 3 gallons

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-4 DATE: 10/26/10

PROJECT NAME: Tioga Castings
PROJECT NUMBER: 0266362
SAMPLERS: JRW

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 10.04

D: Volume of Water in Casing: _____

v = 0.0408 $(B)^2$ x (A-C) = D

v = 0.0408 ( )^2 x (-) = _____ gal.

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1020	1025	1030	1035	1040	1045	1050						
Gallons	0						3.5						
Depth to Water	10.03	10.03	10.03	1003	1003	1003	10.03						
pH	7.09	6.69	6.62	6.59	6.58	6.57	6.55						
Conductivity (mohm/cm	.372	.367	.365	.368	.370	.370	.371						
Turbidity (ntu)	4.4	4.9	2.6	1.3	0	0	0						
Disolved Oxygen (mg/l)	6.23	5.47	5.35	5.32	5.18	5.17	5.21						
Temperature (°C)	16.07	14.75	14.59	14.50	14.46	14.49	14.45						
Salinity													
TDS	0.243	0.238	.238	.239	.241	.241	.242						
Redox (mV)	97	145	165	174	180	185	190						

Notes: 1020 - Initial purge
1050 - Finish purge, collect samples

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-5 DATE: 10/28/10

PROJECT NAME: Tioga Castings
PROJECT NUMBER: 0266362
SAMPLERS: JRW

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 9.72

D: Volume of Water in Casing: _____

v = 0.0408 $(B)^2$ x (A-C) = D

v = 0.0408 ( )^2 x (-) = _____ gal.

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1315	1320	1325	1330	1335								
Gallons													
Depth to Water	10.13	10.23	10.32	10:30	10:30								
pH	6.34	6.24	6.24	6.24	6.24								
Conductivity (mohm/cm	.387	.384	.395	.386	.385								
Turbidity (ntu)	1.7	0	0	0	0								
Disolved Oxygen (mg/l)	2.59	2.36	2.37	2.16	2.15								
Temperature (°C)	15.69	15.98	16.04	16.06	16.07								
Salinity													
TDS	.252	.250	.251	.251	.250								
Redox (mV)	217	223	228	227	225								

Notes: 1315- Initiate Purge
1335- Finish purge, collect samples
- purge ~ 2.5 gallons

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-7 DATE: 10/28/10

PROJECT NAME: Tioga Castings
PROJECT NUMBER: 0266362
SAMPLERS: JEW

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 13.07

D: Volume of Water in Casing: _____

v = 0.0408 $(B)^2$ x (A-C) = D

v = 0.0408 ( )^2 x (-) = _____ gal.

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1450	1455	1500	1505	1510	1515	1520	1525					
Gallons													
Depth to Water	12.97	12.97	12.97	12.97	12.97	12.97	12.97	12.97					
pH	6.43	6.33	6.31	6.30	6.30	6.29	6.29	6.29					
Conductivity (mohm/cm	.453	.456	.459	.458	.458	.457	.457	.457					
Turbidity (ntu)	8.7	5.9	4.3	2.6	1.9	1.0	1.0	1.0					
Disolved Oxygen (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Temperature (°C)	14.92	14.70	14.76	14.78	14.82	14.83	14.83	14.81					
Salinity													
TDS	.294	.297	.298	.298	.297	.297	.297	.297					
Redox (mV)	39	44	57	59	61	62	62	64					

Notes: 1450- Initiate purge
1525- Finish Purge, collect samples
- purged - 4 gallons

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-8 DATE: 12/28/10

PROJECT NAME: Tioga Castings
PROJECT NUMBER: 8266362
SAMPLERS: JLW

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 20.04

D: Volume of Water in Casing: _____

v = 0.0408 $(B)^2$ x (A-C) = D

v = 0.0408 ( )^2 x (-) = _____ gal.

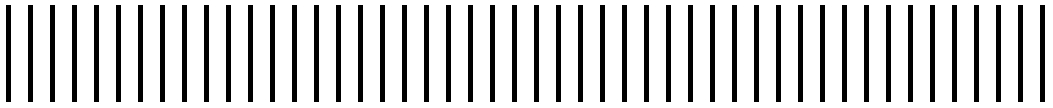
Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1235	1240	1245	1250	1255									
Gallons	0													
Depth to Water	19.98	19.98	19.98	19.98	19.98									
pH	6.47	6.26	6.25	6.25	6.24									
Conductivity (mohm/cm	.287	.440	.436	.435	.434									
Turbidity (ntu)	9.0	3.0	2.3	2.5	2.3									
Disolved Oxygen (mg/l)	8.58	4.26	4.13	4.14	4.10									
Temperature (°C)	13.12	12.99	12.89	12.89	12.88									
Salinity														
TDS	.296	.287	.283	.283	.282									
Redox (mV)	203	218	222	225	227									

Notes: 1235 - Initiate purge
1255 - Finish Purge, Collect samples
- Purged ~ 3.0 gallons

New York State Department of Environmental Conservation
Tioga Castings Site Quarterly Report

Appendix E
Analytical Reporting Forms



0266362 / ALB

MALCOLM PIRNIE

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

MALCP2

CHEMTECH PROJECT NO. B4045
QUOTE NO. Q1010033
COC Number 078781

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Malcolm Pirnie, Inc
ADDRESS: 855 Route 146, Suite 210
CITY: Clifton Park STATE: NY ZIP: 10265
ATTENTION: Jeremy Wyckoff
PHONE: 518-250-7300 FAX: 518-250-7301

CLIENT PROJECT INFORMATION

PROJECT NAME: NYSDEC - Tioga Castings
PROJECT NO.: 0266362 LOCATION: Owego, NY
PROJECT MANAGER: Jeremy Wyckoff
e-mail: jwyckoff@pirnie.com
PHONE: 518-250-7300 FAX: 518-250-7301

CLIENT BILLING INFORMATION

BILL TO: Malcolm Pirnie, Inc PO#: 0266362
ADDRESS: PO Box 1240
CITY: White Plains STATE: NY ZIP:
ATTENTION: Accts Payable PHONE:

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *
HARD COPY: _____ DAYS *
EDD: 24 Hour RUSH DAYS *
PREAPPROVED TAT: ☒ YES ☐ NO
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ RESULTS ONLY ☐ USEPA CLP
☐ RESULTS + QC ☒ New York State ASP "B"
☐ New Jersey REDUCED ☐ New York State ASP "A"
☐ New Jersey CLP ☐ Other _____
☐ EDD FORMAT MS Excel

ANALYSIS

1	2	3	4	5	6	7	8	9
TCL VOCs	TCL SVOCs	TAL Metals						

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
								A	E	B							← Specify Preservatives A – HCl B – HNO_3 C – H_2SO_4 D – NaOH E – ICE F – Other
1.	MW-4	AQ		X	10/28/10	1050	6	X	X	X							
2.	MW-3					1125											
3.	MW-X					1150											
4.	MW-3D					1205											
5.	MW-8					1255											
6.	MW-5					1335											
7.	MW-2					1425											
8.	MW-7					1525											
9.	MW-1R					1615											
10.	Trip Blank		—		10/28/10	—	2										

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. [signature]	10/28/10 1730	1.
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
2.		2.
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY:
3. Fed Ex	10/29/10 7:15	3. [signature]

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant
MeOH extraction requires an additional 4 oz jar for percent solid.
Comments:

Cooler Temp. 4°C
Ice in Cooler?: YES

Page 1 of 1

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☒ OVERNIGHT
CHEMTECH: ☐ PICKED UP ☐ OVERNIGHT

Shipment Complete: ☒ YES ☐ NO

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

CHEMTECH 284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 8922

Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	Mercury	Lab Sample ID :	B4045-01
SDG ID :	B4045	Customer Sample No. :	MW-4
% Moisture :	100	Analytical Method :	EPA SW-846 7470 - HG
DataFile :	LB52312.PRN	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
7439-97-6	Mercury	ND	U	ug/L	0.09	0.20	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	Metals ICP-TAL	Lab Sample ID :	B4045-01
SDG ID :	B4045	Customer Sample No. :	MW-4
% Moisture :	100	Analytical Method :	EPA SW-846 6010 - ICP4
DataFile :	LB52305.txt	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
7429-90-5	Aluminum	10.6	J	ug/L	6.500	50.0	1	
7440-36-0	Antimony	ND	U	ug/L	8.000	25.0	1	
7440-38-2	Arsenic	ND	U	ug/L	4.200	10.0	1	
7440-39-3	Barium	50.3		ug/L	4.000	50.0	1	
7440-41-7	Beryllium	ND	U	ug/L	0.70	3.000	1	
7440-43-9	Cadmium	ND	U	ug/L	0.50	3.000	1	
7440-70-2	Calcium	47900		ug/L	31.8	1000	1	
7440-47-3	Chromium	ND	U	ug/L	1.100	5.000	1	
7440-48-4	Cobalt	ND	U	ug/L	5.800	15.0	1	
7440-50-8	Copper	ND	U	ug/L	2.000	10.0	1	
7439-89-6	Iron	33.4	J	ug/L	20.4	50.0	1	
7439-92-1	Lead	ND	U	ug/L	2.600	6.000	1	
7439-95-4	Magnesium	8390		ug/L	32.5	1000	1	
7439-96-5	Manganese	2.020	J	ug/L	1.700	10.0	1	
7440-02-0	Nickel	ND	U	ug/L	4.200	20.0	1	
7440-09-7	Potassium	1230		ug/L	38.8	1000	1	
7782-49-2	Selenium	ND	U	ug/L	4.800	10.0	1	
7440-22-4	Silver	ND	U	ug/L	1.500	5.000	1	
7440-23-5	Sodium	15000		ug/L	13.9	1000	1	
7440-28-0	Thallium	ND	U	ug/L	2.400	20.0	1	
7440-62-2	Vanadium	ND	U	ug/L	6.100	20.0	1	
7440-66-6	Zinc	10.6	J	ug/L	6.500	20.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-01
SDG ID :	B4045	Customer Sample No. :	MW-4
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067135.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
100-52-7	Benzaldehyde	ND	U	ug/L	0.750	9.7	1	
108-95-2	Phenol	ND	U	ug/L	0.200	9.7	1	
111-44-4	bis(2-Chloroethyl)ether	ND	U	ug/L	0.530	9.7	1	
95-57-8	2-Chlorophenol	ND	U	ug/L	0.520	9.7	1	
95-48-7	2-Methylphenol	ND	U	ug/L	0.230	9.7	1	
108-60-1	2,2-oxybis(1-Chloropropane)	ND	U	ug/L	0.170	9.7	1	
98-86-2	Acetophenone	ND	U	ug/L	0.140	9.7	1	
65794-96-9	3+4-Methylphenols	ND	U	ug/L	0.370	9.7	1	
621-64-7	N-Nitroso-di-n-propylamine	ND	U	ug/L	0.190	9.7	1	
67-72-1	Hexachloroethane	ND	U	ug/L	0.240	9.7	1	
98-95-3	Nitrobenzene	ND	U	ug/L	0.660	9.7	1	
78-59-1	Isophorone	ND	U	ug/L	0.290	9.7	1	
88-75-5	2-Nitrophenol	ND	U	ug/L	0.500	9.7	1	
105-67-9	2,4-Dimethylphenol	ND	U	ug/L	0.690	9.7	1	
111-91-1	bis(2-Chloroethoxy)methane	ND	U	ug/L	0.530	9.7	1	
120-83-2	2,4-Dichlorophenol	ND	U	ug/L	0.640	9.7	1	
91-20-3	Naphthalene	ND	U	ug/L	0.120	9.7	1	
106-47-8	4-Chloroaniline	ND	U	ug/L	2.8	9.7	1	
87-68-3	Hexachlorobutadiene	ND	U	ug/L	0.240	9.7	1	
105-60-2	Caprolactam	ND	U	ug/L	1.9	9.7	1	
59-50-7	4-Chloro-3-methylphenol	ND	U	ug/L	0.390	9.7	1	
91-57-6	2-Methylnaphthalene	ND	U	ug/L	0.310	9.7	1	
77-47-4	Hexachlorocyclopentadiene	ND	U	ug/L	0.230	9.7	1	
88-06-2	2,4,6-Trichlorophenol	ND	U	ug/L	0.540	9.7	1	
95-95-4	2,4,5-Trichlorophenol	ND	U	ug/L	0.390	9.7	1	
92-52-4	1,1-Biphenyl	ND	U	ug/L	0.150	9.7	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-01
SDG ID :	B4045	Customer Sample No. :	MW-4
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067135.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
91-58-7	2-Chloronaphthalene	ND	U	ug/L	0.160	9.7	1	
88-74-4	2-Nitroaniline	ND	U	ug/L	0.480	9.7	1	
131-11-3	Dimethylphthalate	ND	U	ug/L	0.210	9.7	1	
208-96-8	Acenaphthylene	ND	U	ug/L	0.680	9.7	1	
606-20-2	2,6-Dinitrotoluene	ND	U	ug/L	0.310	9.7	1	
99-09-2	3-Nitroaniline	ND	U	ug/L	1.1	9.7	1	
83-32-9	Acenaphthene	ND	U	ug/L	0.200	9.7	1	
51-28-5	2,4-Dinitrophenol	ND	U	ug/L	2.0	9.7	1	
100-02-7	4-Nitrophenol	ND	U	ug/L	1.9	9.7	1	
132-64-9	Dibenzofuran	ND	U	ug/L	0.230	9.7	1	
121-14-2	2,4-Dinitrotoluene	ND	U	ug/L	1.0	9.7	1	
84-66-2	Diethylphthalate	ND	U	ug/L	0.370	9.7	1	
7005-72-3	4-Chlorophenyl-phenylether	ND	U	ug/L	0.200	9.7	1	
86-73-7	Fluorene	ND	U	ug/L	0.300	9.7	1	
100-01-6	4-Nitroaniline	ND	U	ug/L	1.3	9.7	1	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	ug/L	0.720	9.7	1	
86-30-6	N-Nitrosodiphenylamine	ND	U	ug/L	0.580	9.7	1	
101-55-3	4-Bromophenyl-phenylether	ND	U	ug/L	0.220	9.7	1	
118-74-1	Hexachlorobenzene	ND	U	ug/L	0.170	9.7	1	
1912-24-9	Atrazine	ND	U	ug/L	0.390	9.7	1	
87-86-5	Pentachlorophenol	ND	U	ug/L	1.7	9.7	1	
85-01-8	Phenanthrene	ND	U	ug/L	0.250	9.7	1	
120-12-7	Anthracene	ND	U	ug/L	0.160	9.7	1	
86-74-8	Carbazole	ND	U	ug/L	0.210	9.7	1	
84-74-2	Di-n-butylphthalate	ND	U	ug/L	1.9	9.7	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-01
SDG ID :	B4045	Customer Sample No. :	MW-4
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067135.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
206-44-0	Fluoranthene	ND	U	ug/L	0.390	9.7	1	
129-00-0	Pyrene	ND	U	ug/L	0.190	9.7	1	
85-68-7	Butylbenzylphthalate	ND	U	ug/L	0.180	9.7	1	
91-94-1	3,3-Dichlorobenzidine	ND	U	ug/L	1.9	9.7	1	
56-55-3	Benzo(a)anthracene	ND	U	ug/L	0.160	9.7	1	
218-01-9	Chrysene	ND	U	ug/L	0.170	9.7	1	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	ug/L	0.160	9.7	1	
117-84-0	Di-n-octyl phthalate	ND	U	ug/L	0.500	9.7	1	
205-99-2	Benzo(b)fluoranthene	ND	U	ug/L	0.280	9.7	1	
207-08-9	Benzo(k)fluoranthene	ND	U	ug/L	0.170	9.7	1	
50-32-8	Benzo(a)pyrene	ND	U	ug/L	0.140	9.7	1	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	ug/L	0.150	9.7	1	
53-70-3	Dibenz(a,h)anthracene	ND	U	ug/L	0.410	9.7	1	
191-24-2	Benzo(g,h,i)perylene	ND	U	ug/L	0.280	9.7	1	
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.5	AB	ug/L	0	0	1	TIC
994-05-8	Butane, 2-methoxy-2-methyl-	67	JB	ug/L	0	0	1	TIC
	unknown16.82	2.4	J	ug/L	0	0	1	TIC

CHEMTECH 284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 8922

Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	VOC-TCLVOA-10	Lab Sample ID :	B4045-01
SDG ID :	B4045	Customer Sample No. :	MW-4
% Moisture :	100	Analytical Method :	EPA SW846 8260
DataFile :	VF024272.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-71-8	Dichlorodifluoromethane	ND	U	ug/L	0.20	1.0	1	
74-87-3	Chloromethane	ND	U	ug/L	0.20	1.0	1	
75-01-4	Vinyl Chloride	ND	U	ug/L	0.34	1.0	1	
74-83-9	Bromomethane	ND	U	ug/L	0.20	1.0	1	
75-00-3	Chloroethane	ND	U	ug/L	0.20	1.0	1	
75-69-4	Trichlorofluoromethane	ND	U	ug/L	0.35	1.0	1	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U	ug/L	0.45	1.0	1	
75-35-4	1,1-Dichloroethene	ND	U	ug/L	0.47	1.0	1	
67-64-1	Acetone	ND	U	ug/L	0.50	5.0	1	
75-15-0	Carbon Disulfide	ND	U	ug/L	0.20	1.0	1	
1634-04-4	Methyl tert-butyl Ether	ND	U	ug/L	0.35	1.0	1	
79-20-9	Methyl Acetate	ND	U	ug/L	0.20	1.0	1	
75-09-2	Methylene Chloride	ND	U	ug/L	0.41	1.0	1	
156-60-5	trans-1,2-Dichloroethene	ND	U	ug/L	0.41	1.0	1	
75-34-3	1,1-Dichloroethane	ND	U	ug/L	0.36	1.0	1	
110-82-7	Cyclohexane	ND	U	ug/L	0.20	1.0	1	
78-93-3	2-Butanone	ND	U	ug/L	1.3	5.0	1	
56-23-5	Carbon Tetrachloride	ND	U	ug/L	0.20	1.0	1	
156-59-2	cis-1,2-Dichloroethene	ND	U	ug/L	0.35	1.0	1	
67-66-3	Chloroform	ND	U	ug/L	0.34	1.0	1	
71-55-6	1,1,1-Trichloroethane	ND	U	ug/L	0.40	1.0	1	
108-87-2	Methylcyclohexane	ND	U	ug/L	0.20	1.0	1	
71-43-2	Benzene	ND	U	ug/L	0.32	1.0	1	
107-06-2	1,2-Dichloroethane	ND	U	ug/L	0.48	1.0	1	
79-01-6	Trichloroethene	ND	U	ug/L	0.28	1.0	1	
78-87-5	1,2-Dichloropropane	ND	U	ug/L	0.46	1.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	VOC-TCLVOA-10	Lab Sample ID :	B4045-01
SDG ID :	B4045	Customer Sample No. :	MW-4
% Moisture :	100	Analytical Method :	EPA SW846 8260
DataFile :	VF024272.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-27-4	Bromodichloromethane	ND	U	ug/L	0.36	1.0	1	
108-10-1	4-Methyl-2-Pentanone	ND	U	ug/L	2.1	5.0	1	
108-88-3	Toluene	ND	U	ug/L	0.37	1.0	1	
10061-02-6	t-1,3-Dichloropropene	ND	U	ug/L	0.29	1.0	1	
10061-01-5	cis-1,3-Dichloropropene	ND	U	ug/L	0.31	1.0	1	
79-00-5	1,1,2-Trichloroethane	ND	U	ug/L	0.38	1.0	1	
591-78-6	2-Hexanone	ND	U	ug/L	1.9	5.0	1	
124-48-1	Dibromochloromethane	ND	U	ug/L	0.20	1.0	1	
106-93-4	1,2-Dibromoethane	ND	U	ug/L	0.41	1.0	1	
127-18-4	Tetrachloroethene	ND	U	ug/L	0.27	1.0	1	
108-90-7	Chlorobenzene	ND	U	ug/L	0.49	1.0	1	
100-41-4	Ethyl Benzene	ND	U	ug/L	0.20	1.0	1	
179601-23-1	m/p-Xylenes	ND	U	ug/L	0.95	2.0	1	
95-47-6	o-Xylene	ND	U	ug/L	0.43	1.0	1	
100-42-5	Styrene	ND	U	ug/L	0.36	1.0	1	
75-25-2	Bromoform	ND	U	ug/L	0.47	1.0	1	
98-82-8	Isopropylbenzene	ND	U	ug/L	0.45	1.0	1	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ug/L	0.31	1.0	1	
541-73-1	1,3-Dichlorobenzene	ND	U	ug/L	0.43	1.0	1	
106-46-7	1,4-Dichlorobenzene	ND	U	ug/L	0.32	1.0	1	
95-50-1	1,2-Dichlorobenzene	ND	U	ug/L	0.45	1.0	1	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	ug/L	0.46	1.0	1	
120-82-1	1,2,4-Trichlorobenzene	ND	U	ug/L	0.20	1.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	Mercury	Lab Sample ID :	B4045-02
SDG ID :	B4045	Customer Sample No. :	MW-3
% Moisture :	100	Analytical Method :	EPA SW-846 7470 - HG
DataFile :	LB52312.PRN	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
7439-97-6	Mercury	ND	U	ug/L	0.09	0.20	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	Metals ICP-TAL	Lab Sample ID :	B4045-02
SDG ID :	B4045	Customer Sample No. :	MW-3
% Moisture :	100	Analytical Method :	EPA SW-846 6010 - ICP4
DataFile :	LB52305.txt	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
7429-90-5	Aluminum	17.7	J	ug/L	6.500	50.0	1	
7440-36-0	Antimony	ND	U	ug/L	8.000	25.0	1	
7440-38-2	Arsenic	ND	U	ug/L	4.200	10.0	1	
7440-39-3	Barium	57.1		ug/L	4.000	50.0	1	
7440-41-7	Beryllium	ND	U	ug/L	0.70	3.000	1	
7440-43-9	Cadmium	ND	U	ug/L	0.50	3.000	1	
7440-70-2	Calcium	54400		ug/L	31.8	1000	1	
7440-47-3	Chromium	ND	U	ug/L	1.100	5.000	1	
7440-48-4	Cobalt	ND	U	ug/L	5.800	15.0	1	
7440-50-8	Copper	ND	U	ug/L	2.000	10.0	1	
7439-89-6	Iron	55.6		ug/L	20.4	50.0	1	
7439-92-1	Lead	5.140	J	ug/L	2.600	6.000	1	
7439-95-4	Magnesium	9550		ug/L	32.5	1000	1	
7439-96-5	Manganese	3.020	J	ug/L	1.700	10.0	1	
7440-02-0	Nickel	ND	U	ug/L	4.200	20.0	1	
7440-09-7	Potassium	1480		ug/L	38.8	1000	1	
7782-49-2	Selenium	ND	U	ug/L	4.800	10.0	1	
7440-22-4	Silver	ND	U	ug/L	1.500	5.000	1	
7440-23-5	Sodium	17000		ug/L	13.9	1000	1	
7440-28-0	Thallium	ND	U	ug/L	2.400	20.0	1	
7440-62-2	Vanadium	ND	U	ug/L	6.100	20.0	1	
7440-66-6	Zinc	44.3		ug/L	6.500	20.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-02
SDG ID :	B4045	Customer Sample No. :	MW-3
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067136.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
100-52-7	Benzaldehyde	ND	U	ug/L	0.750	9.8	1	
108-95-2	Phenol	ND	U	ug/L	0.210	9.8	1	
111-44-4	bis(2-Chloroethyl)ether	ND	U	ug/L	0.540	9.8	1	
95-57-8	2-Chlorophenol	ND	U	ug/L	0.530	9.8	1	
95-48-7	2-Methylphenol	ND	U	ug/L	0.240	9.8	1	
108-60-1	2,2-oxybis(1-Chloropropane)	ND	U	ug/L	0.170	9.8	1	
98-86-2	Acetophenone	ND	U	ug/L	0.140	9.8	1	
65794-96-9	3+4-Methylphenols	ND	U	ug/L	0.370	9.8	1	
621-64-7	N-Nitroso-di-n-propylamine	ND	U	ug/L	0.200	9.8	1	
67-72-1	Hexachloroethane	ND	U	ug/L	0.250	9.8	1	
98-95-3	Nitrobenzene	ND	U	ug/L	0.670	9.8	1	
78-59-1	Isophorone	ND	U	ug/L	0.290	9.8	1	
88-75-5	2-Nitrophenol	ND	U	ug/L	0.510	9.8	1	
105-67-9	2,4-Dimethylphenol	ND	U	ug/L	0.700	9.8	1	
111-91-1	bis(2-Chloroethoxy)methane	ND	U	ug/L	0.540	9.8	1	
120-83-2	2,4-Dichlorophenol	ND	U	ug/L	0.650	9.8	1	
91-20-3	Naphthalene	ND	U	ug/L	0.120	9.8	1	
106-47-8	4-Chloroaniline	ND	U	ug/L	2.8	9.8	1	
87-68-3	Hexachlorobutadiene	ND	U	ug/L	0.250	9.8	1	
105-60-2	Caprolactam	ND	U	ug/L	2.0	9.8	1	
59-50-7	4-Chloro-3-methylphenol	ND	U	ug/L	0.390	9.8	1	
91-57-6	2-Methylnaphthalene	ND	U	ug/L	0.310	9.8	1	
77-47-4	Hexachlorocyclopentadiene	ND	U	ug/L	0.240	9.8	1	
88-06-2	2,4,6-Trichlorophenol	ND	U	ug/L	0.550	9.8	1	
95-95-4	2,4,5-Trichlorophenol	ND	U	ug/L	0.390	9.8	1	
92-52-4	1,1-Biphenyl	ND	U	ug/L	0.150	9.8	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-02
SDG ID :	B4045	Customer Sample No. :	MW-3
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067136.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
91-58-7	2-Chloronaphthalene	ND	U	ug/L	0.160	9.8	1	
88-74-4	2-Nitroaniline	ND	U	ug/L	0.480	9.8	1	
131-11-3	Dimethylphthalate	ND	U	ug/L	0.220	9.8	1	
208-96-8	Acenaphthylene	ND	U	ug/L	0.690	9.8	1	
606-20-2	2,6-Dinitrotoluene	ND	U	ug/L	0.310	9.8	1	
99-09-2	3-Nitroaniline	ND	U	ug/L	1.1	9.8	1	
83-32-9	Acenaphthene	ND	U	ug/L	0.210	9.8	1	
51-28-5	2,4-Dinitrophenol	ND	U	ug/L	2.1	9.8	1	
100-02-7	4-Nitrophenol	ND	U	ug/L	2.0	9.8	1	
132-64-9	Dibenzofuran	ND	U	ug/L	0.240	9.8	1	
121-14-2	2,4-Dinitrotoluene	ND	U	ug/L	1.0	9.8	1	
84-66-2	Diethylphthalate	ND	U	ug/L	0.370	9.8	1	
7005-72-3	4-Chlorophenyl-phenylether	ND	U	ug/L	0.210	9.8	1	
86-73-7	Fluorene	ND	U	ug/L	0.300	9.8	1	
100-01-6	4-Nitroaniline	ND	U	ug/L	1.3	9.8	1	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	ug/L	0.730	9.8	1	
86-30-6	N-Nitrosodiphenylamine	ND	U	ug/L	0.590	9.8	1	
101-55-3	4-Bromophenyl-phenylether	ND	U	ug/L	0.230	9.8	1	
118-74-1	Hexachlorobenzene	ND	U	ug/L	0.180	9.8	1	
1912-24-9	Atrazine	ND	U	ug/L	0.390	9.8	1	
87-86-5	Pentachlorophenol	ND	U	ug/L	1.7	9.8	1	
85-01-8	Phenanthrene	ND	U	ug/L	0.250	9.8	1	
120-12-7	Anthracene	ND	U	ug/L	0.160	9.8	1	
86-74-8	Carbazole	ND	U	ug/L	0.220	9.8	1	
84-74-2	Di-n-butylphthalate	ND	U	ug/L	2.0	9.8	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-02
SDG ID :	B4045	Customer Sample No. :	MW-3
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067136.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
206-44-0	Fluoranthene	ND	U	ug/L	0.390	9.8	1	
129-00-0	Pyrene	ND	U	ug/L	0.200	9.8	1	
85-68-7	Butylbenzylphthalate	ND	U	ug/L	0.190	9.8	1	
91-94-1	3,3-Dichlorobenzidine	ND	U	ug/L	2.0	9.8	1	
56-55-3	Benzo(a)anthracene	ND	U	ug/L	0.160	9.8	1	
218-01-9	Chrysene	ND	U	ug/L	0.180	9.8	1	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	ug/L	0.160	9.8	1	
117-84-0	Di-n-octyl phthalate	ND	U	ug/L	0.500	9.8	1	
205-99-2	Benzo(b)fluoranthene	ND	U	ug/L	0.280	9.8	1	
207-08-9	Benzo(k)fluoranthene	ND	U	ug/L	0.180	9.8	1	
50-32-8	Benzo(a)pyrene	ND	U	ug/L	0.140	9.8	1	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	ug/L	0.150	9.8	1	
53-70-3	Dibenz(a,h)anthracene	ND	U	ug/L	0.410	9.8	1	
191-24-2	Benzo(g,h,i)perylene	ND	U	ug/L	0.280	9.8	1	
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	5.4	AB	ug/L	0	0	1	TIC
994-05-8	Butane, 2-methoxy-2-methyl-	86	JB	ug/L	0	0	1	TIC
79-92-5	Camphene	3.3	JB	ug/L	0	0	1	TIC
	unknown16.82	2.7	J	ug/L	0	0	1	TIC

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	VOC-TCLVOA-10	Lab Sample ID :	B4045-02
SDG ID :	B4045	Customer Sample No. :	MW-3
% Moisture :	100	Analytical Method :	EPA SW846 8260
DataFile :	VF024273.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-71-8	Dichlorodifluoromethane	ND	U	ug/L	0.20	1.0	1	
74-87-3	Chloromethane	ND	U	ug/L	0.20	1.0	1	
75-01-4	Vinyl Chloride	ND	U	ug/L	0.34	1.0	1	
74-83-9	Bromomethane	ND	U	ug/L	0.20	1.0	1	
75-00-3	Chloroethane	ND	U	ug/L	0.20	1.0	1	
75-69-4	Trichlorofluoromethane	ND	U	ug/L	0.35	1.0	1	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U	ug/L	0.45	1.0	1	
75-35-4	1,1-Dichloroethene	ND	U	ug/L	0.47	1.0	1	
67-64-1	Acetone	ND	U	ug/L	0.50	5.0	1	
75-15-0	Carbon Disulfide	ND	U	ug/L	0.20	1.0	1	
1634-04-4	Methyl tert-butyl Ether	ND	U	ug/L	0.35	1.0	1	
79-20-9	Methyl Acetate	ND	U	ug/L	0.20	1.0	1	
75-09-2	Methylene Chloride	ND	U	ug/L	0.41	1.0	1	
156-60-5	trans-1,2-Dichloroethene	ND	U	ug/L	0.41	1.0	1	
75-34-3	1,1-Dichloroethane	ND	U	ug/L	0.36	1.0	1	
110-82-7	Cyclohexane	ND	U	ug/L	0.20	1.0	1	
78-93-3	2-Butanone	ND	U	ug/L	1.3	5.0	1	
56-23-5	Carbon Tetrachloride	ND	U	ug/L	0.20	1.0	1	
156-59-2	cis-1,2-Dichloroethene	ND	U	ug/L	0.35	1.0	1	
67-66-3	Chloroform	ND	U	ug/L	0.34	1.0	1	
71-55-6	1,1,1-Trichloroethane	ND	U	ug/L	0.40	1.0	1	
108-87-2	Methylcyclohexane	ND	U	ug/L	0.20	1.0	1	
71-43-2	Benzene	ND	U	ug/L	0.32	1.0	1	
107-06-2	1,2-Dichloroethane	ND	U	ug/L	0.48	1.0	1	
79-01-6	Trichloroethene	ND	U	ug/L	0.28	1.0	1	
78-87-5	1,2-Dichloropropane	ND	U	ug/L	0.46	1.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	VOC-TCLVOA-10	Lab Sample ID :	B4045-02
SDG ID :	B4045	Customer Sample No. :	MW-3
% Moisture :	100	Analytical Method :	EPA SW846 8260
DataFile :	VF024273.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-27-4	Bromodichloromethane	ND	U	ug/L	0.36	1.0	1	
108-10-1	4-Methyl-2-Pentanone	ND	U	ug/L	2.1	5.0	1	
108-88-3	Toluene	ND	U	ug/L	0.37	1.0	1	
10061-02-6	t-1,3-Dichloropropene	ND	U	ug/L	0.29	1.0	1	
10061-01-5	cis-1,3-Dichloropropene	ND	U	ug/L	0.31	1.0	1	
79-00-5	1,1,2-Trichloroethane	ND	U	ug/L	0.38	1.0	1	
591-78-6	2-Hexanone	ND	U	ug/L	1.9	5.0	1	
124-48-1	Dibromochloromethane	ND	U	ug/L	0.20	1.0	1	
106-93-4	1,2-Dibromoethane	ND	U	ug/L	0.41	1.0	1	
127-18-4	Tetrachloroethene	ND	U	ug/L	0.27	1.0	1	
108-90-7	Chlorobenzene	ND	U	ug/L	0.49	1.0	1	
100-41-4	Ethyl Benzene	ND	U	ug/L	0.20	1.0	1	
179601-23-1	m/p-Xylenes	ND	U	ug/L	0.95	2.0	1	
95-47-6	o-Xylene	ND	U	ug/L	0.43	1.0	1	
100-42-5	Styrene	ND	U	ug/L	0.36	1.0	1	
75-25-2	Bromoform	ND	U	ug/L	0.47	1.0	1	
98-82-8	Isopropylbenzene	ND	U	ug/L	0.45	1.0	1	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ug/L	0.31	1.0	1	
541-73-1	1,3-Dichlorobenzene	ND	U	ug/L	0.43	1.0	1	
106-46-7	1,4-Dichlorobenzene	ND	U	ug/L	0.32	1.0	1	
95-50-1	1,2-Dichlorobenzene	ND	U	ug/L	0.45	1.0	1	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	ug/L	0.46	1.0	1	
120-82-1	1,2,4-Trichlorobenzene	ND	U	ug/L	0.20	1.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	Mercury	Lab Sample ID :	B4045-03
SDG ID :	B4045	Customer Sample No. :	MW-X
% Moisture :	100	Analytical Method :	EPA SW-846 7470 - HG
DataFile :	LB52312.PRN	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
7439-97-6	Mercury	ND	U	ug/L	0.09	0.20	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	Metals ICP-TAL	Lab Sample ID :	B4045-03
SDG ID :	B4045	Customer Sample No. :	MW-X
% Moisture :	100	Analytical Method :	EPA SW-846 6010 - ICP4
DataFile :	LB52305.txt	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
7429-90-5	Aluminum	11.6	J	ug/L	6.500	50.0	1	
7440-36-0	Antimony	ND	U	ug/L	8.000	25.0	1	
7440-38-2	Arsenic	ND	U	ug/L	4.200	10.0	1	
7440-39-3	Barium	54.8		ug/L	4.000	50.0	1	
7440-41-7	Beryllium	ND	U	ug/L	0.70	3.000	1	
7440-43-9	Cadmium	ND	U	ug/L	0.50	3.000	1	
7440-70-2	Calcium	52500		ug/L	31.8	1000	1	
7440-47-3	Chromium	ND	U	ug/L	1.100	5.000	1	
7440-48-4	Cobalt	ND	U	ug/L	5.800	15.0	1	
7440-50-8	Copper	ND	U	ug/L	2.000	10.0	1	
7439-89-6	Iron	50.3		ug/L	20.4	50.0	1	
7439-92-1	Lead	3.770	J	ug/L	2.600	6.000	1	
7439-95-4	Magnesium	9370		ug/L	32.5	1000	1	
7439-96-5	Manganese	2.400	J	ug/L	1.700	10.0	1	
7440-02-0	Nickel	ND	U	ug/L	4.200	20.0	1	
7440-09-7	Potassium	1410		ug/L	38.8	1000	1	
7782-49-2	Selenium	ND	U	ug/L	4.800	10.0	1	
7440-22-4	Silver	ND	U	ug/L	1.500	5.000	1	
7440-23-5	Sodium	16900		ug/L	13.9	1000	1	
7440-28-0	Thallium	ND	U	ug/L	2.400	20.0	1	
7440-62-2	Vanadium	ND	U	ug/L	6.100	20.0	1	
7440-66-6	Zinc	15.6	J	ug/L	6.500	20.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-03
SDG ID :	B4045	Customer Sample No. :	MW-X
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067137.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
100-52-7	Benzaldehyde	ND	U	ug/L	0.760	9.9	1	
108-95-2	Phenol	ND	U	ug/L	0.210	9.9	1	
111-44-4	bis(2-Chloroethyl)ether	ND	U	ug/L	0.540	9.9	1	
95-57-8	2-Chlorophenol	ND	U	ug/L	0.530	9.9	1	
95-48-7	2-Methylphenol	ND	U	ug/L	0.240	9.9	1	
108-60-1	2,2-oxybis(1-Chloropropane)	ND	U	ug/L	0.170	9.9	1	
98-86-2	Acetophenone	ND	U	ug/L	0.140	9.9	1	
65794-96-9	3+4-Methylphenols	ND	U	ug/L	0.380	9.9	1	
621-64-7	N-Nitroso-di-n-propylamine	ND	U	ug/L	0.200	9.9	1	
67-72-1	Hexachloroethane	ND	U	ug/L	0.250	9.9	1	
98-95-3	Nitrobenzene	ND	U	ug/L	0.670	9.9	1	
78-59-1	Isophorone	ND	U	ug/L	0.300	9.9	1	
88-75-5	2-Nitrophenol	ND	U	ug/L	0.510	9.9	1	
105-67-9	2,4-Dimethylphenol	ND	U	ug/L	0.700	9.9	1	
111-91-1	bis(2-Chloroethoxy)methane	ND	U	ug/L	0.540	9.9	1	
120-83-2	2,4-Dichlorophenol	ND	U	ug/L	0.650	9.9	1	
91-20-3	Naphthalene	ND	U	ug/L	0.120	9.9	1	
106-47-8	4-Chloroaniline	ND	U	ug/L	2.8	9.9	1	
87-68-3	Hexachlorobutadiene	ND	U	ug/L	0.250	9.9	1	
105-60-2	Caprolactam	ND	U	ug/L	2.0	9.9	1	
59-50-7	4-Chloro-3-methylphenol	ND	U	ug/L	0.400	9.9	1	
91-57-6	2-Methylnaphthalene	ND	U	ug/L	0.320	9.9	1	
77-47-4	Hexachlorocyclopentadiene	ND	U	ug/L	0.240	9.9	1	
88-06-2	2,4,6-Trichlorophenol	ND	U	ug/L	0.550	9.9	1	
95-95-4	2,4,5-Trichlorophenol	ND	U	ug/L	0.400	9.9	1	
92-52-4	1,1-Biphenyl	ND	U	ug/L	0.150	9.9	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-03
SDG ID :	B4045	Customer Sample No. :	MW-X
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067137.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
91-58-7	2-Chloronaphthalene	ND	U	ug/L	0.160	9.9	1	
88-74-4	2-Nitroaniline	ND	U	ug/L	0.490	9.9	1	
131-11-3	Dimethylphthalate	ND	U	ug/L	0.220	9.9	1	
208-96-8	Acenaphthylene	ND	U	ug/L	0.690	9.9	1	
606-20-2	2,6-Dinitrotoluene	ND	U	ug/L	0.320	9.9	1	
99-09-2	3-Nitroaniline	ND	U	ug/L	1.1	9.9	1	
83-32-9	Acenaphthene	ND	U	ug/L	0.210	9.9	1	
51-28-5	2,4-Dinitrophenol	ND	U	ug/L	2.1	9.9	1	
100-02-7	4-Nitrophenol	ND	U	ug/L	2.0	9.9	1	
132-64-9	Dibenzofuran	ND	U	ug/L	0.240	9.9	1	
121-14-2	2,4-Dinitrotoluene	ND	U	ug/L	1.0	9.9	1	
84-66-2	Diethylphthalate	ND	U	ug/L	0.380	9.9	1	
7005-72-3	4-Chlorophenyl-phenylether	ND	U	ug/L	0.210	9.9	1	
86-73-7	Fluorene	ND	U	ug/L	0.310	9.9	1	
100-01-6	4-Nitroaniline	ND	U	ug/L	1.3	9.9	1	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	ug/L	0.730	9.9	1	
86-30-6	N-Nitrosodiphenylamine	ND	U	ug/L	0.590	9.9	1	
101-55-3	4-Bromophenyl-phenylether	ND	U	ug/L	0.230	9.9	1	
118-74-1	Hexachlorobenzene	ND	U	ug/L	0.180	9.9	1	
1912-24-9	Atrazine	ND	U	ug/L	0.400	9.9	1	
87-86-5	Pentachlorophenol	ND	U	ug/L	1.7	9.9	1	
85-01-8	Phenanthrene	ND	U	ug/L	0.260	9.9	1	
120-12-7	Anthracene	ND	U	ug/L	0.160	9.9	1	
86-74-8	Carbazole	ND	U	ug/L	0.220	9.9	1	
84-74-2	Di-n-butylphthalate	ND	U	ug/L	2.0	9.9	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-03
SDG ID :	B4045	Customer Sample No. :	MW-X
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067137.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
206-44-0	Fluoranthene	ND	U	ug/L	0.400	9.9	1	
129-00-0	Pyrene	ND	U	ug/L	0.200	9.9	1	
85-68-7	Butylbenzylphthalate	ND	U	ug/L	0.190	9.9	1	
91-94-1	3,3-Dichlorobenzidine	ND	U	ug/L	2.0	9.9	1	
56-55-3	Benzo(a)anthracene	ND	U	ug/L	0.160	9.9	1	
218-01-9	Chrysene	ND	U	ug/L	0.180	9.9	1	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	ug/L	0.160	9.9	1	
117-84-0	Di-n-octyl phthalate	ND	U	ug/L	0.500	9.9	1	
205-99-2	Benzo(b)fluoranthene	ND	U	ug/L	0.290	9.9	1	
207-08-9	Benzo(k)fluoranthene	ND	U	ug/L	0.180	9.9	1	
50-32-8	Benzo(a)pyrene	ND	U	ug/L	0.140	9.9	1	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	ug/L	0.150	9.9	1	
53-70-3	Dibenz(a,h)anthracene	ND	U	ug/L	0.420	9.9	1	
191-24-2	Benzo(g,h,i)perylene	ND	U	ug/L	0.290	9.9	1	
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	5.8	AB	ug/L	0	0	1	TIC
994-05-8	Butane, 2-methoxy-2-methyl-	86	JB	ug/L	0	0	1	TIC
	unknown16.82	2.5	J	ug/L	0	0	1	TIC

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	VOC-TCLVOA-10	Lab Sample ID :	B4045-03
SDG ID :	B4045	Customer Sample No. :	MW-X
% Moisture :	100	Analytical Method :	EPA SW846 8260
DataFile :	VF024274.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-71-8	Dichlorodifluoromethane	ND	U	ug/L	0.20	1.0	1	
74-87-3	Chloromethane	ND	U	ug/L	0.20	1.0	1	
75-01-4	Vinyl Chloride	ND	U	ug/L	0.34	1.0	1	
74-83-9	Bromomethane	ND	U	ug/L	0.20	1.0	1	
75-00-3	Chloroethane	ND	U	ug/L	0.20	1.0	1	
75-69-4	Trichlorofluoromethane	ND	U	ug/L	0.35	1.0	1	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U	ug/L	0.45	1.0	1	
75-35-4	1,1-Dichloroethene	ND	U	ug/L	0.47	1.0	1	
67-64-1	Acetone	ND	U	ug/L	0.50	5.0	1	
75-15-0	Carbon Disulfide	ND	U	ug/L	0.20	1.0	1	
1634-04-4	Methyl tert-butyl Ether	ND	U	ug/L	0.35	1.0	1	
79-20-9	Methyl Acetate	ND	U	ug/L	0.20	1.0	1	
75-09-2	Methylene Chloride	ND	U	ug/L	0.41	1.0	1	
156-60-5	trans-1,2-Dichloroethene	ND	U	ug/L	0.41	1.0	1	
75-34-3	1,1-Dichloroethane	ND	U	ug/L	0.36	1.0	1	
110-82-7	Cyclohexane	ND	U	ug/L	0.20	1.0	1	
78-93-3	2-Butanone	ND	U	ug/L	1.3	5.0	1	
56-23-5	Carbon Tetrachloride	ND	U	ug/L	0.20	1.0	1	
156-59-2	cis-1,2-Dichloroethene	ND	U	ug/L	0.35	1.0	1	
67-66-3	Chloroform	ND	U	ug/L	0.34	1.0	1	
71-55-6	1,1,1-Trichloroethane	ND	U	ug/L	0.40	1.0	1	
108-87-2	Methylcyclohexane	ND	U	ug/L	0.20	1.0	1	
71-43-2	Benzene	ND	U	ug/L	0.32	1.0	1	
107-06-2	1,2-Dichloroethane	ND	U	ug/L	0.48	1.0	1	
79-01-6	Trichloroethene	ND	U	ug/L	0.28	1.0	1	
78-87-5	1,2-Dichloropropane	ND	U	ug/L	0.46	1.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	VOC-TCLVOA-10	Lab Sample ID :	B4045-03
SDG ID :	B4045	Customer Sample No. :	MW-X
% Moisture :	100	Analytical Method :	EPA SW846 8260
DataFile :	VF024274.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-27-4	Bromodichloromethane	ND	U	ug/L	0.36	1.0	1	
108-10-1	4-Methyl-2-Pentanone	ND	U	ug/L	2.1	5.0	1	
108-88-3	Toluene	ND	U	ug/L	0.37	1.0	1	
10061-02-6	t-1,3-Dichloropropene	ND	U	ug/L	0.29	1.0	1	
10061-01-5	cis-1,3-Dichloropropene	ND	U	ug/L	0.31	1.0	1	
79-00-5	1,1,2-Trichloroethane	ND	U	ug/L	0.38	1.0	1	
591-78-6	2-Hexanone	ND	U	ug/L	1.9	5.0	1	
124-48-1	Dibromochloromethane	ND	U	ug/L	0.20	1.0	1	
106-93-4	1,2-Dibromoethane	ND	U	ug/L	0.41	1.0	1	
127-18-4	Tetrachloroethene	ND	U	ug/L	0.27	1.0	1	
108-90-7	Chlorobenzene	ND	U	ug/L	0.49	1.0	1	
100-41-4	Ethyl Benzene	ND	U	ug/L	0.20	1.0	1	
179601-23-1	m/p-Xylenes	ND	U	ug/L	0.95	2.0	1	
95-47-6	o-Xylene	ND	U	ug/L	0.43	1.0	1	
100-42-5	Styrene	ND	U	ug/L	0.36	1.0	1	
75-25-2	Bromoform	ND	U	ug/L	0.47	1.0	1	
98-82-8	Isopropylbenzene	ND	U	ug/L	0.45	1.0	1	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ug/L	0.31	1.0	1	
541-73-1	1,3-Dichlorobenzene	ND	U	ug/L	0.43	1.0	1	
106-46-7	1,4-Dichlorobenzene	ND	U	ug/L	0.32	1.0	1	
95-50-1	1,2-Dichlorobenzene	ND	U	ug/L	0.45	1.0	1	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	ug/L	0.46	1.0	1	
120-82-1	1,2,4-Trichlorobenzene	ND	U	ug/L	0.20	1.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	Mercury	Lab Sample ID :	B4045-04
SDG ID :	B4045	Customer Sample No. :	MW-3D
% Moisture :	100	Analytical Method :	EPA SW-846 7470 - HG
DataFile :	LB52312.PRN	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
7439-97-6	Mercury	ND	U	ug/L	0.09	0.20	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	Metals ICP-TAL	Lab Sample ID :	B4045-04
SDG ID :	B4045	Customer Sample No. :	MW-3D
% Moisture :	100	Analytical Method :	EPA SW-846 6010 - ICP4
DataFile :	LB52305.txt	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
7429-90-5	Aluminum	11.7	J	ug/L	6.500	50.0	1	
7440-36-0	Antimony	ND	U	ug/L	8.000	25.0	1	
7440-38-2	Arsenic	ND	U	ug/L	4.200	10.0	1	
7440-39-3	Barium	56.7		ug/L	4.000	50.0	1	
7440-41-7	Beryllium	ND	U	ug/L	0.70	3.000	1	
7440-43-9	Cadmium	ND	U	ug/L	0.50	3.000	1	
7440-70-2	Calcium	54000		ug/L	31.8	1000	1	
7440-47-3	Chromium	ND	U	ug/L	1.100	5.000	1	
7440-48-4	Cobalt	ND	U	ug/L	5.800	15.0	1	
7440-50-8	Copper	2.290	J	ug/L	2.000	10.0	1	
7439-89-6	Iron	52.9		ug/L	20.4	50.0	1	
7439-92-1	Lead	4.600	J	ug/L	2.600	6.000	1	
7439-95-4	Magnesium	9680		ug/L	32.5	1000	1	
7439-96-5	Manganese	2.190	J	ug/L	1.700	10.0	1	
7440-02-0	Nickel	ND	U	ug/L	4.200	20.0	1	
7440-09-7	Potassium	1490		ug/L	38.8	1000	1	
7782-49-2	Selenium	ND	U	ug/L	4.800	10.0	1	
7440-22-4	Silver	ND	U	ug/L	1.500	5.000	1	
7440-23-5	Sodium	17400		ug/L	13.9	1000	1	
7440-28-0	Thallium	ND	U	ug/L	2.400	20.0	1	
7440-62-2	Vanadium	ND	U	ug/L	6.100	20.0	1	
7440-66-6	Zinc	14.5	J	ug/L	6.500	20.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-04
SDG ID :	B4045	Customer Sample No. :	MW-3D
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067138.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
100-52-7	Benzaldehyde	ND	U	ug/L	0.770	10	1	
108-95-2	Phenol	ND	U	ug/L	0.210	10	1	
111-44-4	bis(2-Chloroethyl)ether	ND	U	ug/L	0.550	10	1	
95-57-8	2-Chlorophenol	ND	U	ug/L	0.540	10	1	
95-48-7	2-Methylphenol	ND	U	ug/L	0.240	10	1	
108-60-1	2,2-oxybis(1-Chloropropane)	ND	U	ug/L	0.170	10	1	
98-86-2	Acetophenone	ND	U	ug/L	0.140	10	1	
65794-96-9	3+4-Methylphenols	ND	U	ug/L	0.380	10	1	
621-64-7	N-Nitroso-di-n-propylamine	ND	U	ug/L	0.200	10	1	
67-72-1	Hexachloroethane	ND	U	ug/L	0.250	10	1	
98-95-3	Nitrobenzene	ND	U	ug/L	0.680	10	1	
78-59-1	Isophorone	ND	U	ug/L	0.300	10	1	
88-75-5	2-Nitrophenol	ND	U	ug/L	0.520	10	1	
105-67-9	2,4-Dimethylphenol	ND	U	ug/L	0.710	10	1	
111-91-1	bis(2-Chloroethoxy)methane	ND	U	ug/L	0.550	10	1	
120-83-2	2,4-Dichlorophenol	ND	U	ug/L	0.660	10	1	
91-20-3	Naphthalene	ND	U	ug/L	0.120	10	1	
106-47-8	4-Chloroaniline	ND	U	ug/L	2.9	10	1	
87-68-3	Hexachlorobutadiene	ND	U	ug/L	0.250	10	1	
105-60-2	Caprolactam	ND	U	ug/L	2.0	10	1	
59-50-7	4-Chloro-3-methylphenol	ND	U	ug/L	0.400	10	1	
91-57-6	2-Methylnaphthalene	ND	U	ug/L	0.320	10	1	
77-47-4	Hexachlorocyclopentadiene	ND	U	ug/L	0.240	10	1	
88-06-2	2,4,6-Trichlorophenol	ND	U	ug/L	0.560	10	1	
95-95-4	2,4,5-Trichlorophenol	ND	U	ug/L	0.400	10	1	
92-52-4	1,1-Biphenyl	ND	U	ug/L	0.150	10	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-04
SDG ID :	B4045	Customer Sample No. :	MW-3D
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067138.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
91-58-7	2-Chloronaphthalene	ND	U	ug/L	0.160	10	1	
88-74-4	2-Nitroaniline	ND	U	ug/L	0.490	10	1	
131-11-3	Dimethylphthalate	ND	U	ug/L	0.220	10	1	
208-96-8	Acenaphthylene	ND	U	ug/L	0.700	10	1	
606-20-2	2,6-Dinitrotoluene	ND	U	ug/L	0.320	10	1	
99-09-2	3-Nitroaniline	ND	U	ug/L	1.1	10	1	
83-32-9	Acenaphthene	ND	U	ug/L	0.210	10	1	
51-28-5	2,4-Dinitrophenol	ND	U	ug/L	2.1	10	1	
100-02-7	4-Nitrophenol	ND	U	ug/L	2.0	10	1	
132-64-9	Dibenzofuran	ND	U	ug/L	0.240	10	1	
121-14-2	2,4-Dinitrotoluene	ND	U	ug/L	1.0	10	1	
84-66-2	Diethylphthalate	ND	U	ug/L	0.380	10	1	
7005-72-3	4-Chlorophenyl-phenylether	ND	U	ug/L	0.210	10	1	
86-73-7	Fluorene	ND	U	ug/L	0.310	10	1	
100-01-6	4-Nitroaniline	ND	U	ug/L	1.4	10	1	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	ug/L	0.740	10	1	
86-30-6	N-Nitrosodiphenylamine	ND	U	ug/L	0.600	10	1	
101-55-3	4-Bromophenyl-phenylether	ND	U	ug/L	0.230	10	1	
118-74-1	Hexachlorobenzene	ND	U	ug/L	0.180	10	1	
1912-24-9	Atrazine	ND	U	ug/L	0.400	10	1	
87-86-5	Pentachlorophenol	ND	U	ug/L	1.7	10	1	
85-01-8	Phenanthrene	ND	U	ug/L	0.260	10	1	
120-12-7	Anthracene	ND	U	ug/L	0.160	10	1	
86-74-8	Carbazole	ND	U	ug/L	0.220	10	1	
84-74-2	Di-n-butylphthalate	ND	U	ug/L	2.0	10	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-04
SDG ID :	B4045	Customer Sample No. :	MW-3D
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067138.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
206-44-0	Fluoranthene	ND	U	ug/L	0.400	10	1	
129-00-0	Pyrene	ND	U	ug/L	0.200	10	1	
85-68-7	Butylbenzylphthalate	ND	U	ug/L	0.190	10	1	
91-94-1	3,3-Dichlorobenzidine	ND	U	ug/L	2.0	10	1	
56-55-3	Benzo(a)anthracene	ND	U	ug/L	0.160	10	1	
218-01-9	Chrysene	ND	U	ug/L	0.180	10	1	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	ug/L	0.160	10	1	
117-84-0	Di-n-octyl phthalate	ND	U	ug/L	0.510	10	1	
205-99-2	Benzo(b)fluoranthene	ND	U	ug/L	0.290	10	1	
207-08-9	Benzo(k)fluoranthene	ND	U	ug/L	0.180	10	1	
50-32-8	Benzo(a)pyrene	ND	U	ug/L	0.140	10	1	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	ug/L	0.150	10	1	
53-70-3	Dibenz(a,h)anthracene	ND	U	ug/L	0.420	10	1	
191-24-2	Benzo(g,h,i)perylene	ND	U	ug/L	0.290	10	1	
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.9	AB	ug/L	0	0	1	TIC
994-05-8	Butane, 2-methoxy-2-methyl-	67	JB	ug/L	0	0	1	TIC
	unknown16.82	2.4	J	ug/L	0	0	1	TIC

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	VOC-TCLVOA-10	Lab Sample ID :	B4045-04
SDG ID :	B4045	Customer Sample No. :	MW-3D
% Moisture :	100	Analytical Method :	EPA SW846 8260
DataFile :	VF024275.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-71-8	Dichlorodifluoromethane	ND	U	ug/L	0.20	1.0	1	
74-87-3	Chloromethane	ND	U	ug/L	0.20	1.0	1	
75-01-4	Vinyl Chloride	ND	U	ug/L	0.34	1.0	1	
74-83-9	Bromomethane	ND	U	ug/L	0.20	1.0	1	
75-00-3	Chloroethane	ND	U	ug/L	0.20	1.0	1	
75-69-4	Trichlorofluoromethane	ND	U	ug/L	0.35	1.0	1	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U	ug/L	0.45	1.0	1	
75-35-4	1,1-Dichloroethene	ND	U	ug/L	0.47	1.0	1	
67-64-1	Acetone	ND	U	ug/L	0.50	5.0	1	
75-15-0	Carbon Disulfide	ND	U	ug/L	0.20	1.0	1	
1634-04-4	Methyl tert-butyl Ether	ND	U	ug/L	0.35	1.0	1	
79-20-9	Methyl Acetate	ND	U	ug/L	0.20	1.0	1	
75-09-2	Methylene Chloride	ND	U	ug/L	0.41	1.0	1	
156-60-5	trans-1,2-Dichloroethene	ND	U	ug/L	0.41	1.0	1	
75-34-3	1,1-Dichloroethane	ND	U	ug/L	0.36	1.0	1	
110-82-7	Cyclohexane	ND	U	ug/L	0.20	1.0	1	
78-93-3	2-Butanone	ND	U	ug/L	1.3	5.0	1	
56-23-5	Carbon Tetrachloride	ND	U	ug/L	0.20	1.0	1	
156-59-2	cis-1,2-Dichloroethene	ND	U	ug/L	0.35	1.0	1	
67-66-3	Chloroform	ND	U	ug/L	0.34	1.0	1	
71-55-6	1,1,1-Trichloroethane	ND	U	ug/L	0.40	1.0	1	
108-87-2	Methylcyclohexane	ND	U	ug/L	0.20	1.0	1	
71-43-2	Benzene	ND	U	ug/L	0.32	1.0	1	
107-06-2	1,2-Dichloroethane	ND	U	ug/L	0.48	1.0	1	
79-01-6	Trichloroethene	ND	U	ug/L	0.28	1.0	1	
78-87-5	1,2-Dichloropropane	ND	U	ug/L	0.46	1.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	VOC-TCLVOA-10	Lab Sample ID :	B4045-04
SDG ID :	B4045	Customer Sample No. :	MW-3D
% Moisture :	100	Analytical Method :	EPA SW846 8260
DataFile :	VF024275.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-27-4	Bromodichloromethane	ND	U	ug/L	0.36	1.0	1	
108-10-1	4-Methyl-2-Pentanone	ND	U	ug/L	2.1	5.0	1	
108-88-3	Toluene	ND	U	ug/L	0.37	1.0	1	
10061-02-6	t-1,3-Dichloropropene	ND	U	ug/L	0.29	1.0	1	
10061-01-5	cis-1,3-Dichloropropene	ND	U	ug/L	0.31	1.0	1	
79-00-5	1,1,2-Trichloroethane	ND	U	ug/L	0.38	1.0	1	
591-78-6	2-Hexanone	ND	U	ug/L	1.9	5.0	1	
124-48-1	Dibromochloromethane	ND	U	ug/L	0.20	1.0	1	
106-93-4	1,2-Dibromoethane	ND	U	ug/L	0.41	1.0	1	
127-18-4	Tetrachloroethene	ND	U	ug/L	0.27	1.0	1	
108-90-7	Chlorobenzene	ND	U	ug/L	0.49	1.0	1	
100-41-4	Ethyl Benzene	ND	U	ug/L	0.20	1.0	1	
179601-23-1	m/p-Xylenes	ND	U	ug/L	0.95	2.0	1	
95-47-6	o-Xylene	ND	U	ug/L	0.43	1.0	1	
100-42-5	Styrene	ND	U	ug/L	0.36	1.0	1	
75-25-2	Bromoform	ND	U	ug/L	0.47	1.0	1	
98-82-8	Isopropylbenzene	ND	U	ug/L	0.45	1.0	1	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ug/L	0.31	1.0	1	
541-73-1	1,3-Dichlorobenzene	ND	U	ug/L	0.43	1.0	1	
106-46-7	1,4-Dichlorobenzene	ND	U	ug/L	0.32	1.0	1	
95-50-1	1,2-Dichlorobenzene	ND	U	ug/L	0.45	1.0	1	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	ug/L	0.46	1.0	1	
120-82-1	1,2,4-Trichlorobenzene	ND	U	ug/L	0.20	1.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	Mercury	Lab Sample ID :	B4045-05
SDG ID :	B4045	Customer Sample No. :	MW-8
% Moisture :	100	Analytical Method :	EPA SW-846 7470 - HG
DataFile :	LB52312.PRN	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
7439-97-6	Mercury	ND	U	ug/L	0.09	0.20	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	Metals ICP-TAL	Lab Sample ID :	B4045-05
SDG ID :	B4045	Customer Sample No. :	MW-8
% Moisture :	100	Analytical Method :	EPA SW-846 6010 - ICP4
DataFile :	LB52305.txt	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
7429-90-5	Aluminum	45.5	J	ug/L	6.500	50.0	1	
7440-36-0	Antimony	ND	U	ug/L	8.000	25.0	1	
7440-38-2	Arsenic	ND	U	ug/L	4.200	10.0	1	
7440-39-3	Barium	71.6		ug/L	4.000	50.0	1	
7440-41-7	Beryllium	ND	U	ug/L	0.70	3.000	1	
7440-43-9	Cadmium	ND	U	ug/L	0.50	3.000	1	
7440-70-2	Calcium	52800		ug/L	31.8	1000	1	
7440-47-3	Chromium	1.860	J	ug/L	1.100	5.000	1	
7440-48-4	Cobalt	ND	U	ug/L	5.800	15.0	1	
7440-50-8	Copper	2.310	J	ug/L	2.000	10.0	1	
7439-89-6	Iron	104		ug/L	20.4	50.0	1	
7439-92-1	Lead	ND	U	ug/L	2.600	6.000	1	
7439-95-4	Magnesium	8300		ug/L	32.5	1000	1	
7439-96-5	Manganese	5.010	J	ug/L	1.700	10.0	1	
7440-02-0	Nickel	ND	U	ug/L	4.200	20.0	1	
7440-09-7	Potassium	2630		ug/L	38.8	1000	1	
7782-49-2	Selenium	ND	U	ug/L	4.800	10.0	1	
7440-22-4	Silver	ND	U	ug/L	1.500	5.000	1	
7440-23-5	Sodium	21300		ug/L	13.9	1000	1	
7440-28-0	Thallium	ND	U	ug/L	2.400	20.0	1	
7440-62-2	Vanadium	ND	U	ug/L	6.100	20.0	1	
7440-66-6	Zinc	23.8		ug/L	6.500	20.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-05
SDG ID :	B4045	Customer Sample No. :	MW-8
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067139.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
100-52-7	Benzaldehyde	ND	U	ug/L	0.750	9.8	1	
108-95-2	Phenol	ND	U	ug/L	0.210	9.8	1	
111-44-4	bis(2-Chloroethyl)ether	ND	U	ug/L	0.540	9.8	1	
95-57-8	2-Chlorophenol	ND	U	ug/L	0.530	9.8	1	
95-48-7	2-Methylphenol	ND	U	ug/L	0.240	9.8	1	
108-60-1	2,2-oxybis(1-Chloropropane)	ND	U	ug/L	0.170	9.8	1	
98-86-2	Acetophenone	ND	U	ug/L	0.140	9.8	1	
65794-96-9	3+4-Methylphenols	ND	U	ug/L	0.370	9.8	1	
621-64-7	N-Nitroso-di-n-propylamine	ND	U	ug/L	0.200	9.8	1	
67-72-1	Hexachloroethane	ND	U	ug/L	0.250	9.8	1	
98-95-3	Nitrobenzene	ND	U	ug/L	0.670	9.8	1	
78-59-1	Isophorone	ND	U	ug/L	0.290	9.8	1	
88-75-5	2-Nitrophenol	ND	U	ug/L	0.510	9.8	1	
105-67-9	2,4-Dimethylphenol	ND	U	ug/L	0.700	9.8	1	
111-91-1	bis(2-Chloroethoxy)methane	ND	U	ug/L	0.540	9.8	1	
120-83-2	2,4-Dichlorophenol	ND	U	ug/L	0.650	9.8	1	
91-20-3	Naphthalene	ND	U	ug/L	0.120	9.8	1	
106-47-8	4-Chloroaniline	ND	U	ug/L	2.8	9.8	1	
87-68-3	Hexachlorobutadiene	ND	U	ug/L	0.250	9.8	1	
105-60-2	Caprolactam	ND	U	ug/L	2.0	9.8	1	
59-50-7	4-Chloro-3-methylphenol	ND	U	ug/L	0.390	9.8	1	
91-57-6	2-Methylnaphthalene	ND	U	ug/L	0.310	9.8	1	
77-47-4	Hexachlorocyclopentadiene	ND	U	ug/L	0.240	9.8	1	
88-06-2	2,4,6-Trichlorophenol	ND	U	ug/L	0.550	9.8	1	
95-95-4	2,4,5-Trichlorophenol	ND	U	ug/L	0.390	9.8	1	
92-52-4	1,1-Biphenyl	ND	U	ug/L	0.150	9.8	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-05
SDG ID :	B4045	Customer Sample No. :	MW-8
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067139.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
91-58-7	2-Chloronaphthalene	ND	U	ug/L	0.160	9.8	1	
88-74-4	2-Nitroaniline	ND	U	ug/L	0.480	9.8	1	
131-11-3	Dimethylphthalate	ND	U	ug/L	0.220	9.8	1	
208-96-8	Acenaphthylene	ND	U	ug/L	0.690	9.8	1	
606-20-2	2,6-Dinitrotoluene	ND	U	ug/L	0.310	9.8	1	
99-09-2	3-Nitroaniline	ND	U	ug/L	1.1	9.8	1	
83-32-9	Acenaphthene	ND	U	ug/L	0.210	9.8	1	
51-28-5	2,4-Dinitrophenol	ND	U	ug/L	2.1	9.8	1	
100-02-7	4-Nitrophenol	ND	U	ug/L	2.0	9.8	1	
132-64-9	Dibenzofuran	ND	U	ug/L	0.240	9.8	1	
121-14-2	2,4-Dinitrotoluene	ND	U	ug/L	1.0	9.8	1	
84-66-2	Diethylphthalate	ND	U	ug/L	0.370	9.8	1	
7005-72-3	4-Chlorophenyl-phenylether	ND	U	ug/L	0.210	9.8	1	
86-73-7	Fluorene	ND	U	ug/L	0.300	9.8	1	
100-01-6	4-Nitroaniline	ND	U	ug/L	1.3	9.8	1	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	ug/L	0.730	9.8	1	
86-30-6	N-Nitrosodiphenylamine	ND	U	ug/L	0.590	9.8	1	
101-55-3	4-Bromophenyl-phenylether	ND	U	ug/L	0.230	9.8	1	
118-74-1	Hexachlorobenzene	ND	U	ug/L	0.180	9.8	1	
1912-24-9	Atrazine	ND	U	ug/L	0.390	9.8	1	
87-86-5	Pentachlorophenol	ND	U	ug/L	1.7	9.8	1	
85-01-8	Phenanthrene	ND	U	ug/L	0.250	9.8	1	
120-12-7	Anthracene	ND	U	ug/L	0.160	9.8	1	
86-74-8	Carbazole	ND	U	ug/L	0.220	9.8	1	
84-74-2	Di-n-butylphthalate	ND	U	ug/L	2.0	9.8	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-05
SDG ID :	B4045	Customer Sample No. :	MW-8
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067139.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
206-44-0	Fluoranthene	ND	U	ug/L	0.390	9.8	1	
129-00-0	Pyrene	ND	U	ug/L	0.200	9.8	1	
85-68-7	Butylbenzylphthalate	ND	U	ug/L	0.190	9.8	1	
91-94-1	3,3-Dichlorobenzidine	ND	U	ug/L	2.0	9.8	1	
56-55-3	Benzo(a)anthracene	ND	U	ug/L	0.160	9.8	1	
218-01-9	Chrysene	ND	U	ug/L	0.180	9.8	1	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	ug/L	0.160	9.8	1	
117-84-0	Di-n-octyl phthalate	ND	U	ug/L	0.500	9.8	1	
205-99-2	Benzo(b)fluoranthene	ND	U	ug/L	0.280	9.8	1	
207-08-9	Benzo(k)fluoranthene	ND	U	ug/L	0.180	9.8	1	
50-32-8	Benzo(a)pyrene	ND	U	ug/L	0.140	9.8	1	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	ug/L	0.150	9.8	1	
53-70-3	Dibenz(a,h)anthracene	ND	U	ug/L	0.410	9.8	1	
191-24-2	Benzo(g,h,i)perylene	ND	U	ug/L	0.280	9.8	1	
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	5.0	AB	ug/L	0	0	1	TIC
994-05-8	Butane, 2-methoxy-2-methyl-	82	JB	ug/L	0	0	1	TIC
	unknown16.82	2.5	J	ug/L	0	0	1	TIC

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	VOC-TCLVOA-10	Lab Sample ID :	B4045-05
SDG ID :	B4045	Customer Sample No. :	MW-8
% Moisture :	100	Analytical Method :	EPA SW846 8260
DataFile :	VF024276.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-71-8	Dichlorodifluoromethane	ND	U	ug/L	0.20	1.0	1	
74-87-3	Chloromethane	ND	U	ug/L	0.20	1.0	1	
75-01-4	Vinyl Chloride	ND	U	ug/L	0.34	1.0	1	
74-83-9	Bromomethane	ND	U	ug/L	0.20	1.0	1	
75-00-3	Chloroethane	ND	U	ug/L	0.20	1.0	1	
75-69-4	Trichlorofluoromethane	ND	U	ug/L	0.35	1.0	1	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U	ug/L	0.45	1.0	1	
75-35-4	1,1-Dichloroethene	ND	U	ug/L	0.47	1.0	1	
67-64-1	Acetone	ND	U	ug/L	0.50	5.0	1	
75-15-0	Carbon Disulfide	ND	U	ug/L	0.20	1.0	1	
1634-04-4	Methyl tert-butyl Ether	ND	U	ug/L	0.35	1.0	1	
79-20-9	Methyl Acetate	ND	U	ug/L	0.20	1.0	1	
75-09-2	Methylene Chloride	ND	U	ug/L	0.41	1.0	1	
156-60-5	trans-1,2-Dichloroethene	ND	U	ug/L	0.41	1.0	1	
75-34-3	1,1-Dichloroethane	ND	U	ug/L	0.36	1.0	1	
110-82-7	Cyclohexane	ND	U	ug/L	0.20	1.0	1	
78-93-3	2-Butanone	ND	U	ug/L	1.3	5.0	1	
56-23-5	Carbon Tetrachloride	ND	U	ug/L	0.20	1.0	1	
156-59-2	cis-1,2-Dichloroethene	ND	U	ug/L	0.35	1.0	1	
67-66-3	Chloroform	ND	U	ug/L	0.34	1.0	1	
71-55-6	1,1,1-Trichloroethane	ND	U	ug/L	0.40	1.0	1	
108-87-2	Methylcyclohexane	ND	U	ug/L	0.20	1.0	1	
71-43-2	Benzene	ND	U	ug/L	0.32	1.0	1	
107-06-2	1,2-Dichloroethane	ND	U	ug/L	0.48	1.0	1	
79-01-6	Trichloroethene	ND	U	ug/L	0.28	1.0	1	
78-87-5	1,2-Dichloropropane	ND	U	ug/L	0.46	1.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	VOC-TCLVOA-10	Lab Sample ID :	B4045-05
SDG ID :	B4045	Customer Sample No. :	MW-8
% Moisture :	100	Analytical Method :	EPA SW846 8260
DataFile :	VF024276.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-27-4	Bromodichloromethane	ND	U	ug/L	0.36	1.0	1	
108-10-1	4-Methyl-2-Pentanone	ND	U	ug/L	2.1	5.0	1	
108-88-3	Toluene	ND	U	ug/L	0.37	1.0	1	
10061-02-6	t-1,3-Dichloropropene	ND	U	ug/L	0.29	1.0	1	
10061-01-5	cis-1,3-Dichloropropene	ND	U	ug/L	0.31	1.0	1	
79-00-5	1,1,2-Trichloroethane	ND	U	ug/L	0.38	1.0	1	
591-78-6	2-Hexanone	ND	U	ug/L	1.9	5.0	1	
124-48-1	Dibromochloromethane	ND	U	ug/L	0.20	1.0	1	
106-93-4	1,2-Dibromoethane	ND	U	ug/L	0.41	1.0	1	
127-18-4	Tetrachloroethene	ND	U	ug/L	0.27	1.0	1	
108-90-7	Chlorobenzene	ND	U	ug/L	0.49	1.0	1	
100-41-4	Ethyl Benzene	ND	U	ug/L	0.20	1.0	1	
179601-23-1	m/p-Xylenes	ND	U	ug/L	0.95	2.0	1	
95-47-6	o-Xylene	ND	U	ug/L	0.43	1.0	1	
100-42-5	Styrene	ND	U	ug/L	0.36	1.0	1	
75-25-2	Bromoform	ND	U	ug/L	0.47	1.0	1	
98-82-8	Isopropylbenzene	ND	U	ug/L	0.45	1.0	1	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ug/L	0.31	1.0	1	
541-73-1	1,3-Dichlorobenzene	ND	U	ug/L	0.43	1.0	1	
106-46-7	1,4-Dichlorobenzene	ND	U	ug/L	0.32	1.0	1	
95-50-1	1,2-Dichlorobenzene	ND	U	ug/L	0.45	1.0	1	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	ug/L	0.46	1.0	1	
120-82-1	1,2,4-Trichlorobenzene	ND	U	ug/L	0.20	1.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	Mercury	Lab Sample ID :	B4045-06
SDG ID :	B4045	Customer Sample No. :	MW-5
% Moisture :	100	Analytical Method :	EPA SW-846 7470 - HG
DataFile :	LB52312.PRN	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
7439-97-6	Mercury	ND	U	ug/L	0.09	0.20	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	Metals ICP-TAL	Lab Sample ID :	B4045-06
SDG ID :	B4045	Customer Sample No. :	MW-5
% Moisture :	100	Analytical Method :	EPA SW-846 6010 - ICP4
DataFile :	LB52305.txt	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
7429-90-5	Aluminum	22.4	J	ug/L	6.500	50.0	1	
7440-36-0	Antimony	ND	U	ug/L	8.000	25.0	1	
7440-38-2	Arsenic	ND	U	ug/L	4.200	10.0	1	
7440-39-3	Barium	67.3		ug/L	4.000	50.0	1	
7440-41-7	Beryllium	ND	U	ug/L	0.70	3.000	1	
7440-43-9	Cadmium	ND	U	ug/L	0.50	3.000	1	
7440-70-2	Calcium	49500		ug/L	31.8	1000	1	
7440-47-3	Chromium	ND	U	ug/L	1.100	5.000	1	
7440-48-4	Cobalt	ND	U	ug/L	5.800	15.0	1	
7440-50-8	Copper	ND	U	ug/L	2.000	10.0	1	
7439-89-6	Iron	94.1		ug/L	20.4	50.0	1	
7439-92-1	Lead	7.190		ug/L	2.600	6.000	1	
7439-95-4	Magnesium	7980		ug/L	32.5	1000	1	
7439-96-5	Manganese	5.550	J	ug/L	1.700	10.0	1	
7440-02-0	Nickel	ND	U	ug/L	4.200	20.0	1	
7440-09-7	Potassium	3620		ug/L	38.8	1000	1	
7782-49-2	Selenium	ND	U	ug/L	4.800	10.0	1	
7440-22-4	Silver	ND	U	ug/L	1.500	5.000	1	
7440-23-5	Sodium	13600		ug/L	13.9	1000	1	
7440-28-0	Thallium	ND	U	ug/L	2.400	20.0	1	
7440-62-2	Vanadium	ND	U	ug/L	6.100	20.0	1	
7440-66-6	Zinc	15.3	J	ug/L	6.500	20.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-06
SDG ID :	B4045	Customer Sample No. :	MW-5
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067140.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
100-52-7	Benzaldehyde	ND	U	ug/L	0.750	9.7	1	
108-95-2	Phenol	ND	U	ug/L	0.200	9.7	1	
111-44-4	bis(2-Chloroethyl)ether	ND	U	ug/L	0.530	9.7	1	
95-57-8	2-Chlorophenol	ND	U	ug/L	0.520	9.7	1	
95-48-7	2-Methylphenol	ND	U	ug/L	0.230	9.7	1	
108-60-1	2,2-oxybis(1-Chloropropane)	ND	U	ug/L	0.170	9.7	1	
98-86-2	Acetophenone	ND	U	ug/L	0.140	9.7	1	
65794-96-9	3+4-Methylphenols	ND	U	ug/L	0.370	9.7	1	
621-64-7	N-Nitroso-di-n-propylamine	ND	U	ug/L	0.190	9.7	1	
67-72-1	Hexachloroethane	ND	U	ug/L	0.240	9.7	1	
98-95-3	Nitrobenzene	ND	U	ug/L	0.660	9.7	1	
78-59-1	Isophorone	ND	U	ug/L	0.290	9.7	1	
88-75-5	2-Nitrophenol	ND	U	ug/L	0.500	9.7	1	
105-67-9	2,4-Dimethylphenol	ND	U	ug/L	0.690	9.7	1	
111-91-1	bis(2-Chloroethoxy)methane	ND	U	ug/L	0.530	9.7	1	
120-83-2	2,4-Dichlorophenol	ND	U	ug/L	0.640	9.7	1	
91-20-3	Naphthalene	ND	U	ug/L	0.120	9.7	1	
106-47-8	4-Chloroaniline	ND	U	ug/L	2.8	9.7	1	
87-68-3	Hexachlorobutadiene	ND	U	ug/L	0.240	9.7	1	
105-60-2	Caprolactam	ND	U	ug/L	1.9	9.7	1	
59-50-7	4-Chloro-3-methylphenol	ND	U	ug/L	0.390	9.7	1	
91-57-6	2-Methylnaphthalene	ND	U	ug/L	0.310	9.7	1	
77-47-4	Hexachlorocyclopentadiene	ND	U	ug/L	0.230	9.7	1	
88-06-2	2,4,6-Trichlorophenol	ND	U	ug/L	0.540	9.7	1	
95-95-4	2,4,5-Trichlorophenol	ND	U	ug/L	0.390	9.7	1	
92-52-4	1,1-Biphenyl	ND	U	ug/L	0.150	9.7	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-06
SDG ID :	B4045	Customer Sample No. :	MW-5
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067140.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
91-58-7	2-Chloronaphthalene	ND	U	ug/L	0.160	9.7	1	
88-74-4	2-Nitroaniline	ND	U	ug/L	0.480	9.7	1	
131-11-3	Dimethylphthalate	ND	U	ug/L	0.210	9.7	1	
208-96-8	Acenaphthylene	ND	U	ug/L	0.680	9.7	1	
606-20-2	2,6-Dinitrotoluene	ND	U	ug/L	0.310	9.7	1	
99-09-2	3-Nitroaniline	ND	U	ug/L	1.1	9.7	1	
83-32-9	Acenaphthene	ND	U	ug/L	0.200	9.7	1	
51-28-5	2,4-Dinitrophenol	ND	U	ug/L	2.0	9.7	1	
100-02-7	4-Nitrophenol	ND	U	ug/L	1.9	9.7	1	
132-64-9	Dibenzofuran	ND	U	ug/L	0.230	9.7	1	
121-14-2	2,4-Dinitrotoluene	ND	U	ug/L	1.0	9.7	1	
84-66-2	Diethylphthalate	ND	U	ug/L	0.370	9.7	1	
7005-72-3	4-Chlorophenyl-phenylether	ND	U	ug/L	0.200	9.7	1	
86-73-7	Fluorene	ND	U	ug/L	0.300	9.7	1	
100-01-6	4-Nitroaniline	ND	U	ug/L	1.3	9.7	1	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	ug/L	0.720	9.7	1	
86-30-6	N-Nitrosodiphenylamine	ND	U	ug/L	0.580	9.7	1	
101-55-3	4-Bromophenyl-phenylether	ND	U	ug/L	0.220	9.7	1	
118-74-1	Hexachlorobenzene	ND	U	ug/L	0.170	9.7	1	
1912-24-9	Atrazine	ND	U	ug/L	0.390	9.7	1	
87-86-5	Pentachlorophenol	ND	U	ug/L	1.7	9.7	1	
85-01-8	Phenanthrene	ND	U	ug/L	0.250	9.7	1	
120-12-7	Anthracene	ND	U	ug/L	0.160	9.7	1	
86-74-8	Carbazole	ND	U	ug/L	0.210	9.7	1	
84-74-2	Di-n-butylphthalate	ND	U	ug/L	1.9	9.7	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-06
SDG ID :	B4045	Customer Sample No. :	MW-5
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067140.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
206-44-0	Fluoranthene	ND	U	ug/L	0.390	9.7	1	
129-00-0	Pyrene	ND	U	ug/L	0.190	9.7	1	
85-68-7	Butylbenzylphthalate	ND	U	ug/L	0.180	9.7	1	
91-94-1	3,3-Dichlorobenzidine	ND	U	ug/L	1.9	9.7	1	
56-55-3	Benzo(a)anthracene	ND	U	ug/L	0.160	9.7	1	
218-01-9	Chrysene	ND	U	ug/L	0.170	9.7	1	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	ug/L	0.160	9.7	1	
117-84-0	Di-n-octyl phthalate	ND	U	ug/L	0.500	9.7	1	
205-99-2	Benzo(b)fluoranthene	ND	U	ug/L	0.280	9.7	1	
207-08-9	Benzo(k)fluoranthene	ND	U	ug/L	0.170	9.7	1	
50-32-8	Benzo(a)pyrene	ND	U	ug/L	0.140	9.7	1	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	ug/L	0.150	9.7	1	
53-70-3	Dibenz(a,h)anthracene	ND	U	ug/L	0.410	9.7	1	
191-24-2	Benzo(g,h,i)perylene	ND	U	ug/L	0.280	9.7	1	
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	5.2	AB	ug/L	0	0	1	TIC
994-05-8	Butane, 2-methoxy-2-methyl-	85	JB	ug/L	0	0	1	TIC
	unknown16.82	2.7	J	ug/L	0	0	1	TIC

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	VOC-TCLVOA-10	Lab Sample ID :	B4045-06
SDG ID :	B4045	Customer Sample No. :	MW-5
% Moisture :	100	Analytical Method :	EPA SW846 8260
DataFile :	VF024277.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-71-8	Dichlorodifluoromethane	ND	U	ug/L	0.20	1.0	1	
74-87-3	Chloromethane	ND	U	ug/L	0.20	1.0	1	
75-01-4	Vinyl Chloride	ND	U	ug/L	0.34	1.0	1	
74-83-9	Bromomethane	ND	U	ug/L	0.20	1.0	1	
75-00-3	Chloroethane	ND	U	ug/L	0.20	1.0	1	
75-69-4	Trichlorofluoromethane	ND	U	ug/L	0.35	1.0	1	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U	ug/L	0.45	1.0	1	
75-35-4	1,1-Dichloroethene	ND	U	ug/L	0.47	1.0	1	
67-64-1	Acetone	ND	U	ug/L	0.50	5.0	1	
75-15-0	Carbon Disulfide	ND	U	ug/L	0.20	1.0	1	
1634-04-4	Methyl tert-butyl Ether	ND	U	ug/L	0.35	1.0	1	
79-20-9	Methyl Acetate	ND	U	ug/L	0.20	1.0	1	
75-09-2	Methylene Chloride	ND	U	ug/L	0.41	1.0	1	
156-60-5	trans-1,2-Dichloroethene	ND	U	ug/L	0.41	1.0	1	
75-34-3	1,1-Dichloroethane	ND	U	ug/L	0.36	1.0	1	
110-82-7	Cyclohexane	ND	U	ug/L	0.20	1.0	1	
78-93-3	2-Butanone	ND	U	ug/L	1.3	5.0	1	
56-23-5	Carbon Tetrachloride	ND	U	ug/L	0.20	1.0	1	
156-59-2	cis-1,2-Dichloroethene	ND	U	ug/L	0.35	1.0	1	
67-66-3	Chloroform	ND	U	ug/L	0.34	1.0	1	
71-55-6	1,1,1-Trichloroethane	ND	U	ug/L	0.40	1.0	1	
108-87-2	Methylcyclohexane	ND	U	ug/L	0.20	1.0	1	
71-43-2	Benzene	ND	U	ug/L	0.32	1.0	1	
107-06-2	1,2-Dichloroethane	ND	U	ug/L	0.48	1.0	1	
79-01-6	Trichloroethene	ND	U	ug/L	0.28	1.0	1	
78-87-5	1,2-Dichloropropane	ND	U	ug/L	0.46	1.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	VOC-TCLVOA-10	Lab Sample ID :	B4045-06
SDG ID :	B4045	Customer Sample No. :	MW-5
% Moisture :	100	Analytical Method :	EPA SW846 8260
DataFile :	VF024277.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-27-4	Bromodichloromethane	ND	U	ug/L	0.36	1.0	1	
108-10-1	4-Methyl-2-Pentanone	ND	U	ug/L	2.1	5.0	1	
108-88-3	Toluene	ND	U	ug/L	0.37	1.0	1	
10061-02-6	t-1,3-Dichloropropene	ND	U	ug/L	0.29	1.0	1	
10061-01-5	cis-1,3-Dichloropropene	ND	U	ug/L	0.31	1.0	1	
79-00-5	1,1,2-Trichloroethane	ND	U	ug/L	0.38	1.0	1	
591-78-6	2-Hexanone	ND	U	ug/L	1.9	5.0	1	
124-48-1	Dibromochloromethane	ND	U	ug/L	0.20	1.0	1	
106-93-4	1,2-Dibromoethane	ND	U	ug/L	0.41	1.0	1	
127-18-4	Tetrachloroethene	ND	U	ug/L	0.27	1.0	1	
108-90-7	Chlorobenzene	ND	U	ug/L	0.49	1.0	1	
100-41-4	Ethyl Benzene	ND	U	ug/L	0.20	1.0	1	
179601-23-1	m/p-Xylenes	ND	U	ug/L	0.95	2.0	1	
95-47-6	o-Xylene	ND	U	ug/L	0.43	1.0	1	
100-42-5	Styrene	ND	U	ug/L	0.36	1.0	1	
75-25-2	Bromoform	ND	U	ug/L	0.47	1.0	1	
98-82-8	Isopropylbenzene	ND	U	ug/L	0.45	1.0	1	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ug/L	0.31	1.0	1	
541-73-1	1,3-Dichlorobenzene	ND	U	ug/L	0.43	1.0	1	
106-46-7	1,4-Dichlorobenzene	ND	U	ug/L	0.32	1.0	1	
95-50-1	1,2-Dichlorobenzene	ND	U	ug/L	0.45	1.0	1	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	ug/L	0.46	1.0	1	
120-82-1	1,2,4-Trichlorobenzene	ND	U	ug/L	0.20	1.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	Mercury	Lab Sample ID :	B4045-07
SDG ID :	B4045	Customer Sample No. :	MW-2
% Moisture :	100	Analytical Method :	EPA SW-846 7470 - HG
DataFile :	LB52312.PRN	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
7439-97-6	Mercury	ND	U	ug/L	0.09	0.20	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	Metals ICP-TAL	Lab Sample ID :	B4045-07
SDG ID :	B4045	Customer Sample No. :	MW-2
% Moisture :	100	Analytical Method :	EPA SW-846 6010 - ICP4
DataFile :	LB52305.txt	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
7429-90-5	Aluminum	9.240	J	ug/L	6.500	50.0	1	
7440-36-0	Antimony	ND	U	ug/L	8.000	25.0	1	
7440-38-2	Arsenic	ND	U	ug/L	4.200	10.0	1	
7440-39-3	Barium	78.9		ug/L	4.000	50.0	1	
7440-41-7	Beryllium	ND	U	ug/L	0.70	3.000	1	
7440-43-9	Cadmium	ND	U	ug/L	0.50	3.000	1	
7440-70-2	Calcium	62900		ug/L	31.8	1000	1	
7440-47-3	Chromium	ND	U	ug/L	1.100	5.000	1	
7440-48-4	Cobalt	ND	U	ug/L	5.800	15.0	1	
7440-50-8	Copper	ND	U	ug/L	2.000	10.0	1	
7439-89-6	Iron	29.4	J	ug/L	20.4	50.0	1	
7439-92-1	Lead	3.320	J	ug/L	2.600	6.000	1	
7439-95-4	Magnesium	10100		ug/L	32.5	1000	1	
7439-96-5	Manganese	5.000	J	ug/L	1.700	10.0	1	
7440-02-0	Nickel	ND	U	ug/L	4.200	20.0	1	
7440-09-7	Potassium	5830		ug/L	38.8	1000	1	
7782-49-2	Selenium	ND	U	ug/L	4.800	10.0	1	
7440-22-4	Silver	ND	U	ug/L	1.500	5.000	1	
7440-23-5	Sodium	35000		ug/L	13.9	1000	1	
7440-28-0	Thallium	ND	U	ug/L	2.400	20.0	1	
7440-62-2	Vanadium	ND	U	ug/L	6.100	20.0	1	
7440-66-6	Zinc	12.9	J	ug/L	6.500	20.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-07
SDG ID :	B4045	Customer Sample No. :	MW-2
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067141.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
100-52-7	Benzaldehyde	ND	U	ug/L	0.760	9.9	1	
108-95-2	Phenol	ND	U	ug/L	0.210	9.9	1	
111-44-4	bis(2-Chloroethyl)ether	ND	U	ug/L	0.540	9.9	1	
95-57-8	2-Chlorophenol	ND	U	ug/L	0.530	9.9	1	
95-48-7	2-Methylphenol	ND	U	ug/L	0.240	9.9	1	
108-60-1	2,2-oxybis(1-Chloropropane)	ND	U	ug/L	0.170	9.9	1	
98-86-2	Acetophenone	ND	U	ug/L	0.140	9.9	1	
65794-96-9	3+4-Methylphenols	ND	U	ug/L	0.380	9.9	1	
621-64-7	N-Nitroso-di-n-propylamine	ND	U	ug/L	0.200	9.9	1	
67-72-1	Hexachloroethane	ND	U	ug/L	0.250	9.9	1	
98-95-3	Nitrobenzene	ND	U	ug/L	0.670	9.9	1	
78-59-1	Isophorone	ND	U	ug/L	0.300	9.9	1	
88-75-5	2-Nitrophenol	ND	U	ug/L	0.510	9.9	1	
105-67-9	2,4-Dimethylphenol	ND	U	ug/L	0.700	9.9	1	
111-91-1	bis(2-Chloroethoxy)methane	ND	U	ug/L	0.540	9.9	1	
120-83-2	2,4-Dichlorophenol	ND	U	ug/L	0.650	9.9	1	
91-20-3	Naphthalene	ND	U	ug/L	0.120	9.9	1	
106-47-8	4-Chloroaniline	ND	U	ug/L	2.8	9.9	1	
87-68-3	Hexachlorobutadiene	ND	U	ug/L	0.250	9.9	1	
105-60-2	Caprolactam	ND	U	ug/L	2.0	9.9	1	
59-50-7	4-Chloro-3-methylphenol	ND	U	ug/L	0.400	9.9	1	
91-57-6	2-Methylnaphthalene	ND	U	ug/L	0.320	9.9	1	
77-47-4	Hexachlorocyclopentadiene	ND	U	ug/L	0.240	9.9	1	
88-06-2	2,4,6-Trichlorophenol	ND	U	ug/L	0.550	9.9	1	
95-95-4	2,4,5-Trichlorophenol	ND	U	ug/L	0.400	9.9	1	
92-52-4	1,1-Biphenyl	ND	U	ug/L	0.150	9.9	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-07
SDG ID :	B4045	Customer Sample No. :	MW-2
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067141.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
91-58-7	2-Chloronaphthalene	ND	U	ug/L	0.160	9.9	1	
88-74-4	2-Nitroaniline	ND	U	ug/L	0.490	9.9	1	
131-11-3	Dimethylphthalate	ND	U	ug/L	0.220	9.9	1	
208-96-8	Acenaphthylene	ND	U	ug/L	0.690	9.9	1	
606-20-2	2,6-Dinitrotoluene	ND	U	ug/L	0.320	9.9	1	
99-09-2	3-Nitroaniline	ND	U	ug/L	1.1	9.9	1	
83-32-9	Acenaphthene	ND	U	ug/L	0.210	9.9	1	
51-28-5	2,4-Dinitrophenol	ND	U	ug/L	2.1	9.9	1	
100-02-7	4-Nitrophenol	ND	U	ug/L	2.0	9.9	1	
132-64-9	Dibenzofuran	ND	U	ug/L	0.240	9.9	1	
121-14-2	2,4-Dinitrotoluene	ND	U	ug/L	1.0	9.9	1	
84-66-2	Diethylphthalate	ND	U	ug/L	0.380	9.9	1	
7005-72-3	4-Chlorophenyl-phenylether	ND	U	ug/L	0.210	9.9	1	
86-73-7	Fluorene	ND	U	ug/L	0.310	9.9	1	
100-01-6	4-Nitroaniline	ND	U	ug/L	1.3	9.9	1	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	ug/L	0.730	9.9	1	
86-30-6	N-Nitrosodiphenylamine	ND	U	ug/L	0.590	9.9	1	
101-55-3	4-Bromophenyl-phenylether	ND	U	ug/L	0.230	9.9	1	
118-74-1	Hexachlorobenzene	ND	U	ug/L	0.180	9.9	1	
1912-24-9	Atrazine	ND	U	ug/L	0.400	9.9	1	
87-86-5	Pentachlorophenol	ND	U	ug/L	1.7	9.9	1	
85-01-8	Phenanthrene	ND	U	ug/L	0.260	9.9	1	
120-12-7	Anthracene	ND	U	ug/L	0.160	9.9	1	
86-74-8	Carbazole	ND	U	ug/L	0.220	9.9	1	
84-74-2	Di-n-butylphthalate	ND	U	ug/L	2.0	9.9	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-07
SDG ID :	B4045	Customer Sample No. :	MW-2
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067141.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
206-44-0	Fluoranthene	ND	U	ug/L	0.400	9.9	1	
129-00-0	Pyrene	ND	U	ug/L	0.200	9.9	1	
85-68-7	Butylbenzylphthalate	ND	U	ug/L	0.190	9.9	1	
91-94-1	3,3-Dichlorobenzidine	ND	U	ug/L	2.0	9.9	1	
56-55-3	Benzo(a)anthracene	ND	U	ug/L	0.160	9.9	1	
218-01-9	Chrysene	ND	U	ug/L	0.180	9.9	1	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	ug/L	0.160	9.9	1	
117-84-0	Di-n-octyl phthalate	ND	U	ug/L	0.500	9.9	1	
205-99-2	Benzo(b)fluoranthene	ND	U	ug/L	0.290	9.9	1	
207-08-9	Benzo(k)fluoranthene	ND	U	ug/L	0.180	9.9	1	
50-32-8	Benzo(a)pyrene	ND	U	ug/L	0.140	9.9	1	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	ug/L	0.150	9.9	1	
53-70-3	Dibenz(a,h)anthracene	ND	U	ug/L	0.420	9.9	1	
191-24-2	Benzo(g,h,i)perylene	ND	U	ug/L	0.290	9.9	1	
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	5.2	AB	ug/L	0	0	1	TIC
994-05-8	Butane, 2-methoxy-2-methyl-	78	JB	ug/L	0	0	1	TIC
	unknown16.82	2.8	J	ug/L	0	0	1	TIC

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	VOC-TCLVOA-10	Lab Sample ID :	B4045-07
SDG ID :	B4045	Customer Sample No. :	MW-2
% Moisture :	100	Analytical Method :	EPA SW846 8260
DataFile :	VF024278.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-71-8	Dichlorodifluoromethane	ND	U	ug/L	0.20	1.0	1	
74-87-3	Chloromethane	ND	U	ug/L	0.20	1.0	1	
75-01-4	Vinyl Chloride	ND	U	ug/L	0.34	1.0	1	
74-83-9	Bromomethane	ND	U	ug/L	0.20	1.0	1	
75-00-3	Chloroethane	ND	U	ug/L	0.20	1.0	1	
75-69-4	Trichlorofluoromethane	ND	U	ug/L	0.35	1.0	1	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U	ug/L	0.45	1.0	1	
75-35-4	1,1-Dichloroethene	ND	U	ug/L	0.47	1.0	1	
67-64-1	Acetone	ND	U	ug/L	0.50	5.0	1	
75-15-0	Carbon Disulfide	ND	U	ug/L	0.20	1.0	1	
1634-04-4	Methyl tert-butyl Ether	ND	U	ug/L	0.35	1.0	1	
79-20-9	Methyl Acetate	ND	U	ug/L	0.20	1.0	1	
75-09-2	Methylene Chloride	ND	U	ug/L	0.41	1.0	1	
156-60-5	trans-1,2-Dichloroethene	ND	U	ug/L	0.41	1.0	1	
75-34-3	1,1-Dichloroethane	ND	U	ug/L	0.36	1.0	1	
110-82-7	Cyclohexane	ND	U	ug/L	0.20	1.0	1	
78-93-3	2-Butanone	ND	U	ug/L	1.3	5.0	1	
56-23-5	Carbon Tetrachloride	ND	U	ug/L	0.20	1.0	1	
156-59-2	cis-1,2-Dichloroethene	ND	U	ug/L	0.35	1.0	1	
67-66-3	Chloroform	ND	U	ug/L	0.34	1.0	1	
71-55-6	1,1,1-Trichloroethane	ND	U	ug/L	0.40	1.0	1	
108-87-2	Methylcyclohexane	ND	U	ug/L	0.20	1.0	1	
71-43-2	Benzene	ND	U	ug/L	0.32	1.0	1	
107-06-2	1,2-Dichloroethane	ND	U	ug/L	0.48	1.0	1	
79-01-6	Trichloroethene	ND	U	ug/L	0.28	1.0	1	
78-87-5	1,2-Dichloropropane	ND	U	ug/L	0.46	1.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	VOC-TCLVOA-10	Lab Sample ID :	B4045-07
SDG ID :	B4045	Customer Sample No. :	MW-2
% Moisture :	100	Analytical Method :	EPA SW846 8260
DataFile :	VF024278.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-27-4	Bromodichloromethane	ND	U	ug/L	0.36	1.0	1	
108-10-1	4-Methyl-2-Pentanone	ND	U	ug/L	2.1	5.0	1	
108-88-3	Toluene	ND	U	ug/L	0.37	1.0	1	
10061-02-6	t-1,3-Dichloropropene	ND	U	ug/L	0.29	1.0	1	
10061-01-5	cis-1,3-Dichloropropene	ND	U	ug/L	0.31	1.0	1	
79-00-5	1,1,2-Trichloroethane	ND	U	ug/L	0.38	1.0	1	
591-78-6	2-Hexanone	ND	U	ug/L	1.9	5.0	1	
124-48-1	Dibromochloromethane	ND	U	ug/L	0.20	1.0	1	
106-93-4	1,2-Dibromoethane	ND	U	ug/L	0.41	1.0	1	
127-18-4	Tetrachloroethene	ND	U	ug/L	0.27	1.0	1	
108-90-7	Chlorobenzene	ND	U	ug/L	0.49	1.0	1	
100-41-4	Ethyl Benzene	ND	U	ug/L	0.20	1.0	1	
179601-23-1	m/p-Xylenes	ND	U	ug/L	0.95	2.0	1	
95-47-6	o-Xylene	ND	U	ug/L	0.43	1.0	1	
100-42-5	Styrene	ND	U	ug/L	0.36	1.0	1	
75-25-2	Bromoform	ND	U	ug/L	0.47	1.0	1	
98-82-8	Isopropylbenzene	ND	U	ug/L	0.45	1.0	1	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ug/L	0.31	1.0	1	
541-73-1	1,3-Dichlorobenzene	ND	U	ug/L	0.43	1.0	1	
106-46-7	1,4-Dichlorobenzene	ND	U	ug/L	0.32	1.0	1	
95-50-1	1,2-Dichlorobenzene	ND	U	ug/L	0.45	1.0	1	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	ug/L	0.46	1.0	1	
120-82-1	1,2,4-Trichlorobenzene	ND	U	ug/L	0.20	1.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	Mercury	Lab Sample ID :	B4045-08
SDG ID :	B4045	Customer Sample No. :	MW-7
% Moisture :	100	Analytical Method :	EPA SW-846 7470 - HG
DataFile :	LB52312.PRN	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
7439-97-6	Mercury	ND	U	ug/L	0.09	0.20	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	Metals ICP-TAL	Lab Sample ID :	B4045-08
SDG ID :	B4045	Customer Sample No. :	MW-7
% Moisture :	100	Analytical Method :	EPA SW-846 6010 - ICP4
DataFile :	LB52305.txt	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
7429-90-5	Aluminum	28.2	J	ug/L	6.500	50.0	1	
7440-36-0	Antimony	ND	U	ug/L	8.000	25.0	1	
7440-38-2	Arsenic	ND	U	ug/L	4.200	10.0	1	
7440-39-3	Barium	96.0		ug/L	4.000	50.0	1	
7440-41-7	Beryllium	ND	U	ug/L	0.70	3.000	1	
7440-43-9	Cadmium	ND	U	ug/L	0.50	3.000	1	
7440-70-2	Calcium	60300		ug/L	31.8	1000	1	
7440-47-3	Chromium	ND	U	ug/L	1.100	5.000	1	
7440-48-4	Cobalt	ND	U	ug/L	5.800	15.0	1	
7440-50-8	Copper	3.590	J	ug/L	2.000	10.0	1	
7439-89-6	Iron	297		ug/L	20.4	50.0	1	
7439-92-1	Lead	3.050	J	ug/L	2.600	6.000	1	
7439-95-4	Magnesium	9230		ug/L	32.5	1000	1	
7439-96-5	Manganese	474		ug/L	1.700	10.0	1	
7440-02-0	Nickel	ND	U	ug/L	4.200	20.0	1	
7440-09-7	Potassium	4170		ug/L	38.8	1000	1	
7782-49-2	Selenium	ND	U	ug/L	4.800	10.0	1	
7440-22-4	Silver	ND	U	ug/L	1.500	5.000	1	
7440-23-5	Sodium	20700		ug/L	13.9	1000	1	
7440-28-0	Thallium	ND	U	ug/L	2.400	20.0	1	
7440-62-2	Vanadium	ND	U	ug/L	6.100	20.0	1	
7440-66-6	Zinc	18.0	J	ug/L	6.500	20.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-08
SDG ID :	B4045	Customer Sample No. :	MW-7
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067142.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
100-52-7	Benzaldehyde	ND	U	ug/L	0.750	9.8	1	
108-95-2	Phenol	ND	U	ug/L	0.210	9.8	1	
111-44-4	bis(2-Chloroethyl)ether	ND	U	ug/L	0.540	9.8	1	
95-57-8	2-Chlorophenol	ND	U	ug/L	0.530	9.8	1	
95-48-7	2-Methylphenol	ND	U	ug/L	0.240	9.8	1	
108-60-1	2,2-oxybis(1-Chloropropane)	ND	U	ug/L	0.170	9.8	1	
98-86-2	Acetophenone	ND	U	ug/L	0.140	9.8	1	
65794-96-9	3+4-Methylphenols	ND	U	ug/L	0.370	9.8	1	
621-64-7	N-Nitroso-di-n-propylamine	ND	U	ug/L	0.200	9.8	1	
67-72-1	Hexachloroethane	ND	U	ug/L	0.250	9.8	1	
98-95-3	Nitrobenzene	ND	U	ug/L	0.670	9.8	1	
78-59-1	Isophorone	ND	U	ug/L	0.290	9.8	1	
88-75-5	2-Nitrophenol	ND	U	ug/L	0.510	9.8	1	
105-67-9	2,4-Dimethylphenol	ND	U	ug/L	0.700	9.8	1	
111-91-1	bis(2-Chloroethoxy)methane	ND	U	ug/L	0.540	9.8	1	
120-83-2	2,4-Dichlorophenol	ND	U	ug/L	0.650	9.8	1	
91-20-3	Naphthalene	ND	U	ug/L	0.120	9.8	1	
106-47-8	4-Chloroaniline	ND	U	ug/L	2.8	9.8	1	
87-68-3	Hexachlorobutadiene	ND	U	ug/L	0.250	9.8	1	
105-60-2	Caprolactam	ND	U	ug/L	2.0	9.8	1	
59-50-7	4-Chloro-3-methylphenol	ND	U	ug/L	0.390	9.8	1	
91-57-6	2-Methylnaphthalene	ND	U	ug/L	0.310	9.8	1	
77-47-4	Hexachlorocyclopentadiene	ND	U	ug/L	0.240	9.8	1	
88-06-2	2,4,6-Trichlorophenol	ND	U	ug/L	0.550	9.8	1	
95-95-4	2,4,5-Trichlorophenol	ND	U	ug/L	0.390	9.8	1	
92-52-4	1,1-Biphenyl	ND	U	ug/L	0.150	9.8	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-08
SDG ID :	B4045	Customer Sample No. :	MW-7
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067142.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
91-58-7	2-Chloronaphthalene	ND	U	ug/L	0.160	9.8	1	
88-74-4	2-Nitroaniline	ND	U	ug/L	0.480	9.8	1	
131-11-3	Dimethylphthalate	ND	U	ug/L	0.220	9.8	1	
208-96-8	Acenaphthylene	ND	U	ug/L	0.690	9.8	1	
606-20-2	2,6-Dinitrotoluene	ND	U	ug/L	0.310	9.8	1	
99-09-2	3-Nitroaniline	ND	U	ug/L	1.1	9.8	1	
83-32-9	Acenaphthene	ND	U	ug/L	0.210	9.8	1	
51-28-5	2,4-Dinitrophenol	ND	U	ug/L	2.1	9.8	1	
100-02-7	4-Nitrophenol	ND	U	ug/L	2.0	9.8	1	
132-64-9	Dibenzofuran	ND	U	ug/L	0.240	9.8	1	
121-14-2	2,4-Dinitrotoluene	ND	U	ug/L	1.0	9.8	1	
84-66-2	Diethylphthalate	ND	U	ug/L	0.370	9.8	1	
7005-72-3	4-Chlorophenyl-phenylether	ND	U	ug/L	0.210	9.8	1	
86-73-7	Fluorene	ND	U	ug/L	0.300	9.8	1	
100-01-6	4-Nitroaniline	ND	U	ug/L	1.3	9.8	1	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	ug/L	0.730	9.8	1	
86-30-6	N-Nitrosodiphenylamine	ND	U	ug/L	0.590	9.8	1	
101-55-3	4-Bromophenyl-phenylether	ND	U	ug/L	0.230	9.8	1	
118-74-1	Hexachlorobenzene	ND	U	ug/L	0.180	9.8	1	
1912-24-9	Atrazine	ND	U	ug/L	0.390	9.8	1	
87-86-5	Pentachlorophenol	ND	U	ug/L	1.7	9.8	1	
85-01-8	Phenanthrene	ND	U	ug/L	0.250	9.8	1	
120-12-7	Anthracene	ND	U	ug/L	0.160	9.8	1	
86-74-8	Carbazole	ND	U	ug/L	0.220	9.8	1	
84-74-2	Di-n-butylphthalate	ND	U	ug/L	2.0	9.8	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-08
SDG ID :	B4045	Customer Sample No. :	MW-7
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067142.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
206-44-0	Fluoranthene	ND	U	ug/L	0.390	9.8	1	
129-00-0	Pyrene	ND	U	ug/L	0.200	9.8	1	
85-68-7	Butylbenzylphthalate	ND	U	ug/L	0.190	9.8	1	
91-94-1	3,3-Dichlorobenzidine	ND	U	ug/L	2.0	9.8	1	
56-55-3	Benzo(a)anthracene	ND	U	ug/L	0.160	9.8	1	
218-01-9	Chrysene	ND	U	ug/L	0.180	9.8	1	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	ug/L	0.160	9.8	1	
117-84-0	Di-n-octyl phthalate	ND	U	ug/L	0.500	9.8	1	
205-99-2	Benzo(b)fluoranthene	ND	U	ug/L	0.280	9.8	1	
207-08-9	Benzo(k)fluoranthene	ND	U	ug/L	0.180	9.8	1	
50-32-8	Benzo(a)pyrene	ND	U	ug/L	0.140	9.8	1	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	ug/L	0.150	9.8	1	
53-70-3	Dibenz(a,h)anthracene	ND	U	ug/L	0.410	9.8	1	
191-24-2	Benzo(g,h,i)perylene	ND	U	ug/L	0.280	9.8	1	
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.9	AB	ug/L	0	0	1	TIC
994-05-8	Butane, 2-methoxy-2-methyl-	73	JB	ug/L	0	0	1	TIC
	unknown16.82	2.5	J	ug/L	0	0	1	TIC

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	VOC-TCLVOA-10	Lab Sample ID :	B4045-08
SDG ID :	B4045	Customer Sample No. :	MW-7
% Moisture :	100	Analytical Method :	EPA SW846 8260
DataFile :	VF024279.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-71-8	Dichlorodifluoromethane	ND	U	ug/L	0.20	1.0	1	
74-87-3	Chloromethane	ND	U	ug/L	0.20	1.0	1	
75-01-4	Vinyl Chloride	ND	U	ug/L	0.34	1.0	1	
74-83-9	Bromomethane	ND	U	ug/L	0.20	1.0	1	
75-00-3	Chloroethane	ND	U	ug/L	0.20	1.0	1	
75-69-4	Trichlorofluoromethane	ND	U	ug/L	0.35	1.0	1	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U	ug/L	0.45	1.0	1	
75-35-4	1,1-Dichloroethene	ND	U	ug/L	0.47	1.0	1	
67-64-1	Acetone	ND	U	ug/L	0.50	5.0	1	
75-15-0	Carbon Disulfide	ND	U	ug/L	0.20	1.0	1	
1634-04-4	Methyl tert-butyl Ether	ND	U	ug/L	0.35	1.0	1	
79-20-9	Methyl Acetate	ND	U	ug/L	0.20	1.0	1	
75-09-2	Methylene Chloride	ND	U	ug/L	0.41	1.0	1	
156-60-5	trans-1,2-Dichloroethene	ND	U	ug/L	0.41	1.0	1	
75-34-3	1,1-Dichloroethane	ND	U	ug/L	0.36	1.0	1	
110-82-7	Cyclohexane	ND	U	ug/L	0.20	1.0	1	
78-93-3	2-Butanone	ND	U	ug/L	1.3	5.0	1	
56-23-5	Carbon Tetrachloride	ND	U	ug/L	0.20	1.0	1	
156-59-2	cis-1,2-Dichloroethene	ND	U	ug/L	0.35	1.0	1	
67-66-3	Chloroform	ND	U	ug/L	0.34	1.0	1	
71-55-6	1,1,1-Trichloroethane	ND	U	ug/L	0.40	1.0	1	
108-87-2	Methylcyclohexane	ND	U	ug/L	0.20	1.0	1	
71-43-2	Benzene	ND	U	ug/L	0.32	1.0	1	
107-06-2	1,2-Dichloroethane	ND	U	ug/L	0.48	1.0	1	
79-01-6	Trichloroethene	ND	U	ug/L	0.28	1.0	1	
78-87-5	1,2-Dichloropropane	ND	U	ug/L	0.46	1.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	VOC-TCLVOA-10	Lab Sample ID :	B4045-08
SDG ID :	B4045	Customer Sample No. :	MW-7
% Moisture :	100	Analytical Method :	EPA SW846 8260
DataFile :	VF024279.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-27-4	Bromodichloromethane	ND	U	ug/L	0.36	1.0	1	
108-10-1	4-Methyl-2-Pentanone	ND	U	ug/L	2.1	5.0	1	
108-88-3	Toluene	ND	U	ug/L	0.37	1.0	1	
10061-02-6	t-1,3-Dichloropropene	ND	U	ug/L	0.29	1.0	1	
10061-01-5	cis-1,3-Dichloropropene	ND	U	ug/L	0.31	1.0	1	
79-00-5	1,1,2-Trichloroethane	ND	U	ug/L	0.38	1.0	1	
591-78-6	2-Hexanone	ND	U	ug/L	1.9	5.0	1	
124-48-1	Dibromochloromethane	ND	U	ug/L	0.20	1.0	1	
106-93-4	1,2-Dibromoethane	ND	U	ug/L	0.41	1.0	1	
127-18-4	Tetrachloroethene	ND	U	ug/L	0.27	1.0	1	
108-90-7	Chlorobenzene	ND	U	ug/L	0.49	1.0	1	
100-41-4	Ethyl Benzene	ND	U	ug/L	0.20	1.0	1	
179601-23-1	m/p-Xylenes	ND	U	ug/L	0.95	2.0	1	
95-47-6	o-Xylene	ND	U	ug/L	0.43	1.0	1	
100-42-5	Styrene	ND	U	ug/L	0.36	1.0	1	
75-25-2	Bromoform	ND	U	ug/L	0.47	1.0	1	
98-82-8	Isopropylbenzene	ND	U	ug/L	0.45	1.0	1	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ug/L	0.31	1.0	1	
541-73-1	1,3-Dichlorobenzene	ND	U	ug/L	0.43	1.0	1	
106-46-7	1,4-Dichlorobenzene	ND	U	ug/L	0.32	1.0	1	
95-50-1	1,2-Dichlorobenzene	ND	U	ug/L	0.45	1.0	1	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	ug/L	0.46	1.0	1	
120-82-1	1,2,4-Trichlorobenzene	ND	U	ug/L	0.20	1.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	Mercury	Lab Sample ID :	B4045-09
SDG ID :	B4045	Customer Sample No. :	MW-1R
% Moisture :	100	Analytical Method :	EPA SW-846 7470 - HG
DataFile :	LB52312.PRN	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
7439-97-6	Mercury	ND	U	ug/L	0.09	0.20	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	Metals ICP-TAL	Lab Sample ID :	B4045-09
SDG ID :	B4045	Customer Sample No. :	MW-1R
% Moisture :	100	Analytical Method :	EPA SW-846 6010 - ICP4
DataFile :	LB52305.txt	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
7429-90-5	Aluminum	20.8	J	ug/L	6.500	50.0	1	
7440-36-0	Antimony	ND	U	ug/L	8.000	25.0	1	
7440-38-2	Arsenic	ND	U	ug/L	4.200	10.0	1	
7440-39-3	Barium	50.7		ug/L	4.000	50.0	1	
7440-41-7	Beryllium	ND	U	ug/L	0.70	3.000	1	
7440-43-9	Cadmium	ND	U	ug/L	0.50	3.000	1	
7440-70-2	Calcium	58900		ug/L	31.8	1000	1	
7440-47-3	Chromium	ND	U	ug/L	1.100	5.000	1	
7440-48-4	Cobalt	ND	U	ug/L	5.800	15.0	1	
7440-50-8	Copper	2.260	J	ug/L	2.000	10.0	1	
7439-89-6	Iron	43.7	J	ug/L	20.4	50.0	1	
7439-92-1	Lead	4.370	J	ug/L	2.600	6.000	1	
7439-95-4	Magnesium	10900		ug/L	32.5	1000	1	
7439-96-5	Manganese	3.850	J	ug/L	1.700	10.0	1	
7440-02-0	Nickel	ND	U	ug/L	4.200	20.0	1	
7440-09-7	Potassium	1640		ug/L	38.8	1000	1	
7782-49-2	Selenium	ND	U	ug/L	4.800	10.0	1	
7440-22-4	Silver	ND	U	ug/L	1.500	5.000	1	
7440-23-5	Sodium	23300		ug/L	13.9	1000	1	
7440-28-0	Thallium	ND	U	ug/L	2.400	20.0	1	
7440-62-2	Vanadium	ND	U	ug/L	6.100	20.0	1	
7440-66-6	Zinc	21.1		ug/L	6.500	20.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-09
SDG ID :	B4045	Customer Sample No. :	MW-1R
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067143.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
100-52-7	Benzaldehyde	ND	U	ug/L	0.760	9.9	1	
108-95-2	Phenol	ND	U	ug/L	0.210	9.9	1	
111-44-4	bis(2-Chloroethyl)ether	ND	U	ug/L	0.540	9.9	1	
95-57-8	2-Chlorophenol	ND	U	ug/L	0.530	9.9	1	
95-48-7	2-Methylphenol	ND	U	ug/L	0.240	9.9	1	
108-60-1	2,2-oxybis(1-Chloropropane)	ND	U	ug/L	0.170	9.9	1	
98-86-2	Acetophenone	ND	U	ug/L	0.140	9.9	1	
65794-96-9	3+4-Methylphenols	ND	U	ug/L	0.380	9.9	1	
621-64-7	N-Nitroso-di-n-propylamine	ND	U	ug/L	0.200	9.9	1	
67-72-1	Hexachloroethane	ND	U	ug/L	0.250	9.9	1	
98-95-3	Nitrobenzene	ND	U	ug/L	0.670	9.9	1	
78-59-1	Isophorone	ND	U	ug/L	0.300	9.9	1	
88-75-5	2-Nitrophenol	ND	U	ug/L	0.510	9.9	1	
105-67-9	2,4-Dimethylphenol	ND	U	ug/L	0.700	9.9	1	
111-91-1	bis(2-Chloroethoxy)methane	ND	U	ug/L	0.540	9.9	1	
120-83-2	2,4-Dichlorophenol	ND	U	ug/L	0.650	9.9	1	
91-20-3	Naphthalene	ND	U	ug/L	0.120	9.9	1	
106-47-8	4-Chloroaniline	ND	U	ug/L	2.8	9.9	1	
87-68-3	Hexachlorobutadiene	ND	U	ug/L	0.250	9.9	1	
105-60-2	Caprolactam	ND	U	ug/L	2.0	9.9	1	
59-50-7	4-Chloro-3-methylphenol	ND	U	ug/L	0.400	9.9	1	
91-57-6	2-Methylnaphthalene	ND	U	ug/L	0.320	9.9	1	
77-47-4	Hexachlorocyclopentadiene	ND	U	ug/L	0.240	9.9	1	
88-06-2	2,4,6-Trichlorophenol	ND	U	ug/L	0.550	9.9	1	
95-95-4	2,4,5-Trichlorophenol	ND	U	ug/L	0.400	9.9	1	
92-52-4	1,1-Biphenyl	ND	U	ug/L	0.150	9.9	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-09
SDG ID :	B4045	Customer Sample No. :	MW-1R
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067143.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
91-58-7	2-Chloronaphthalene	ND	U	ug/L	0.160	9.9	1	
88-74-4	2-Nitroaniline	ND	U	ug/L	0.490	9.9	1	
131-11-3	Dimethylphthalate	ND	U	ug/L	0.220	9.9	1	
208-96-8	Acenaphthylene	ND	U	ug/L	0.690	9.9	1	
606-20-2	2,6-Dinitrotoluene	ND	U	ug/L	0.320	9.9	1	
99-09-2	3-Nitroaniline	ND	U	ug/L	1.1	9.9	1	
83-32-9	Acenaphthene	ND	U	ug/L	0.210	9.9	1	
51-28-5	2,4-Dinitrophenol	ND	U	ug/L	2.1	9.9	1	
100-02-7	4-Nitrophenol	ND	U	ug/L	2.0	9.9	1	
132-64-9	Dibenzofuran	ND	U	ug/L	0.240	9.9	1	
121-14-2	2,4-Dinitrotoluene	ND	U	ug/L	1.0	9.9	1	
84-66-2	Diethylphthalate	ND	U	ug/L	0.380	9.9	1	
7005-72-3	4-Chlorophenyl-phenylether	ND	U	ug/L	0.210	9.9	1	
86-73-7	Fluorene	ND	U	ug/L	0.310	9.9	1	
100-01-6	4-Nitroaniline	ND	U	ug/L	1.3	9.9	1	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	ug/L	0.730	9.9	1	
86-30-6	N-Nitrosodiphenylamine	ND	U	ug/L	0.590	9.9	1	
101-55-3	4-Bromophenyl-phenylether	ND	U	ug/L	0.230	9.9	1	
118-74-1	Hexachlorobenzene	ND	U	ug/L	0.180	9.9	1	
1912-24-9	Atrazine	ND	U	ug/L	0.400	9.9	1	
87-86-5	Pentachlorophenol	ND	U	ug/L	1.7	9.9	1	
85-01-8	Phenanthrene	ND	U	ug/L	0.260	9.9	1	
120-12-7	Anthracene	ND	U	ug/L	0.160	9.9	1	
86-74-8	Carbazole	ND	U	ug/L	0.220	9.9	1	
84-74-2	Di-n-butylphthalate	ND	U	ug/L	2.0	9.9	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	SVOC-TCL BNA -20	Lab Sample ID :	B4045-09
SDG ID :	B4045	Customer Sample No. :	MW-1R
% Moisture :	100	Analytical Method :	EPA SW-846 8270
DataFile :	BE067143.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
206-44-0	Fluoranthene	ND	U	ug/L	0.400	9.9	1	
129-00-0	Pyrene	ND	U	ug/L	0.200	9.9	1	
85-68-7	Butylbenzylphthalate	ND	U	ug/L	0.190	9.9	1	
91-94-1	3,3-Dichlorobenzidine	ND	U	ug/L	2.0	9.9	1	
56-55-3	Benzo(a)anthracene	ND	U	ug/L	0.160	9.9	1	
218-01-9	Chrysene	ND	U	ug/L	0.180	9.9	1	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	ug/L	0.160	9.9	1	
117-84-0	Di-n-octyl phthalate	ND	U	ug/L	0.500	9.9	1	
205-99-2	Benzo(b)fluoranthene	ND	U	ug/L	0.290	9.9	1	
207-08-9	Benzo(k)fluoranthene	ND	U	ug/L	0.180	9.9	1	
50-32-8	Benzo(a)pyrene	ND	U	ug/L	0.140	9.9	1	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	ug/L	0.150	9.9	1	
53-70-3	Dibenz(a,h)anthracene	ND	U	ug/L	0.420	9.9	1	
191-24-2	Benzo(g,h,i)perylene	ND	U	ug/L	0.290	9.9	1	
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	5.7	AB	ug/L	0	0	1	TIC
994-05-8	Butane, 2-methoxy-2-methyl-	91	JB	ug/L	0	0	1	TIC
	unknown16.82	2.7	J	ug/L	0	0	1	TIC

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	VOC-TCLVOA-10	Lab Sample ID :	B4045-09
SDG ID :	B4045	Customer Sample No. :	MW-1R
% Moisture :	100	Analytical Method :	EPA SW846 8260
DataFile :	VF024280.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-71-8	Dichlorodifluoromethane	ND	U	ug/L	0.20	1.0	1	
74-87-3	Chloromethane	ND	U	ug/L	0.20	1.0	1	
75-01-4	Vinyl Chloride	ND	U	ug/L	0.34	1.0	1	
74-83-9	Bromomethane	ND	U	ug/L	0.20	1.0	1	
75-00-3	Chloroethane	ND	U	ug/L	0.20	1.0	1	
75-69-4	Trichlorofluoromethane	ND	U	ug/L	0.35	1.0	1	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U	ug/L	0.45	1.0	1	
75-35-4	1,1-Dichloroethene	ND	U	ug/L	0.47	1.0	1	
67-64-1	Acetone	ND	U	ug/L	0.50	5.0	1	
75-15-0	Carbon Disulfide	ND	U	ug/L	0.20	1.0	1	
1634-04-4	Methyl tert-butyl Ether	ND	U	ug/L	0.35	1.0	1	
79-20-9	Methyl Acetate	ND	U	ug/L	0.20	1.0	1	
75-09-2	Methylene Chloride	ND	U	ug/L	0.41	1.0	1	
156-60-5	trans-1,2-Dichloroethene	ND	U	ug/L	0.41	1.0	1	
75-34-3	1,1-Dichloroethane	ND	U	ug/L	0.36	1.0	1	
110-82-7	Cyclohexane	ND	U	ug/L	0.20	1.0	1	
78-93-3	2-Butanone	ND	U	ug/L	1.3	5.0	1	
56-23-5	Carbon Tetrachloride	ND	U	ug/L	0.20	1.0	1	
156-59-2	cis-1,2-Dichloroethene	ND	U	ug/L	0.35	1.0	1	
67-66-3	Chloroform	ND	U	ug/L	0.34	1.0	1	
71-55-6	1,1,1-Trichloroethane	ND	U	ug/L	0.40	1.0	1	
108-87-2	Methylcyclohexane	ND	U	ug/L	0.20	1.0	1	
71-43-2	Benzene	ND	U	ug/L	0.32	1.0	1	
107-06-2	1,2-Dichloroethane	ND	U	ug/L	0.48	1.0	1	
79-01-6	Trichloroethene	ND	U	ug/L	0.28	1.0	1	
78-87-5	1,2-Dichloropropane	ND	U	ug/L	0.46	1.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	VOC-TCLVOA-10	Lab Sample ID :	B4045-09
SDG ID :	B4045	Customer Sample No. :	MW-1R
% Moisture :	100	Analytical Method :	EPA SW846 8260
DataFile :	VF024280.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-27-4	Bromodichloromethane	ND	U	ug/L	0.36	1.0	1	
108-10-1	4-Methyl-2-Pentanone	ND	U	ug/L	2.1	5.0	1	
108-88-3	Toluene	ND	U	ug/L	0.37	1.0	1	
10061-02-6	t-1,3-Dichloropropene	ND	U	ug/L	0.29	1.0	1	
10061-01-5	cis-1,3-Dichloropropene	ND	U	ug/L	0.31	1.0	1	
79-00-5	1,1,2-Trichloroethane	ND	U	ug/L	0.38	1.0	1	
591-78-6	2-Hexanone	ND	U	ug/L	1.9	5.0	1	
124-48-1	Dibromochloromethane	ND	U	ug/L	0.20	1.0	1	
106-93-4	1,2-Dibromoethane	ND	U	ug/L	0.41	1.0	1	
127-18-4	Tetrachloroethene	ND	U	ug/L	0.27	1.0	1	
108-90-7	Chlorobenzene	ND	U	ug/L	0.49	1.0	1	
100-41-4	Ethyl Benzene	ND	U	ug/L	0.20	1.0	1	
179601-23-1	m/p-Xylenes	ND	U	ug/L	0.95	2.0	1	
95-47-6	o-Xylene	ND	U	ug/L	0.43	1.0	1	
100-42-5	Styrene	ND	U	ug/L	0.36	1.0	1	
75-25-2	Bromoform	ND	U	ug/L	0.47	1.0	1	
98-82-8	Isopropylbenzene	ND	U	ug/L	0.45	1.0	1	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ug/L	0.31	1.0	1	
541-73-1	1,3-Dichlorobenzene	ND	U	ug/L	0.43	1.0	1	
106-46-7	1,4-Dichlorobenzene	ND	U	ug/L	0.32	1.0	1	
95-50-1	1,2-Dichlorobenzene	ND	U	ug/L	0.45	1.0	1	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	ug/L	0.46	1.0	1	
120-82-1	1,2,4-Trichlorobenzene	ND	U	ug/L	0.20	1.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	VOC-TCLVOA-10	Lab Sample ID :	B4045-10
SDG ID :	B4045	Customer Sample No. :	TRIPBLANK
% Moisture :	100	Analytical Method :	EPA SW846 8260
DataFile :	VF024271.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-71-8	Dichlorodifluoromethane	ND	U	ug/L	0.20	1.0	1	
74-87-3	Chloromethane	ND	U	ug/L	0.20	1.0	1	
75-01-4	Vinyl Chloride	ND	U	ug/L	0.34	1.0	1	
74-83-9	Bromomethane	ND	U	ug/L	0.20	1.0	1	
75-00-3	Chloroethane	ND	U	ug/L	0.20	1.0	1	
75-69-4	Trichlorofluoromethane	ND	U	ug/L	0.35	1.0	1	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U	ug/L	0.45	1.0	1	
75-35-4	1,1-Dichloroethene	ND	U	ug/L	0.47	1.0	1	
67-64-1	Acetone	ND	U	ug/L	0.50	5.0	1	
75-15-0	Carbon Disulfide	ND	U	ug/L	0.20	1.0	1	
1634-04-4	Methyl tert-butyl Ether	ND	U	ug/L	0.35	1.0	1	
79-20-9	Methyl Acetate	ND	U	ug/L	0.20	1.0	1	
75-09-2	Methylene Chloride	ND	U	ug/L	0.41	1.0	1	
156-60-5	trans-1,2-Dichloroethene	ND	U	ug/L	0.41	1.0	1	
75-34-3	1,1-Dichloroethane	ND	U	ug/L	0.36	1.0	1	
110-82-7	Cyclohexane	ND	U	ug/L	0.20	1.0	1	
78-93-3	2-Butanone	ND	U	ug/L	1.3	5.0	1	
56-23-5	Carbon Tetrachloride	ND	U	ug/L	0.20	1.0	1	
156-59-2	cis-1,2-Dichloroethene	ND	U	ug/L	0.35	1.0	1	
67-66-3	Chloroform	ND	U	ug/L	0.34	1.0	1	
71-55-6	1,1,1-Trichloroethane	ND	U	ug/L	0.40	1.0	1	
108-87-2	Methylcyclohexane	ND	U	ug/L	0.20	1.0	1	
71-43-2	Benzene	ND	U	ug/L	0.32	1.0	1	
107-06-2	1,2-Dichloroethane	ND	U	ug/L	0.48	1.0	1	
79-01-6	Trichloroethene	ND	U	ug/L	0.28	1.0	1	
78-87-5	1,2-Dichloropropane	ND	U	ug/L	0.46	1.0	1	

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Report Of Analysis

Client :	Malcolm Pirnie, Inc.	Date Collected :	10/28/10
Project Id :	NYSDEC-Tioga Castings Site	Date Received :	10/29/10
Test :	VOC-TCLVOA-10	Lab Sample ID :	B4045-10
SDG ID :	B4045	Customer Sample No. :	TRIPBLANK
% Moisture :	100	Analytical Method :	EPA SW846 8260
DataFile :	VF024271.D	Result Type :	Final

CasNumber	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-27-4	Bromodichloromethane	ND	U	ug/L	0.36	1.0	1	
108-10-1	4-Methyl-2-Pentanone	ND	U	ug/L	2.1	5.0	1	
108-88-3	Toluene	ND	U	ug/L	0.37	1.0	1	
10061-02-6	t-1,3-Dichloropropene	ND	U	ug/L	0.29	1.0	1	
10061-01-5	cis-1,3-Dichloropropene	ND	U	ug/L	0.31	1.0	1	
79-00-5	1,1,2-Trichloroethane	ND	U	ug/L	0.38	1.0	1	
591-78-6	2-Hexanone	ND	U	ug/L	1.9	5.0	1	
124-48-1	Dibromochloromethane	ND	U	ug/L	0.20	1.0	1	
106-93-4	1,2-Dibromoethane	ND	U	ug/L	0.41	1.0	1	
127-18-4	Tetrachloroethene	ND	U	ug/L	0.27	1.0	1	
108-90-7	Chlorobenzene	ND	U	ug/L	0.49	1.0	1	
100-41-4	Ethyl Benzene	ND	U	ug/L	0.20	1.0	1	
179601-23-1	m/p-Xylenes	ND	U	ug/L	0.95	2.0	1	
95-47-6	o-Xylene	ND	U	ug/L	0.43	1.0	1	
100-42-5	Styrene	ND	U	ug/L	0.36	1.0	1	
75-25-2	Bromoform	ND	U	ug/L	0.47	1.0	1	
98-82-8	Isopropylbenzene	ND	U	ug/L	0.45	1.0	1	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ug/L	0.31	1.0	1	
541-73-1	1,3-Dichlorobenzene	ND	U	ug/L	0.43	1.0	1	
106-46-7	1,4-Dichlorobenzene	ND	U	ug/L	0.32	1.0	1	
95-50-1	1,2-Dichlorobenzene	ND	U	ug/L	0.45	1.0	1	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	ug/L	0.46	1.0	1	
120-82-1	1,2,4-Trichlorobenzene	ND	U	ug/L	0.20	1.0	1	

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Page

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

Project #: B4045
10/29/2010 7:40:28 PM
End Of Report

con-test® ANALYTICAL LABORATORY
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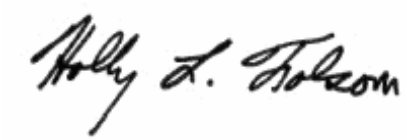
January 11, 2011

Jeremy Wyckoff
Malcolm Pirnie - Clifton Park-NY
855 Route 146, Suite 210
Clifton Park, NY 12065

Project Location: Tioga Castings, Owego, NY
Client Job Number:
Project Number: 0266362-NY DEC StandbyTioga Castings
Laboratory Work Order Number: 10L0386

Enclosed are results of analyses for samples received by the laboratory on December 10, 2010. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Holly L. Folsom
Project Manager

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

Malcolm Pirnie - Clifton Park-NY
855 Route 146, Suite 210
Clifton Park, NY 12065
ATTN: Jeremy Wyckoff

REPORT DATE: 1/11/2011

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 0266362-NY DEC StandbyTioga Castings

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 10L0386

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Tioga Castings, Owego, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SV-6	10L0386-01	Sub Slab		EPA TO-15	
SV-7	10L0386-02	Sub Slab		EPA TO-15	
SV-8	10L0386-03	Sub Slab		EPA TO-15	
SV-X	10L0386-04	Sub Slab		EPA TO-15	
AA-2	10L0386-05	Ambient Air		EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

Revised Report on 1/11/11 to include Batch Canister Certification documents

EPA TO-15

Qualifications:

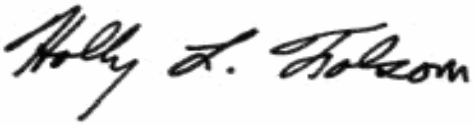
Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

1,2,4-Trichlorobenzene, Toluene

10L0386-01[SV-6], 10L0386-02[SV-7], 10L0386-03[SV-8], 10L0386-04[SV-X], 10L0386-05[AA-2], B024025-BLK1, B024025-BS1, B024025-DUP1, B024028-BLK1, B024028-BS1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
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 individuuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Holly L. Folsom
Project Chemist

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ANALYTICAL RESULTS

Project Location: Tioga Castings, Owego, NY
Date Received: 12/10/2010
Field Sample #: SV-6
Sample ID: 10L0386-01
Sample Matrix: Sub Slab
Sampled: 12/9/2010 12:32

Sample Description/Location:
Sub Description/Location:
Canister ID: 1081
Canister Size: 6 liter
Flow Controller ID: 4079
Sample Type: 30 min

Work Order: 10L0386
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	Results	RL	Flag	Results	RL	Dilution	Analyzed	Analyst
Acetone	ND	0.40		ND	0.95	2	12/18/10 19:11	XC
Benzene	0.51	0.10		1.6	0.32	2	12/18/10 19:11	XC
Benzyl chloride	ND	0.10		ND	0.52	2	12/18/10 19:11	XC
Bromodichloromethane	ND	0.10		ND	0.67	2	12/18/10 19:11	XC
Bromoform	ND	0.10		ND	1.0	2	12/18/10 19:11	XC
Bromomethane	ND	0.10		ND	0.39	2	12/18/10 19:11	XC
1,3-Butadiene	ND	0.10		ND	0.22	2	12/18/10 19:11	XC
2-Butanone (MEK)	1.5	0.10		4.5	0.29	2	12/18/10 19:11	XC
Carbon Disulfide	0.35	0.10		1.1	0.31	2	12/18/10 19:11	XC
Carbon Tetrachloride	ND	0.10		ND	0.63	2	12/18/10 19:11	XC
Chlorobenzene	ND	0.10		ND	0.46	2	12/18/10 19:11	XC
Chloroethane	ND	0.10		ND	0.26	2	12/18/10 19:11	XC
Chloroform	ND	0.10		ND	0.49	2	12/18/10 19:11	XC
Chloromethane	ND	0.10		ND	0.21	2	12/18/10 19:11	XC
Cyclohexane	0.34	0.10		1.2	0.34	2	12/18/10 19:11	XC
Dibromochloromethane	ND	0.10		ND	0.85	2	12/18/10 19:11	XC
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	12/18/10 19:11	XC
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 19:11	XC
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 19:11	XC
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 19:11	XC
Dichlorodifluoromethane (Freon 12)	0.32	0.10		1.6	0.49	2	12/18/10 19:11	XC
1,1-Dichloroethane	ND	0.10		ND	0.40	2	12/18/10 19:11	XC
1,2-Dichloroethane	ND	0.10		ND	0.40	2	12/18/10 19:11	XC
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 19:11	XC
cis-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 19:11	XC
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 19:11	XC
1,2-Dichloropropane	ND	0.10		ND	0.46	2	12/18/10 19:11	XC
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	12/18/10 19:11	XC
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	12/18/10 19:11	XC
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	12/18/10 19:11	XC
Ethanol	1.6	1.0		3.1	1.9	2	12/18/10 19:11	XC
Ethyl Acetate	ND	0.10		ND	0.36	2	12/18/10 19:11	XC
Ethylbenzene	0.52	0.10		2.2	0.43	2	12/18/10 19:11	XC
4-Ethyltoluene	ND	0.10		ND	0.49	2	12/18/10 19:11	XC
Heptane	56	0.10		230	0.41	2	12/18/10 19:11	XC
Hexachlorobutadiene	ND	0.10		ND	1.1	2	12/18/10 19:11	XC
Hexane	100	0.25		360	0.88	5	12/20/10 13:45	XC
2-Hexanone (MBK)	ND	0.10		ND	0.41	2	12/18/10 19:11	XC

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ANALYTICAL RESULTS

Project Location: Tioga Castings, Owego, NY
Date Received: 12/10/2010
Field Sample #: SV-6
Sample ID: 10L0386-01
Sample Matrix: Sub Slab
Sampled: 12/9/2010 12:32

Sample Description/Location:
Sub Description/Location:
Canister ID: 1081
Canister Size: 6 liter
Flow Controller ID: 4079
Sample Type: 30 min

Work Order: 10L0386
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
Isopropanol	ND	0.10		ND	0.25	2	12/18/10 19:11	XC
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	12/18/10 19:11	XC
Methylene Chloride	ND	0.40		ND	1.4	2	12/18/10 19:11	XC
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	12/18/10 19:11	XC
Propene	ND	0.40		ND	0.69	2	12/18/10 19:11	XC
Styrene	ND	0.10		ND	0.43	2	12/18/10 19:11	XC
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	12/18/10 19:11	XC
Tetrachloroethylene	ND	0.10		ND	0.68	2	12/18/10 19:11	XC
Tetrahydrofuran	ND	0.10		ND	0.29	2	12/18/10 19:11	XC
Toluene	0.76	0.10		2.9	0.38	2	12/18/10 19:11	XC
1,2,4-Trichlorobenzene	ND	0.10	V-05	ND	0.74	2	12/18/10 19:11	XC
1,1,1-Trichloroethane	0.66	0.10		3.6	0.55	2	12/18/10 19:11	XC
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	12/18/10 19:11	XC
Trichloroethylene	ND	0.10		ND	0.54	2	12/18/10 19:11	XC
Trichlorofluoromethane (Freon 11)	ND	0.10		ND	0.56	2	12/18/10 19:11	XC
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.11	0.10		0.84	0.77	2	12/18/10 19:11	XC
1,2,4-Trimethylbenzene	ND	0.10		ND	0.49	2	12/18/10 19:11	XC
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	12/18/10 19:11	XC
Vinyl Acetate	ND	0.10		ND	0.35	2	12/18/10 19:11	XC
Vinyl Chloride	ND	0.10		ND	0.26	2	12/18/10 19:11	XC
m&p-Xylene	0.39	0.20		1.7	0.87	2	12/18/10 19:11	XC
o-Xylene	0.25	0.10		1.1	0.43	2	12/18/10 19:11	XC

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	103	70-130	12/20/10 13:45
4-Bromofluorobenzene (1)	104	70-130	12/18/10 19:11

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

ANALYTICAL RESULTS

Project Location: Tioga Castings, Owego, NY
Date Received: 12/10/2010
Field Sample #: SV-7
Sample ID: 10L0386-02
Sample Matrix: Sub Slab
Sampled: 12/9/2010 12:36

Sample Description/Location:
Sub Description/Location:
Canister ID: 1170
Canister Size: 6 liter
Flow Controller ID: 4094
Sample Type: 30 min

Work Order: 10L0386
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	Results	RL	Flag	Results	RL	Dilution	Analyzed	Analyst
Acetone	ND	0.40		ND	0.95	2	12/18/10 19:50	XC
Benzene	0.31	0.10		1.0	0.32	2	12/18/10 19:50	XC
Benzyl chloride	ND	0.10		ND	0.52	2	12/18/10 19:50	XC
Bromodichloromethane	ND	0.10		ND	0.67	2	12/18/10 19:50	XC
Bromoform	ND	0.10		ND	1.0	2	12/18/10 19:50	XC
Bromomethane	ND	0.10		ND	0.39	2	12/18/10 19:50	XC
1,3-Butadiene	ND	0.10		ND	0.22	2	12/18/10 19:50	XC
2-Butanone (MEK)	0.61	0.10		1.8	0.29	2	12/18/10 19:50	XC
Carbon Disulfide	0.57	0.10		1.8	0.31	2	12/18/10 19:50	XC
Carbon Tetrachloride	ND	0.10		ND	0.63	2	12/18/10 19:50	XC
Chlorobenzene	ND	0.10		ND	0.46	2	12/18/10 19:50	XC
Chloroethane	ND	0.10		ND	0.26	2	12/18/10 19:50	XC
Chloroform	ND	0.10		ND	0.49	2	12/18/10 19:50	XC
Chloromethane	ND	0.10		ND	0.21	2	12/18/10 19:50	XC
Cyclohexane	0.32	0.10		1.1	0.34	2	12/18/10 19:50	XC
Dibromochloromethane	ND	0.10		ND	0.85	2	12/18/10 19:50	XC
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	12/18/10 19:50	XC
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 19:50	XC
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 19:50	XC
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 19:50	XC
Dichlorodifluoromethane (Freon 12)	0.22	0.10		1.1	0.49	2	12/18/10 19:50	XC
1,1-Dichloroethane	ND	0.10		ND	0.40	2	12/18/10 19:50	XC
1,2-Dichloroethane	ND	0.10		ND	0.40	2	12/18/10 19:50	XC
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 19:50	XC
cis-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 19:50	XC
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 19:50	XC
1,2-Dichloropropane	ND	0.10		ND	0.46	2	12/18/10 19:50	XC
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	12/18/10 19:50	XC
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	12/18/10 19:50	XC
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	12/18/10 19:50	XC
Ethanol	ND	1.0		ND	1.9	2	12/18/10 19:50	XC
Ethyl Acetate	ND	0.10		ND	0.36	2	12/18/10 19:50	XC
Ethylbenzene	ND	0.10		ND	0.43	2	12/18/10 19:50	XC
4-Ethyltoluene	ND	0.10		ND	0.49	2	12/18/10 19:50	XC
Heptane	6.7	0.10		28	0.41	2	12/18/10 19:50	XC
Hexachlorobutadiene	ND	0.10		ND	1.1	2	12/18/10 19:50	XC
Hexane	18	0.10		63	0.35	2	12/18/10 19:50	XC
2-Hexanone (MBK)	ND	0.10		ND	0.41	2	12/18/10 19:50	XC

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Tioga Castings, Owego, NY
Date Received: 12/10/2010
Field Sample #: SV-7
Sample ID: 10L0386-02
Sample Matrix: Sub Slab
Sampled: 12/9/2010 12:36

Sample Description/Location:
Sub Description/Location:
Canister ID: 1170
Canister Size: 6 liter
Flow Controller ID: 4094
Sample Type: 30 min

Work Order: 10L0386
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Isopropanol	ND	0.10		ND	0.25	2	12/18/10 19:50	XC
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	12/18/10 19:50	XC
Methylene Chloride	ND	0.40		ND	1.4	2	12/18/10 19:50	XC
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	12/18/10 19:50	XC
Propene	ND	0.40		ND	0.69	2	12/18/10 19:50	XC
Styrene	ND	0.10		ND	0.43	2	12/18/10 19:50	XC
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	12/18/10 19:50	XC
Tetrachloroethylene	ND	0.10		ND	0.68	2	12/18/10 19:50	XC
Tetrahydrofuran	ND	0.10		ND	0.29	2	12/18/10 19:50	XC
Toluene	0.40	0.10		1.5	0.38	2	12/18/10 19:50	XC
1,2,4-Trichlorobenzene	ND	0.10	V-05	ND	0.74	2	12/18/10 19:50	XC
1,1,1-Trichloroethane	0.32	0.10		1.7	0.55	2	12/18/10 19:50	XC
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	12/18/10 19:50	XC
Trichloroethylene	ND	0.10		ND	0.54	2	12/18/10 19:50	XC
Trichlorofluoromethane (Freon 11)	ND	0.10		ND	0.56	2	12/18/10 19:50	XC
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10		ND	0.77	2	12/18/10 19:50	XC
1,2,4-Trimethylbenzene	ND	0.10		ND	0.49	2	12/18/10 19:50	XC
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	12/18/10 19:50	XC
Vinyl Acetate	ND	0.10		ND	0.35	2	12/18/10 19:50	XC
Vinyl Chloride	ND	0.10		ND	0.26	2	12/18/10 19:50	XC
m&p-Xylene	ND	0.20		ND	0.87	2	12/18/10 19:50	XC
o-Xylene	ND	0.10		ND	0.43	2	12/18/10 19:50	XC

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	102	70-130	12/18/10 19:50

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ANALYTICAL RESULTS

Project Location: Tioga Castings, Owego, NY
Date Received: 12/10/2010
Field Sample #: SV-8
Sample ID: 10L0386-03
Sample Matrix: Sub Slab
Sampled: 12/9/2010 12:34

Sample Description/Location:
Sub Description/Location:
Canister ID: 1174
Canister Size: 6 liter
Flow Controller ID: 4075
Sample Type: 30 min

Work Order: 10L0386
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
Acetone	5.0	0.40		12	0.95	2	12/18/10 20:29	XC
Benzene	0.10	0.10		0.33	0.32	2	12/18/10 20:29	XC
Benzyl chloride	ND	0.10		ND	0.52	2	12/18/10 20:29	XC
Bromodichloromethane	ND	0.10		ND	0.67	2	12/18/10 20:29	XC
Bromoform	ND	0.10		ND	1.0	2	12/18/10 20:29	XC
Bromomethane	ND	0.10		ND	0.39	2	12/18/10 20:29	XC
1,3-Butadiene	ND	0.10		ND	0.22	2	12/18/10 20:29	XC
2-Butanone (MEK)	0.47	0.10		1.4	0.29	2	12/18/10 20:29	XC
Carbon Disulfide	ND	0.10		ND	0.31	2	12/18/10 20:29	XC
Carbon Tetrachloride	ND	0.10		ND	0.63	2	12/18/10 20:29	XC
Chlorobenzene	ND	0.10		ND	0.46	2	12/18/10 20:29	XC
Chloroethane	ND	0.10		ND	0.26	2	12/18/10 20:29	XC
Chloroform	ND	0.10		ND	0.49	2	12/18/10 20:29	XC
Chloromethane	ND	0.10		ND	0.21	2	12/18/10 20:29	XC
Cyclohexane	0.23	0.10		0.78	0.34	2	12/18/10 20:29	XC
Dibromochloromethane	ND	0.10		ND	0.85	2	12/18/10 20:29	XC
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	12/18/10 20:29	XC
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 20:29	XC
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 20:29	XC
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 20:29	XC
Dichlorodifluoromethane (Freon 12)	0.53	0.10		2.6	0.49	2	12/18/10 20:29	XC
1,1-Dichloroethane	ND	0.10		ND	0.40	2	12/18/10 20:29	XC
1,2-Dichloroethane	ND	0.10		ND	0.40	2	12/18/10 20:29	XC
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 20:29	XC
cis-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 20:29	XC
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 20:29	XC
1,2-Dichloropropane	ND	0.10		ND	0.46	2	12/18/10 20:29	XC
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	12/18/10 20:29	XC
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	12/18/10 20:29	XC
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	12/18/10 20:29	XC
Ethanol	1.3	1.0		2.5	1.9	2	12/18/10 20:29	XC
Ethyl Acetate	ND	0.10		ND	0.36	2	12/18/10 20:29	XC
Ethylbenzene	ND	0.10		ND	0.43	2	12/18/10 20:29	XC
4-Ethyltoluene	ND	0.10		ND	0.49	2	12/18/10 20:29	XC
Heptane	1.0	0.10		4.2	0.41	2	12/18/10 20:29	XC
Hexachlorobutadiene	ND	0.10		ND	1.1	2	12/18/10 20:29	XC
Hexane	1.4	0.10		5.0	0.35	2	12/18/10 20:29	XC
2-Hexanone (MBK)	ND	0.10		ND	0.41	2	12/18/10 20:29	XC

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

ANALYTICAL RESULTS

Project Location: Tioga Castings, Owego, NY
Date Received: 12/10/2010
Field Sample #: SV-8
Sample ID: 10L0386-03
Sample Matrix: Sub Slab
Sampled: 12/9/2010 12:34

Sample Description/Location:
Sub Description/Location:
Canister ID: 1174
Canister Size: 6 liter
Flow Controller ID: 4075
Sample Type: 30 min

Work Order: 10L0386
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
Isopropanol	0.37	0.10		0.90	0.25	2	12/18/10 20:29	XC
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	12/18/10 20:29	XC
Methylene Chloride	0.76	0.40		2.6	1.4	2	12/18/10 20:29	XC
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	12/18/10 20:29	XC
Propene	ND	0.40		ND	0.69	2	12/18/10 20:29	XC
Styrene	ND	0.10		ND	0.43	2	12/18/10 20:29	XC
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	12/18/10 20:29	XC
Tetrachloroethylene	ND	0.10		ND	0.68	2	12/18/10 20:29	XC
Tetrahydrofuran	ND	0.10		ND	0.29	2	12/18/10 20:29	XC
Toluene	0.20	0.10		0.75	0.38	2	12/18/10 20:29	XC
1,2,4-Trichlorobenzene	ND	0.10	V-05	ND	0.74	2	12/18/10 20:29	XC
1,1,1-Trichloroethane	0.33	0.10		1.8	0.55	2	12/18/10 20:29	XC
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	12/18/10 20:29	XC
Trichloroethylene	ND	0.10		ND	0.54	2	12/18/10 20:29	XC
Trichlorofluoromethane (Freon 11)	0.18	0.10		0.99	0.56	2	12/18/10 20:29	XC
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10		ND	0.77	2	12/18/10 20:29	XC
1,2,4-Trimethylbenzene	ND	0.10		ND	0.49	2	12/18/10 20:29	XC
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	12/18/10 20:29	XC
Vinyl Acetate	ND	0.10		ND	0.35	2	12/18/10 20:29	XC
Vinyl Chloride	ND	0.10		ND	0.26	2	12/18/10 20:29	XC
m&p-Xylene	ND	0.20		ND	0.87	2	12/18/10 20:29	XC
o-Xylene	ND	0.10		ND	0.43	2	12/18/10 20:29	XC

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	102	70-130	12/18/10 20:29

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ANALYTICAL RESULTS

Project Location: Tioga Castings, Owego, NY
Date Received: 12/10/2010
Field Sample #: SV-X
Sample ID: 10L0386-04
Sample Matrix: Sub Slab
Sampled: 12/9/2010 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 1670
Canister Size: 6 liter
Flow Controller ID: 4016
Sample Type: 30 min

Work Order: 10L0386
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	Results	RL	Flag	Results	RL	Dilution	Analyzed	Analyst
Acetone	ND	0.40		ND	0.95	2	12/18/10 21:48	XC
Benzene	0.30	0.10		0.96	0.32	2	12/18/10 21:48	XC
Benzyl chloride	ND	0.10		ND	0.52	2	12/18/10 21:48	XC
Bromodichloromethane	ND	0.10		ND	0.67	2	12/18/10 21:48	XC
Bromoform	ND	0.10		ND	1.0	2	12/18/10 21:48	XC
Bromomethane	ND	0.10		ND	0.39	2	12/18/10 21:48	XC
1,3-Butadiene	ND	0.10		ND	0.22	2	12/18/10 21:48	XC
2-Butanone (MEK)	0.27	0.10		0.79	0.29	2	12/18/10 21:48	XC
Carbon Disulfide	0.56	0.10		1.7	0.31	2	12/18/10 21:48	XC
Carbon Tetrachloride	ND	0.10		ND	0.63	2	12/18/10 21:48	XC
Chlorobenzene	ND	0.10		ND	0.46	2	12/18/10 21:48	XC
Chloroethane	ND	0.10		ND	0.26	2	12/18/10 21:48	XC
Chloroform	ND	0.10		ND	0.49	2	12/18/10 21:48	XC
Chloromethane	ND	0.10		ND	0.21	2	12/18/10 21:48	XC
Cyclohexane	0.30	0.10		1.0	0.34	2	12/18/10 21:48	XC
Dibromochloromethane	ND	0.10		ND	0.85	2	12/18/10 21:48	XC
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	12/18/10 21:48	XC
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 21:48	XC
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 21:48	XC
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 21:48	XC
Dichlorodifluoromethane (Freon 12)	0.29	0.10		1.4	0.49	2	12/18/10 21:48	XC
1,1-Dichloroethane	ND	0.10		ND	0.40	2	12/18/10 21:48	XC
1,2-Dichloroethane	ND	0.10		ND	0.40	2	12/18/10 21:48	XC
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 21:48	XC
cis-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 21:48	XC
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 21:48	XC
1,2-Dichloropropane	ND	0.10		ND	0.46	2	12/18/10 21:48	XC
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	12/18/10 21:48	XC
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	12/18/10 21:48	XC
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	12/18/10 21:48	XC
Ethanol	ND	1.0		ND	1.9	2	12/18/10 21:48	XC
Ethyl Acetate	ND	0.10		ND	0.36	2	12/18/10 21:48	XC
Ethylbenzene	ND	0.10		ND	0.43	2	12/18/10 21:48	XC
4-Ethyltoluene	ND	0.10		ND	0.49	2	12/18/10 21:48	XC
Heptane	6.3	0.10		26	0.41	2	12/18/10 21:48	XC
Hexachlorobutadiene	ND	0.10		ND	1.1	2	12/18/10 21:48	XC
Hexane	17	0.10		60	0.35	2	12/18/10 21:48	XC
2-Hexanone (MBK)	ND	0.10		ND	0.41	2	12/18/10 21:48	XC

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Tioga Castings, Owego, NY
Date Received: 12/10/2010
Field Sample #: SV-X
Sample ID: 10L0386-04
Sample Matrix: Sub Slab
Sampled: 12/9/2010 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 1670
Canister Size: 6 liter
Flow Controller ID: 4016
Sample Type: 30 min

Work Order: 10L0386
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
Isopropanol	ND	0.10		ND	0.25	2	12/18/10 21:48	XC
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	12/18/10 21:48	XC
Methylene Chloride	ND	0.40		ND	1.4	2	12/18/10 21:48	XC
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	12/18/10 21:48	XC
Propene	ND	0.40		ND	0.69	2	12/18/10 21:48	XC
Styrene	ND	0.10		ND	0.43	2	12/18/10 21:48	XC
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	12/18/10 21:48	XC
Tetrachloroethylene	ND	0.10		ND	0.68	2	12/18/10 21:48	XC
Tetrahydrofuran	ND	0.10		ND	0.29	2	12/18/10 21:48	XC
Toluene	0.38	0.10		1.4	0.38	2	12/18/10 21:48	XC
1,2,4-Trichlorobenzene	ND	0.10	V-05	ND	0.74	2	12/18/10 21:48	XC
1,1,1-Trichloroethane	0.31	0.10		1.7	0.55	2	12/18/10 21:48	XC
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	12/18/10 21:48	XC
Trichloroethylene	ND	0.10		ND	0.54	2	12/18/10 21:48	XC
Trichlorofluoromethane (Freon 11)	ND	0.10		ND	0.56	2	12/18/10 21:48	XC
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10		ND	0.77	2	12/18/10 21:48	XC
1,2,4-Trimethylbenzene	ND	0.10		ND	0.49	2	12/18/10 21:48	XC
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	12/18/10 21:48	XC
Vinyl Acetate	ND	0.10		ND	0.35	2	12/18/10 21:48	XC
Vinyl Chloride	ND	0.10		ND	0.26	2	12/18/10 21:48	XC
m&p-Xylene	ND	0.20		ND	0.87	2	12/18/10 21:48	XC
o-Xylene	ND	0.10		ND	0.43	2	12/18/10 21:48	XC

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	101	70-130	12/18/10 21:48

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

ANALYTICAL RESULTS

Project Location: Tioga Castings, Owego, NY
Date Received: 12/10/2010
Field Sample #: AA-2
Sample ID: 10L0386-05
Sample Matrix: Ambient Air
Sampled: 12/9/2010 12:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 1497
Canister Size: 6 liter
Flow Controller ID: 4078
Sample Type: 30 min

Work Order: 10L0386
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	Results	RL	Flag	Results	RL	Dilution	Analyzed	Analyst
Acetone	2.8	0.14		6.7	0.33	0.702	12/18/10 17:10	XC
Benzene	0.11	0.035		0.34	0.11	0.702	12/18/10 17:10	XC
Benzyl chloride	ND	0.035		ND	0.18	0.702	12/18/10 17:10	XC
Bromodichloromethane	ND	0.035		ND	0.24	0.702	12/18/10 17:10	XC
Bromoform	ND	0.035		ND	0.36	0.702	12/18/10 17:10	XC
Bromomethane	ND	0.035		ND	0.14	0.702	12/18/10 17:10	XC
1,3-Butadiene	ND	0.035		ND	0.078	0.702	12/18/10 17:10	XC
2-Butanone (MEK)	0.56	0.035		1.6	0.10	0.702	12/18/10 17:10	XC
Carbon Disulfide	ND	0.035		ND	0.11	0.702	12/18/10 17:10	XC
Carbon Tetrachloride	0.073	0.035		0.46	0.22	0.702	12/18/10 17:10	XC
Chlorobenzene	ND	0.035		ND	0.16	0.702	12/18/10 17:10	XC
Chloroethane	ND	0.035		ND	0.093	0.702	12/18/10 17:10	XC
Chloroform	ND	0.035		ND	0.17	0.702	12/18/10 17:10	XC
Chloromethane	0.51	0.035		1.1	0.072	0.702	12/18/10 17:10	XC
Cyclohexane	ND	0.035		ND	0.12	0.702	12/18/10 17:10	XC
Dibromochloromethane	ND	0.035		ND	0.30	0.702	12/18/10 17:10	XC
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	12/18/10 17:10	XC
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/18/10 17:10	XC
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/18/10 17:10	XC
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/18/10 17:10	XC
Dichlorodifluoromethane (Freon 12)	0.22	0.035		1.1	0.17	0.702	12/18/10 17:10	XC
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	12/18/10 17:10	XC
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	12/18/10 17:10	XC
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/18/10 17:10	XC
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/18/10 17:10	XC
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/18/10 17:10	XC
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	12/18/10 17:10	XC
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/18/10 17:10	XC
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/18/10 17:10	XC
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	12/18/10 17:10	XC
Ethanol	0.86	0.35		1.6	0.66	0.702	12/18/10 17:10	XC
Ethyl Acetate	ND	0.035		ND	0.13	0.702	12/18/10 17:10	XC
Ethylbenzene	ND	0.035		ND	0.15	0.702	12/18/10 17:10	XC
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	12/18/10 17:10	XC
Heptane	ND	0.035		ND	0.14	0.702	12/18/10 17:10	XC
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	12/18/10 17:10	XC
Hexane	ND	0.035		ND	0.12	0.702	12/18/10 17:10	XC
2-Hexanone (MBK)	0.10	0.035		0.43	0.14	0.702	12/18/10 17:10	XC

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ANALYTICAL RESULTS

Project Location: Tioga Castings, Owego, NY
Date Received: 12/10/2010
Field Sample #: AA-2
Sample ID: 10L0386-05
Sample Matrix: Ambient Air
Sampled: 12/9/2010 12:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 1497
Canister Size: 6 liter
Flow Controller ID: 4078
Sample Type: 30 min

Work Order: 10L0386
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
Isopropanol	0.12	0.035		0.29	0.086	0.702	12/18/10 17:10	XC
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	12/18/10 17:10	XC
Methylene Chloride	0.15	0.14		0.52	0.49	0.702	12/18/10 17:10	XC
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	12/18/10 17:10	XC
Propene	ND	0.14		ND	0.24	0.702	12/18/10 17:10	XC
Styrene	ND	0.035		ND	0.15	0.702	12/18/10 17:10	XC
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	12/18/10 17:10	XC
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	12/18/10 17:10	XC
Tetrahydrofuran	ND	0.035		ND	0.10	0.702	12/18/10 17:10	XC
Toluene	0.050	0.035		0.19	0.13	0.702	12/18/10 17:10	XC
1,2,4-Trichlorobenzene	ND	0.035	V-05	ND	0.26	0.702	12/18/10 17:10	XC
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	12/18/10 17:10	XC
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	12/18/10 17:10	XC
Trichloroethylene	ND	0.035		ND	0.19	0.702	12/18/10 17:10	XC
Trichlorofluoromethane (Freon 11)	0.19	0.035		1.0	0.20	0.702	12/18/10 17:10	XC
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.060	0.035		0.46	0.27	0.702	12/18/10 17:10	XC
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.702	12/18/10 17:10	XC
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	12/18/10 17:10	XC
Vinyl Acetate	ND	0.035		ND	0.12	0.702	12/18/10 17:10	XC
Vinyl Chloride	ND	0.035		ND	0.090	0.702	12/18/10 17:10	XC
m&p-Xylene	ND	0.070		ND	0.30	0.702	12/18/10 17:10	XC
o-Xylene	ND	0.035		ND	0.15	0.702	12/18/10 17:10	XC

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	103	70-130	12/18/10 17:10

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
10L0386-01 [SV-6]	B024025	1	1	N/A	1000	400	200	12/18/10
10L0386-02 [SV-7]	B024025	1	1	N/A	1000	400	200	12/18/10
10L0386-03 [SV-8]	B024025	1	1	N/A	1000	400	200	12/18/10
10L0386-04 [SV-X]	B024025	1	1	N/A	1000	400	200	12/18/10
10L0386-05 [AA-2]	B024025	1	1	N/A	1000	400	570	12/18/10

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
10L0386-01RE1 [SV-6]	B024028	1	1	N/A	1000	400	80	12/20/10

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch B024025 - TO-15 Prep											
Blank (B024025-BLK1)					Prepared & Analyzed: 12/18/10						
Acetone	ND	0.14									
Benzene	ND	0.035									
Benzyl chloride	ND	0.035									
Bromodichloromethane	ND	0.035									
Bromoform	ND	0.035									
Bromomethane	ND	0.035									
1,3-Butadiene	ND	0.035									
2-Butanone (MEK)	ND	0.035									
Carbon Disulfide	ND	0.035									
Carbon Tetrachloride	ND	0.035									
Chlorobenzene	ND	0.035									
Chloroethane	ND	0.035									
Chloroform	ND	0.035									
Chloromethane	ND	0.035									
Cyclohexane	ND	0.035									
Dibromochloromethane	ND	0.035									
1,2-Dibromoethane (EDB)	ND	0.035									
1,2-Dichlorobenzene	ND	0.035									
1,3-Dichlorobenzene	ND	0.035									
1,4-Dichlorobenzene	ND	0.035									
Dichlorodifluoromethane (Freon 12)	ND	0.035									
1,1-Dichloroethane	ND	0.035									
1,2-Dichloroethane	ND	0.035									
1,1-Dichloroethylene	ND	0.035									
cis-1,2-Dichloroethylene	ND	0.035									
trans-1,2-Dichloroethylene	ND	0.035									
1,2-Dichloropropane	ND	0.035									
cis-1,3-Dichloropropene	ND	0.035									
trans-1,3-Dichloropropene	ND	0.035									
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035									
Ethanol	ND	0.35									
Ethyl Acetate	ND	0.035									
Ethylbenzene	ND	0.035									
4-Ethyltoluene	ND	0.035									
Heptane	ND	0.035									
Hexachlorobutadiene	ND	0.035									
Hexane	ND	0.035									
2-Hexanone (MBK)	ND	0.035									
Isopropanol	ND	0.035									
Methyl tert-Butyl Ether (MTBE)	ND	0.035									
Methylene Chloride	ND	0.14									
4-Methyl-2-pentanone (MIBK)	ND	0.035									
Propene	ND	0.14									
Styrene	ND	0.035									
1,1,2,2-Tetrachloroethane	ND	0.035									
Tetrachloroethylene	ND	0.035									

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch B024025 - TO-15 Prep											
Blank (B024025-BLK1)					Prepared & Analyzed: 12/18/10						
Tetrahydrofuran	ND	0.035									
Toluene	ND	0.035									
1,2,4-Trichlorobenzene	ND	0.035									V-05
1,1,1-Trichloroethane	ND	0.035									
1,1,2-Trichloroethane	ND	0.035									
Trichloroethylene	ND	0.035									
Trichlorofluoromethane (Freon 11)	ND	0.035									
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.035									
1,2,4-Trimethylbenzene	ND	0.035									
1,3,5-Trimethylbenzene	ND	0.035									
Vinyl Acetate	ND	0.035									
Vinyl Chloride	ND	0.035									
m&p-Xylene	ND	0.070									
o-Xylene	ND	0.035									
Surrogate: 4-Bromofluorobenzene (1)	*8.24*				*8.00*		*103*	*70-130*			
LCS (B024025-BS1)					Prepared & Analyzed: 12/18/10						
Acetone	5.20				5.00		104	50-150			
Benzene	3.94				5.00		78.8	70-130			
Benzyl chloride	5.26				5.00		105	70-130			
Bromodichloromethane	4.51				5.00		90.2	70-130			
Bromoform	4.82				5.00		96.4	70-130			
Bromomethane	4.03				5.00		80.6	70-130			
1,3-Butadiene	4.19				5.00		83.9	70-130			
2-Butanone (MEK)	4.30				5.00		86.1	70-130			
Carbon Disulfide	4.10				5.00		81.9	70-130			
Carbon Tetrachloride	4.92				5.00		98.5	70-130			
Chlorobenzene	4.15				5.00		83.0	70-130			
Chloroethane	3.95				5.00		79.0	70-130			
Chloroform	4.10				5.00		82.0	70-130			
Chloromethane	4.45				5.00		88.9	70-130			
Cyclohexane	3.94				5.00		78.8	50-150			
Dibromochloromethane	4.61				5.00		92.2	70-130			
1,2-Dibromoethane (EDB)	4.11				5.00		82.2	70-130			
1,2-Dichlorobenzene	4.01				5.00		80.1	70-130			
1,3-Dichlorobenzene	4.02				5.00		80.3	70-130			
1,4-Dichlorobenzene	3.97				5.00		79.4	70-130			
Dichlorodifluoromethane (Freon 12)	4.67				5.00		93.5	70-130			
1,1-Dichloroethane	4.28				5.00		85.6	70-130			
1,2-Dichloroethane	4.22				5.00		84.4	70-130			
1,1-Dichloroethylene	4.30				5.00		86.1	70-130			
cis-1,2-Dichloroethylene	4.26				5.00		85.2	70-130			
trans-1,2-Dichloroethylene	4.27				5.00		85.4	70-130			
1,2-Dichloropropane	4.61				5.00		92.2	70-130			
cis-1,3-Dichloropropene	5.07				5.00		101	70-130			
trans-1,3-Dichloropropene	4.60				5.00		92.1	70-130			

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch B024025 - TO-15 Prep											
LCS (B024025-BS1)					Prepared & Analyzed: 12/18/10						
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	3.96				5.00		79.1	70-130			
Ethanol	2.73				5.00		54.7	50-150			
Ethyl Acetate	5.13				5.00		103	50-150			
Ethylbenzene	4.20				5.00		84.1	70-130			
4-Ethyltoluene	4.04				5.00		80.8	50-150			
Heptane	4.37				5.00		87.4	50-150			
Hexachlorobutadiene	4.15				5.00		83.0	70-130			
Hexane	4.19				5.00		83.8	70-130			
2-Hexanone (MBK)	3.57				5.00		71.4	50-150			
Isopropanol	2.93				5.00		58.6	50-150			
Methyl tert-Butyl Ether (MTBE)	4.41				5.00		88.2	70-130			
Methylene Chloride	4.35				5.00		87.0	70-130			
4-Methyl-2-pentanone (MIBK)	4.17				5.00		83.3	70-130			
Propene	4.54				5.00		90.7	50-150			
Styrene	3.76				5.00		75.1	70-130			
1,1,2,2-Tetrachloroethane	4.21				5.00		84.1	70-130			
Tetrachloroethylene	3.80				5.00		76.1	70-130			
Tetrahydrofuran	4.42				5.00		88.4	50-150			
Toluene	3.76				5.00		75.2	70-130			
1,2,4-Trichlorobenzene	3.91				5.00		78.2	70-130			V-05
1,1,1-Trichloroethane	4.39				5.00		87.8	70-130			
1,1,2-Trichloroethane	4.10				5.00		81.9	70-130			
Trichloroethylene	4.20				5.00		83.9	70-130			
Trichlorofluoromethane (Freon 11)	3.82				5.00		76.4	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	4.22				5.00		84.4	70-130			
1,2,4-Trimethylbenzene	4.01				5.00		80.2	70-130			
1,3,5-Trimethylbenzene	4.04				5.00		80.8	70-130			
Vinyl Acetate	4.09				5.00		81.8	70-130			
Vinyl Chloride	4.41				5.00		88.3	70-130			
m&p-Xylene	8.47				10.0		84.7	70-130			
o-Xylene	4.14				5.00		82.7	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.10*				*8.00*		*101*	*70-130*			

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch B024025 - TO-15 Prep											
Duplicate (B024025-DUP1)			**Source: 10L0386-03**		Prepared & Analyzed: 12/18/10						
Acetone	4.7	0.40	11	0.95		5.0			6.28	25	
Benzene	ND	0.10	ND	0.32		0.10				25	
Benzyl chloride	ND	0.10	ND	0.52		ND				25	
Bromodichloromethane	ND	0.10	ND	0.67		ND				25	
Bromoform	ND	0.10	ND	1.0		ND				25	
Bromomethane	ND	0.10	ND	0.39		ND				25	
1,3-Butadiene	ND	0.10	ND	0.22		ND				25	
2-Butanone (MEK)	0.41	0.10	1.2	0.29		0.47			14.5	25	
Carbon Disulfide	ND	0.10	ND	0.31		ND				25	
Carbon Tetrachloride	ND	0.10	ND	0.63		ND				25	
Chlorobenzene	ND	0.10	ND	0.46		ND				25	
Chloroethane	ND	0.10	ND	0.26		ND				25	
Chloroform	ND	0.10	ND	0.49		ND				25	
Chloromethane	ND	0.10	ND	0.21		ND				25	
Cyclohexane	0.22	0.10	0.74	0.34		0.23			4.52	25	
Dibromochloromethane	ND	0.10	ND	0.85		ND				25	
1,2-Dibromoethane (EDB)	ND	0.10	ND	0.77		ND				25	
1,2-Dichlorobenzene	ND	0.10	ND	0.60		ND				25	
1,3-Dichlorobenzene	ND	0.10	ND	0.60		ND				25	
1,4-Dichlorobenzene	ND	0.10	ND	0.60		ND				25	
Dichlorodifluoromethane (Freon 12)	0.45	0.10	2.2	0.49		0.53			16.5	25	
1,1-Dichloroethane	ND	0.10	ND	0.40		ND				25	
1,2-Dichloroethane	ND	0.10	ND	0.40		ND				25	
1,1-Dichloroethylene	ND	0.10	ND	0.40		ND				25	
cis-1,2-Dichloroethylene	ND	0.10	ND	0.40		ND				25	
trans-1,2-Dichloroethylene	ND	0.10	ND	0.40		ND				25	
1,2-Dichloropropane	ND	0.10	ND	0.46		ND				25	
cis-1,3-Dichloropropene	ND	0.10	ND	0.45		ND				25	
trans-1,3-Dichloropropene	ND	0.10	ND	0.45		ND				25	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10	ND	0.70		ND				25	
Ethanol	1.3	1.0	2.4	1.9		1.3			4.64	25	
Ethyl Acetate	ND	0.10	ND	0.36		ND				25	
Ethylbenzene	ND	0.10	ND	0.43		ND				25	
4-Ethyltoluene	ND	0.10	ND	0.49		ND				25	
Heptane	0.93	0.10	3.8	0.41		1.0			10.1	25	
Hexachlorobutadiene	ND	0.10	ND	1.1		ND				25	
Hexane	1.3	0.10	4.7	0.35		1.4			6.10	25	
2-Hexanone (MBK)	ND	0.10	ND	0.41		ND				25	
Isopropanol	0.37	0.10	0.90	0.25		0.37			0.545	25	
Methyl tert-Butyl Ether (MTBE)	ND	0.10	ND	0.36		ND				25	
Methylene Chloride	0.70	0.40	2.4	1.4		0.76			8.53	25	
4-Methyl-2-pentanone (MIBK)	ND	0.10	ND	0.41		ND				25	
Propene	ND	0.40	ND	0.69		ND				25	
Styrene	ND	0.10	ND	0.43		ND				25	
1,1,2,2-Tetrachloroethane	ND	0.10	ND	0.69		ND				25	
Tetrachloroethylene	ND	0.10	ND	0.68		ND				25	

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch B024025 - TO-15 Prep											
Duplicate (B024025-DUP1)		**Source: 10L0386-03**			Prepared & Analyzed: 12/18/10						
Tetrahydrofuran	ND	0.10	ND	0.29		ND				25	
Toluene	0.18	0.10	0.68	0.38		0.20			10.5	25	
1,2,4-Trichlorobenzene	ND	0.10	ND	0.74		ND				25	V-05
1,1,1-Trichloroethane	0.29	0.10	1.6	0.55		0.33			13.4	25	
1,1,2-Trichloroethane	ND	0.10	ND	0.55		ND				25	
Trichloroethylene	ND	0.10	ND	0.54		ND				25	
Trichlorofluoromethane (Freon 11)	0.17	0.10	0.94	0.56		0.18			4.65	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10	ND	0.77		ND				25	
1,2,4-Trimethylbenzene	ND	0.10	ND	0.49		ND				25	
1,3,5-Trimethylbenzene	ND	0.10	ND	0.49		ND				25	
Vinyl Acetate	ND	0.10	ND	0.35		ND				25	
Vinyl Chloride	ND	0.10	ND	0.26		ND				25	
m&p-Xylene	ND	0.20	ND	0.87		ND				25	
o-Xylene	ND	0.10	ND	0.43		ND				25	
Surrogate: 4-Bromofluorobenzene (1)	*8.18*				*8.00*		*102*	*70-130*			
Batch B024028 - TO-15 Prep											
Blank (B024028-BLK1)					Prepared & Analyzed: 12/20/10						
Acetone	ND	0.14									
Benzene	ND	0.035									
Benzyl chloride	ND	0.035									
Bromodichloromethane	ND	0.035									
Bromoform	ND	0.035									
Bromomethane	ND	0.035									
1,3-Butadiene	ND	0.035									
2-Butanone (MEK)	ND	0.035									
Carbon Disulfide	ND	0.035									
Carbon Tetrachloride	ND	0.035									
Chlorobenzene	ND	0.035									
Chloroethane	ND	0.035									
Chloroform	ND	0.035									
Chloromethane	ND	0.035									
Cyclohexane	ND	0.035									
Dibromochloromethane	ND	0.035									
1,2-Dibromoethane (EDB)	ND	0.035									
1,2-Dichlorobenzene	ND	0.035									
1,3-Dichlorobenzene	ND	0.035									
1,4-Dichlorobenzene	ND	0.035									
Dichlorodifluoromethane (Freon 12)	ND	0.035									
1,1-Dichloroethane	ND	0.035									
1,2-Dichloroethane	ND	0.035									
1,1-Dichloroethylene	ND	0.035									
cis-1,2-Dichloroethylene	ND	0.035									
trans-1,2-Dichloroethylene	ND	0.035									
1,2-Dichloropropane	ND	0.035									

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch B024028 - TO-15 Prep											
Blank (B024028-BLK1)					Prepared & Analyzed: 12/20/10						
cis-1,3-Dichloropropene	ND	0.035									
trans-1,3-Dichloropropene	ND	0.035									
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035									
Ethanol	ND	0.35									
Ethyl Acetate	ND	0.035									
Ethylbenzene	ND	0.035									
4-Ethyltoluene	ND	0.035									
Heptane	ND	0.035									
Hexachlorobutadiene	ND	0.035									
Hexane	ND	0.035									
2-Hexanone (MBK)	ND	0.035									
Isopropanol	ND	0.035									
Methyl tert-Butyl Ether (MTBE)	ND	0.035									
Methylene Chloride	ND	0.14									
4-Methyl-2-pentanone (MIBK)	ND	0.035									
Propene	ND	0.14									
Styrene	ND	0.035									
1,1,2,2-Tetrachloroethane	ND	0.035									
Tetrachloroethylene	ND	0.035									
Tetrahydrofuran	ND	0.035									
Toluene	ND	0.035									V-05
1,2,4-Trichlorobenzene	ND	0.035									V-05
1,1,1-Trichloroethane	ND	0.035									
1,1,2-Trichloroethane	ND	0.035									
Trichloroethylene	ND	0.035									
Trichlorofluoromethane (Freon 11)	ND	0.035									
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.035									
1,2,4-Trimethylbenzene	ND	0.035									
1,3,5-Trimethylbenzene	ND	0.035									
Vinyl Acetate	ND	0.035									
Vinyl Chloride	ND	0.035									
m&p-Xylene	ND	0.070									
o-Xylene	ND	0.035									
Surrogate: 4-Bromofluorobenzene (1)	*7.91*				*8.00*		*98.8*	*70-130*			

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch B024028 - TO-15 Prep											
LCS (B024028-BS1)					Prepared & Analyzed: 12/20/10						
Acetone	5.74				5.00		115	50-150			
Benzene	4.09				5.00		81.8	70-130			
Benzyl chloride	5.17				5.00		103	70-130			
Bromodichloromethane	4.93				5.00		98.6	70-130			
Bromoform	4.71				5.00		94.2	70-130			
Bromomethane	4.42				5.00		88.4	70-130			
1,3-Butadiene	4.40				5.00		88.0	70-130			
2-Butanone (MEK)	4.46				5.00		89.1	70-130			
Carbon Disulfide	3.90				5.00		78.0	70-130			
Carbon Tetrachloride	5.25				5.00		105	70-130			
Chlorobenzene	4.19				5.00		83.8	70-130			
Chloroethane	4.28				5.00		85.7	70-130			
Chloroform	4.05				5.00		81.0	70-130			
Chloromethane	4.65				5.00		92.9	70-130			
Cyclohexane	4.14				5.00		82.7	50-150			
Dibromochloromethane	4.73				5.00		94.6	70-130			
1,2-Dibromoethane (EDB)	4.32				5.00		86.4	70-130			
1,2-Dichlorobenzene	4.09				5.00		81.9	70-130			
1,3-Dichlorobenzene	4.13				5.00		82.6	70-130			
1,4-Dichlorobenzene	4.05				5.00		81.0	70-130			
Dichlorodifluoromethane (Freon 12)	4.78				5.00		95.6	70-130			
1,1-Dichloroethane	4.32				5.00		86.4	70-130			
1,2-Dichloroethane	4.35				5.00		87.1	70-130			
1,1-Dichloroethylene	4.32				5.00		86.4	70-130			
cis-1,2-Dichloroethylene	4.24				5.00		84.8	70-130			
trans-1,2-Dichloroethylene	4.20				5.00		84.1	70-130			
1,2-Dichloropropane	4.86				5.00		97.3	70-130			
cis-1,3-Dichloropropene	5.38				5.00		108	70-130			
trans-1,3-Dichloropropene	4.99				5.00		99.8	70-130			
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	4.23				5.00		84.5	70-130			
Ethanol	3.00				5.00		59.9	50-150			
Ethyl Acetate	4.78				5.00		95.5	50-150			
Ethylbenzene	4.37				5.00		87.4	70-130			
4-Ethyltoluene	4.32				5.00		86.3	50-150			
Heptane	4.85				5.00		97.0	50-150			
Hexachlorobutadiene	4.18				5.00		83.5	70-130			
Hexane	4.36				5.00		87.2	70-130			
2-Hexanone (MBK)	4.12				5.00		82.4	50-150			
Isopropanol	3.15				5.00		63.1	50-150			
Methyl tert-Butyl Ether (MTBE)	4.24				5.00		84.7	70-130			
Methylene Chloride	4.48				5.00		89.7	70-130			
4-Methyl-2-pentanone (MIBK)	4.84				5.00		96.9	70-130			
Propene	4.55				5.00		91.0	50-150			
Styrene	3.90				5.00		78.0	70-130			
1,1,2,2-Tetrachloroethane	4.51				5.00		90.2	70-130			
Tetrachloroethylene	3.80				5.00		75.9	70-130			

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch B024028 - TO-15 Prep											
LCS (B024028-BS1)					Prepared & Analyzed: 12/20/10						
Tetrahydrofuran	4.13				5.00		82.6	50-150			
Toluene	3.72				5.00		74.4	70-130			V-05
1,2,4-Trichlorobenzene	3.91				5.00		78.1	70-130			V-05
1,1,1-Trichloroethane	4.94				5.00		98.8	70-130			
1,1,2-Trichloroethane	4.30				5.00		86.0	70-130			
Trichloroethylene	4.48				5.00		89.6	70-130			
Trichlorofluoromethane (Freon 11)	4.40				5.00		88.0	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	3.98				5.00		79.6	70-130			
1,2,4-Trimethylbenzene	4.18				5.00		83.6	70-130			
1,3,5-Trimethylbenzene	4.36				5.00		87.2	70-130			
Vinyl Acetate	3.97				5.00		79.3	70-130			
Vinyl Chloride	4.67				5.00		93.4	70-130			
m&p-Xylene	9.12				10.0		91.2	70-130			
o-Xylene	4.46				5.00		89.1	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.13*				*8.00*		*102*	*70-130*			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
Acetone	AIHA
Benzene	AIHA,FL,NJ,NY
Benzyl chloride	AIHA,FL,NJ,NY
Bromodichloromethane	AIHA,NJ
Bromoform	AIHA,NJ
Bromomethane	AIHA,FL,NJ,NY
1,3-Butadiene	AIHA,NJ
2-Butanone (MEK)	AIHA,FL,NJ,NY
Carbon Disulfide	AIHA,NJ
Carbon Tetrachloride	AIHA,FL,NJ,NY
Chlorobenzene	AIHA,FL,NJ,NY
Chloroethane	AIHA,FL,NJ,NY
Chloroform	AIHA,FL,NJ,NY
Chloromethane	AIHA,FL,NJ,NY
Cyclohexane	AIHA,NJ
Dibromochloromethane	AIHA
1,2-Dibromoethane (EDB)	AIHA,NJ
1,2-Dichlorobenzene	AIHA,FL,NJ,NY
1,3-Dichlorobenzene	AIHA,NJ
1,4-Dichlorobenzene	AIHA,FL,NJ,NY
Dichlorodifluoromethane (Freon 12)	AIHA
1,1-Dichloroethane	AIHA,FL,NJ,NY
1,2-Dichloroethane	AIHA,FL,NJ,NY
1,1-Dichloroethylene	AIHA,FL,NJ,NY
cis-1,2-Dichloroethylene	AIHA,FL,NY
trans-1,2-Dichloroethylene	AIHA,NJ,NY
1,2-Dichloropropane	AIHA,FL,NJ,NY
cis-1,3-Dichloropropene	AIHA,FL,NJ,NY
trans-1,3-Dichloropropene	AIHA
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	AIHA,NJ
Ethanol	AIHA
Ethyl Acetate	AIHA
Ethylbenzene	AIHA,FL,NJ,NY
4-Ethyltoluene	AIHA,NJ
Heptane	AIHA,NJ,NY
Hexachlorobutadiene	AIHA,NJ,NY
Hexane	AIHA,FL,NJ,NY
2-Hexanone (MBK)	AIHA
Isopropanol	AIHA,NY
Methyl tert-Butyl Ether (MTBE)	AIHA,FL,NJ,NY
Methylene Chloride	AIHA,FL,NJ,NY
4-Methyl-2-pentanone (MIBK)	AIHA,FL,NJ,NY
Propene	AIHA
Styrene	AIHA,FL,NJ,NY
1,1,2,2-Tetrachloroethane	AIHA,FL,NJ,NY
Tetrachloroethylene	AIHA,FL,NJ,NY
Tetrahydrofuran	AIHA

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
Toluene	AIHA,FL,NJ,NY
1,2,4-Trichlorobenzene	AIHA,NJ,NY
1,1,1-Trichloroethane	AIHA,FL,NJ,NY
1,1,2-Trichloroethane	AIHA,FL,NJ,NY
Trichloroethylene	AIHA,FL,NJ,NY
Trichlorofluoromethane (Freon 11)	AIHA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	AIHA,NJ,NY
1,2,4-Trimethylbenzene	AIHA,NJ
1,3,5-Trimethylbenzene	AIHA,NJ
Vinyl Acetate	AIHA,FL,NJ,NY
Vinyl Chloride	AIHA,FL,NJ,NY
m&p-Xylene	AIHA,FL,NJ,NY
o-Xylene	AIHA,FL,NJ,NY

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	American Industrial Hygiene Association	100033	01/1/2012
MA	Massachusetts DEP	M-MA100	06/30/2011
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2011
NY	New York State Department of Health	10899 NELAP	04/1/2011
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2011
RI	Rhode Island Department of Health	LAO00112	12/30/2011
NC	North Carolina Div. of Water Quality	652	12/31/2011
NJ	New Jersey DEP	MA007 NELAP	06/30/2011
FL	Florida Department of Health	E871027 NELAP	06/30/2011
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2011
WA	State of Washington Department of Ecology	C2065	02/23/2011

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Phone: 413-525-2332
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Email: info@contestlabs.com
www.contestlabs.com
39 SPRUCE ST
EAST LONGMEADOW, MA 01028

AIR SAMPLE CHAIN OF CUSTODY RECORD

1OL0386

Company Name: Malcolm Pirnie, INC
Address: 855 Route 146, STE 210
Clifton Park, NY 12065
Attention: Jeremy Wyckoff
Project Location: Tioga Castings, Owego, NY
Sampled By: J. Wyckoff

Telephone: (518) 250-7335
Project # 026362
Client PO # 026362

DATA DELIVERY (check one):
☐ FAX ☒ EMAIL ☐ WEBSITE CLIENT
Fax # :
Email: jwyckoff@pirnie.com
Format: ☒ EXCEL ☒ PDF ☐ GIS KEY ☐ OTHER___

Proposal Provided? (For Billing purposes)
☐ yes _____ proposal date

Field ID	Sample Description	Media	Lab #	Date Sampled Start Date Time	Date Sampled Stop Date Time	ONLY USE WHEN USING PUMPS Total Minutes Sampled	Flow Rate M^3/Min. or L / Min.	Volume Liters or M^3	Matrix Code*	ANALYSIS REQUESTED TO-15	" Hg Initial pressure	" Hg Final Pressure	" Hg Lab Receipt Pressure	Summa Canister ID	Flow Controller ID
SV-6	Sub-slab	S	01	12-8-10 1720	12-9-10 1232				SS	X	-29	-5	-5	1081	4079
SV-7	Sub-slab	S	02	12-9-10 1201	12-9-10 1236				SS	X	-28	-5	-6	1170	4074
SV-8	Sub-slab	S	03	12-9-10 1203	12-9-10 1234				SS	X	-28	-4	-4	1174	4075
SV-X	Sub-slab	S	04	12-9-10 —	12-9-10 —				SS	X	-30	-4	-2	1670	4016
AA-2	Ambient Air	S	05	12-9-10 1200	12-9-10 1231				AMB	X	-29	-4	-2	1497	4078

Please fill out completely, sig ate and retain the y w copy for your r d.

Summa canisters and flow controllers must b returned within 14 days of receipt or rental fees will apply.

Summa canisters will b retained for a minimum of 14 days after sampling date prior to cleaning.

Laboratory Comments:

CLIENT COMMENTS:

Relinquished by: (signature)	Date/Time:
	12/9/10 1320
Received by: (signature)	Date/Time:
	12/10/10 09:41
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Turnaround **
☐ 7-Day
☒ 10-Day
☐ Other ___
RUSH *
☐ *24-Hr ☐ *48-Hr
☐ *72-Hr ☐ *4-Day
*Approval Required

Special Requirements
Regulations: NY ASP B
Data Enhancement/RCP? ☐ Y ☐ N
Enhanced Data Package ☒ Y ☐ N
(Surchage Applies)
Required Detection Limits: Low Level per NYSDEC
Other:

***Matrix Code:**
SG = SOIL GAS
IA = INDOOR AIR
AMB=AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = other_____

****Media Codes:**
S=summa can
TB=tedlar bag
P=PUF
T=tube
F= filter
C=cassette
O = Other_____

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

AIHA, NELAC & WBE/DBE Certified

Track Associated Shipments

Printer-Friendly

Detailed Results 873867792499 | Notifications 873867792499 | Associated Shipments

Select time form

Master tracking no.	873867792499	Destination	
Service type	Priority Overnight	Total pieces	2
		Total shipment weight	42.0 lbs/19.1 kg

All Shipments Associated with the Master Tracking Number

Delivered

Tracking no.	Status	Delivery date	Si Ir
873867792499	Delivered	Dec 10, 2010 9:41 AM	Ye
799753328568	Delivered	Dec 10, 2010 9:41 AM	Ye

View/print Signature Proof of Delivery letter

E-mail Signature Proof of Delivery letter

Account no.

(Required for detailed Signature Proof of Delivery)

Click here if you have more than one account number fo

con-test ANALYTICAL LABORATORY
www.contestlabs.com
East Longmeadow, MA
Phone: 1-413-525-2332
Fax: 1-413-525-6405

AIR ONLY RECEIPT CHECKLIST

CLIENT NAME: Malcolm Pirnie
RECEIVED BY: AR DATE: 12/10/10

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

If not, explain:

3. All Samples in good condition? YES NO

If not, explain:

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

5. ARE THERE ANY RUSH OR SHORT HOLDING TIME SAMPLES? WHO WAS NOTIFIED?_____ DATE_____ TIME_____

Location where samples are stored:

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

CONTAINERS SENT TO CON-TEST		# of containers	
Summa cans	6L	6	unused - 1172
Tedlar Bags			
Regulators	30min	6	unused - 4082
Restrictors			
Tubes			
Other			

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

Laboratory comments:

Air Sampling Media Certificate of Analysis

Company Name: Malcolm Pirnie **Project Reference:** 10L0386

Contact Name: Jeremy Wyckoff **Date Analyzed:** 12/1/2010

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Tubes* ☐ *Flow Controllers* ☐ *Other* ☐

Media IDs: BC1081, BC1497, BC1170, BC1174

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv ☑ Ug/M3 ☐ Ng ☐ Other ☐

<0.08	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.04	Hexane	<0.02	1,2-Dibromomethane
<0.02	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.02	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.04	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
0.46	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.02	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
0.23	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.04	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.02	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.02	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.02	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.04	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
0.05	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: TPH 01/04/11

Air Sampling Media Certificate of Analysis

Company Name: Malcolm Pirnie **Project Reference:** 10L0386

Contact Name: Jeremy Wyckoff **Date Analyzed:** 12/1/2010

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Tubes* ☐
Flow Controllers ☐ *Other* ☐

Media IDs: BC1670

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv ☑ Ug/M3 ☐ Ng ☐ Other

<0.08	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.04	Hexane	<0.02	1,2-Dibromomethane
<0.02	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	0.04	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.02	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.04	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
0.35	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.02	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.20	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.04	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.02	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.02	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.02	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.04	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.04	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: TPH 01/04/11

Air Sampling Media Certificate of Analysis

Company Name: Malcolm Pirnie **Project Reference:** 10L0386

Contact Name: Jeremy Wykoff **Date Analyzed:** 12/1/2010

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Tubes* ☐ *Flow Controllers* ☐ *Other* ☐

Media IDs: BC1031, BC1170, BC1174, BC1497

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv ☑ Ug/M3 ☐ Ng ☐ Other ☐

<0.08	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.04	Hexane	<0.02	1,2-Dibromomethane
<0.02	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.04	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
0.46	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.02	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.20	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.04	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.02	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.02	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.02	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.04	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
0.23	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: WSD 1/11/11

Air Sampling Media Certificate of Analysis

Company Name: Malcolm Pirnie **Project Reference:** 10L0386

Contact Name: Jeremy Wykoff **Date Analyzed:** 12/29/2010

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Tubes* ☐
Flow Controllers ☐ *Other* ☐

Media IDs: BC1670

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv ☑ Ug/M3 ☐ Ng ☐ Other

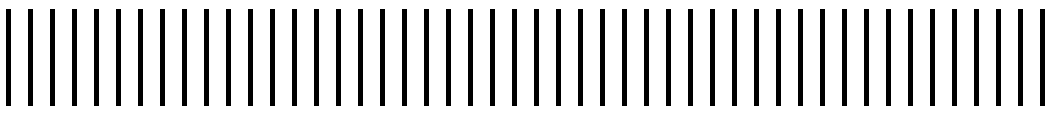
<0.08	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.04	Hexane	<0.02	1,2-Dibromomethane
<0.02	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.04	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
1.4	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.02	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.20	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.04	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.02	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.02	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.02	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.04	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.04	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date:

New York State Department of Environmental Conservation
Tioga Castings Site Quarterly Report

Appendix F
Data Usability Summary Report



0266362 / ALB

MALCOLM PIRNIE

Data Validation Services

120 Cobble Creek Road P.O. Box 208
North Creek, NY 12853

Phone 518-251-4429
Facsimile 518-251-4428

January 13, 2010

Jeremy Wyckoff
Malcolm Pirnie, Inc.
855 Rt 146 Suite 204
Clifton Park, NY 12065

RE: Data Usability Summary Report (DUSR) of Tioga Castings site Data Package
Con-Test SDG No. 10L0386

Dear Mr. Wyckoff:

Review has been completed for the data package generated by Con-test that pertains to analysis of 6-L summa canister air samples collected at the Tioga Castings site. Four air samples and a field duplicate collected 12/09/10 were analyzed for a full list of volatile analytes by USEPA GC/MS method TO-15.

The data package submitted by the laboratory contain full deliverables for validation, but this usability report is generated from review of the QC summary form information, with full review of sample raw data and limited review of associated QC raw data. Full validation has not been performed. However, the reported QC summary forms and sample raw data have been reviewed for application of validation qualifiers, with guidance from the 2006 USEPA Region II validation SOP HW-31, and in consideration for the specific requirements of the analytical methodology. The following items were reviewed:

* Data Completeness
* Case Narrative
* Custody Documentation
* Holding Times
* Surrogate and Internal Standard Recoveries
* Method and Canister Blanks
* Laboratory Control Samples (LCSs)
* Instrumental Tunes
* Initial and Continuing Calibration Standards
* Method Compliance
* Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review.

In summary, sample processing was conducted in compliance with the analytical method. However, many of the sample results are edited to reflect non-detection, often at elevated reporting limits, or qualified otherwise. No data are rejected. The soil vapor samples were processed with lesser volume, resulting in reporting limits that are elevated by a factor of almost three.

Copies of the client sample identifications and the laboratory case narrative are attached to this text, and should be reviewed in conjunction with this report. The laboratory case narrative was not signed, and did not contain the required "verbatim" statement.

Sample report forms are attached, with recommended qualifiers applied in red ink. Results are validated in ppbv, as processed by the laboratory. Conversion factors to ug/m3 were checked on random detected values, and no errors were found.

Volatile Analyses by EPA TO-15

Results for the following analytes have been qualified as tentative in identification and estimated in value due to poor mass spectral quality:

- ethylbenzene in SV-6
- dichlorodifluoromethane in SV-7
- benzene in SV-X

Results for the following analytes have been edited to reflect non-detection due to very poor mass spectral quality:

- m,p-xylene in SV-6
- o-xylene in SV-6
- benzene in SV-7

Clean canister batch certification summaries were forwarded upon request. They show contamination above the reporting limit for acetone, 2-butanone, and ethanol. Conflicting summaries were provided for the batch associated with four of the five field samples; the highest concentrations were used to determine the potential for external contamination in the associated field samples. The following detected values are within the range for consideration as external contamination, and have been edited to reflect non-detection, usually at a significantly elevated reporting limit:

- 2-butanone and ethanol in SV-6
-
- acetone, ethanol, and 2-butanone in SV-8 and AA-2
- 2-butanone in SV-X and SV-7
- acetone and 2-butanone in SV-8

Initial and continuing calibration standard (ICV and CCV) responses are within protocol and validation guidelines, with the following exceptions, results for which are qualified in the project samples:

- acetone detections (71%RSD, with curve intercept above zero), with a likely high bias
- ethanol (33%D), with a likely low bias

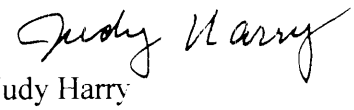
Ethanol and isopropanol produced low recoveries in the LCS (55% and 59%, respectively). The results for these two compounds are therefore qualified as estimated, with a possible low bias.

The blind field duplicate of SV-7 and the laboratory duplicate of SV-8 show acceptable correlations.

Holding times were met. Internal standard responses are within the required limits, and surrogate recoveries fall within the acceptance range. Although listed in the laboratory data package table of

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,



Judy Harry

VALIDATION DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
R	The data are unusable. The analyte may or may not be present.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

CLIENT and LABORATORY SAMPLE IDs and CASE NARRATIVE

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

Malcolm Pirnie - Clifton Park-NY
855 Route 146, Suite 210
Clifton Park, NY 12065
ATTN: Jeremy Wyckoff

REPORT DATE: 12/21/2010

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 0266362-NY DEC StandbyTioga Castings

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 10L0386

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Tioga Castings, Owego, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SV-6	10L0386-01	Sub Slab		EPA TO-15	
SV-7	10L0386-02	Sub Slab		EPA TO-15	
SV-8	10L0386-03	Sub Slab		EPA TO-15	
SV-X	10L0386-04	Sub Slab		EPA TO-15	
AA-2	10L0386-05	Ambient Air		EPA TO-15	

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

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-15

Qualifications:

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Significant uncertainty is associated with the reported value which is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

1,2,4-Trichlorobenzene, Toluene

10L0386-01[SV-6], 10L0386-02[SV-7], 10L0386-03[SV-8], 10L0386-04[SV-X], 10L0386-05[AA-2], B024025-BLK1, B024025-BS1, B024025-DUP1, B024028-BLK1, B024028-BS1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
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.

Michael A. Erickson
Laboratory Director

QUALIFIED SAMPLE RESULTS FORMS

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

ANALYTICAL RESULTS

Project Location: Tioga Castings, Owego, NY
Date Received: 12/10/2010
Field Sample #: SV-6
Sample ID: 10L0386-01
Sample Matrix: Sub Slab
Sampled: 12/9/2010 12:32

Sample Description/Location:
Sub Description/Location:
Canister ID: 1081
Canister Size: 6 liter
Flow Controller ID: 4079
Sample Type: 30 min

Work Order: 10L0386
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Acetone	ND	0.40		ND	0.95	2	12/18/10 19:11	XC
Benzene	0.51	0.10		1.6	0.32	2	12/18/10 19:11	XC
Benzyl chloride	ND	0.10		ND	0.52	2	12/18/10 19:11	XC
Bromodichloromethane	ND	0.10		ND	0.67	2	12/18/10 19:11	XC
Bromoform	ND	0.10		ND	1.0	2	12/18/10 19:11	XC
Bromomethane	ND	0.10		ND	0.39	2	12/18/10 19:11	XC
1,3-Butadiene	ND	0.10		ND	0.22	2	12/18/10 19:11	XC
2-Butanone (MEK)	~~1.5~~	~~0.10~~ 1.5 U		~~4.5~~	~~0.29~~ 4.5 U	2	12/18/10 19:11	XC
Carbon Disulfide	0.35	0.10		1.1	0.31	2	12/18/10 19:11	XC
Carbon Tetrachloride	ND	0.10		ND	0.63	2	12/18/10 19:11	XC
Chlorobenzene	ND	0.10		ND	0.46	2	12/18/10 19:11	XC
Chloroethane	ND	0.10		ND	0.26	2	12/18/10 19:11	XC
Chloroform	ND	0.10		ND	0.49	2	12/18/10 19:11	XC
Chloromethane	ND	0.10		ND	0.21	2	12/18/10 19:11	XC
Cyclohexane	0.34	0.10		1.2	0.34	2	12/18/10 19:11	XC
Dibromochloromethane	ND	0.10		ND	0.85	2	12/18/10 19:11	XC
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	12/18/10 19:11	XC
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 19:11	XC
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 19:11	XC
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 19:11	XC
Dichlorodifluoromethane (Freon 12)	0.32	0.10		1.6	0.49	2	12/18/10 19:11	XC
1,1-Dichloroethane	ND	0.10		ND	0.40	2	12/18/10 19:11	XC
1,2-Dichloroethane	ND	0.10		ND	0.40	2	12/18/10 19:11	XC
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 19:11	XC
cis-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 19:11	XC
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 19:11	XC
1,2-Dichloropropane	ND	0.10		ND	0.46	2	12/18/10 19:11	XC
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	12/18/10 19:11	XC
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	12/18/10 19:11	XC
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	12/18/10 19:11	XC
Ethanol	~~1.6~~	~~1.0~~ 1.6 UJ		~~3.1~~	~~1.9~~ 3.1 UJ	2	12/18/10 19:11	XC
Ethyl Acetate	ND	0.10		ND	0.36	2	12/18/10 19:11	XC
Ethylbenzene	0.52	0.10	NJ	2.2	0.43	2	12/18/10 19:11	XC
4-Ethyltoluene	ND	0.10		ND	0.49	2	12/18/10 19:11	XC
Heptane	56	0.10		230	0.41	2	12/18/10 19:11	XC
Hexachlorobutadiene	ND	0.10		ND	1.1	2	12/18/10 19:11	XC
Hexane	100	0.25		360	0.88	5	12/20/10 13:45	XC
2-Hexanone (MBK)	ND	0.10		ND	0.41	2	12/18/10 19:11	XC

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

ANALYTICAL RESULTS

Project Location: Tioga Castings, Owego, NY
Date Received: 12/10/2010
Field Sample #: SV-6
Sample ID: 10L0386-01
Sample Matrix: Sub Slab
Sampled: 12/9/2010 12:32

Sample Description/Location:
Sub Description/Location:
Canister ID: 1081
Canister Size: 6 liter
Flow Controller ID: 4079
Sample Type: 30 min

Work Order: 10L0386
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Isopropanol	ND	0.10	u J	ND	0.25	2	12/18/10 19:11	XC
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	12/18/10 19:11	XC
Methylene Chloride	ND	0.40		ND	1.4	2	12/18/10 19:11	XC
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	12/18/10 19:11	XC
Propene	ND	0.40		ND	0.69	2	12/18/10 19:11	XC
Styrene	ND	0.10		ND	0.43	2	12/18/10 19:11	XC
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	12/18/10 19:11	XC
Tetrachloroethylene	ND	0.10		ND	0.68	2	12/18/10 19:11	XC
Tetrahydrofuran	ND	0.10		ND	0.29	2	12/18/10 19:11	XC
Toluene	0.76	0.10		2.9	0.38	2	12/18/10 19:11	XC
1,2,4-Trichlorobenzene	ND	0.10	V-05	ND	0.74	2	12/18/10 19:11	XC
1,1,1-Trichloroethane	0.66	0.10		3.6	0.55	2	12/18/10 19:11	XC
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	12/18/10 19:11	XC
Trichloroethylene	ND	0.10		ND	0.54	2	12/18/10 19:11	XC
Trichlorofluoromethane (Freon 11)	ND	0.10		ND	0.56	2	12/18/10 19:11	XC
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.11	0.10		0.84	0.77	2	12/18/10 19:11	XC
1,2,4-Trimethylbenzene	ND	0.10		ND	0.49	2	12/18/10 19:11	XC
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	12/18/10 19:11	XC
Vinyl Acetate	ND	0.10		ND	0.35	2	12/18/10 19:11	XC
Vinyl Chloride	ND	0.10		ND	0.26	2	12/18/10 19:11	XC
m&p-Xylene	~~0.39~~	~~0.20~~ 0.39	u	~~1.7~~	~~0.87~~ 1.7	2	12/18/10 19:11	XC
o-Xylene	~~0.25~~	~~0.10~~ 0.25	u	~~1.1~~	~~0.43~~ 1.1	2	12/18/10 19:11	XC

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	103	70-130	12/20/10 13:45
4-Bromofluorobenzene (1)	104	70-130	12/18/10 19:11

con-test ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Tioga Castings, Owego, NY
Date Received: 12/10/2010
Field Sample #: SV-7
Sample ID: 10L0386-02
Sample Matrix: Sub Slab
Sampled: 12/9/2010 12:36

Sample Description/Location:
Sub Description/Location:
Canister ID: 1170
Canister Size: 6 liter
Flow Controller ID: 4094
Sample Type: 30 min

Work Order: 10L0386
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Acetone	ND	0.40		ND	0.95	2	12/18/10 19:50	XC
Benzene	~~0.31~~	~~0.10~~ 0.31	U	~~1.0~~	~~0.32~~ 1.0 U	2	12/18/10 19:50	XC
Benzyl chloride	ND	0.10		ND	0.52	2	12/18/10 19:50	XC
Bromodichloromethane	ND	0.10		ND	0.67	2	12/18/10 19:50	XC
Bromoform	ND	0.10		ND	1.0	2	12/18/10 19:50	XC
Bromomethane	ND	0.10		ND	0.39	2	12/18/10 19:50	XC
1,3-Butadiene	ND	0.10		ND	0.22	2	12/18/10 19:50	XC
2-Butanone (MEK)	~~0.61~~	~~0.10~~ 0.61	U	~~1.8~~	~~0.29~~ 1.8 U	2	12/18/10 19:50	XC
Carbon Disulfide	0.57	0.10		1.8	0.31	2	12/18/10 19:50	XC
Carbon Tetrachloride	ND	0.10		ND	0.63	2	12/18/10 19:50	XC
Chlorobenzene	ND	0.10		ND	0.46	2	12/18/10 19:50	XC
Chloroethane	ND	0.10		ND	0.26	2	12/18/10 19:50	XC
Chloroform	ND	0.10		ND	0.49	2	12/18/10 19:50	XC
Chloromethane	ND	0.10		ND	0.21	2	12/18/10 19:50	XC
Cyclohexane	0.32	0.10		1.1	0.34	2	12/18/10 19:50	XC
Dibromochloromethane	ND	0.10		ND	0.85	2	12/18/10 19:50	XC
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	12/18/10 19:50	XC
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 19:50	XC
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 19:50	XC
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 19:50	XC
Dichlorodifluoromethane (Freon 12)	0.22	0.10	NJ	1.1	0.49	2	12/18/10 19:50	XC
1,1-Dichloroethane	ND	0.10		ND	0.40	2	12/18/10 19:50	XC
1,2-Dichloroethane	ND	0.10		ND	0.40	2	12/18/10 19:50	XC
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 19:50	XC
cis-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 19:50	XC
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 19:50	XC
1,2-Dichloropropane	ND	0.10		ND	0.46	2	12/18/10 19:50	XC
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	12/18/10 19:50	XC
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	12/18/10 19:50	XC
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	12/18/10 19:50	XC
Ethanol	ND	1.0	NJ	ND	1.9	2	12/18/10 19:50	XC
Ethyl Acetate	ND	0.10		ND	0.36	2	12/18/10 19:50	XC
Ethylbenzene	ND	0.10		ND	0.43	2	12/18/10 19:50	XC
4-Ethyltoluene	ND	0.10		ND	0.49	2	12/18/10 19:50	XC
Heptane	6.7	0.10		28	0.41	2	12/18/10 19:50	XC
Hexachlorobutadiene	ND	0.10		ND	1.1	2	12/18/10 19:50	XC
Hexane	18	0.10		63	0.35	2	12/18/10 19:50	XC
2-Hexanone (MBK)	ND	0.10		ND	0.41	2	12/18/10 19:50	XC

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ANALYTICAL RESULTS

Project Location: Tioga Castings, Owego, NY
Date Received: 12/10/2010
Field Sample #: SV-7
Sample ID: 10L0386-02
Sample Matrix: Sub Slab
Sampled: 12/9/2010 12:36

Sample Description/Location:
Sub Description/Location:
Canister ID: 1170
Canister Size: 6 liter
Flow Controller ID: 4094
Sample Type: 30 min

Work Order: 10L0386
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Isopropanol	ND	0.10	UJ	ND	0.25	2	12/18/10 19:50	XC
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	12/18/10 19:50	XC
Methylene Chloride	ND	0.40		ND	1.4	2	12/18/10 19:50	XC
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	12/18/10 19:50	XC
Propene	ND	0.40		ND	0.69	2	12/18/10 19:50	XC
Styrene	ND	0.10		ND	0.43	2	12/18/10 19:50	XC
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	12/18/10 19:50	XC
Tetrachloroethylene	ND	0.10		ND	0.68	2	12/18/10 19:50	XC
Tetrahydrofuran	ND	0.10		ND	0.29	2	12/18/10 19:50	XC
Toluene	0.40	0.10		1.5	0.38	2	12/18/10 19:50	XC
1,2,4-Trichlorobenzene	ND	0.10	V-05	ND	0.74	2	12/18/10 19:50	XC
1,1,1-Trichloroethane	0.32	0.10		1.7	0.55	2	12/18/10 19:50	XC
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	12/18/10 19:50	XC
Trichloroethylene	ND	0.10		ND	0.54	2	12/18/10 19:50	XC
Trichlorofluoromethane (Freon 11)	ND	0.10		ND	0.56	2	12/18/10 19:50	XC
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10		ND	0.77	2	12/18/10 19:50	XC
1,2,4-Trimethylbenzene	ND	0.10		ND	0.49	2	12/18/10 19:50	XC
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	12/18/10 19:50	XC
Vinyl Acetate	ND	0.10		ND	0.35	2	12/18/10 19:50	XC
Vinyl Chloride	ND	0.10		ND	0.26	2	12/18/10 19:50	XC
m&p-Xylene	ND	0.20		ND	0.87	2	12/18/10 19:50	XC
o-Xylene	ND	0.10		ND	0.43	2	12/18/10 19:50	XC

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	102	70-130	12/18/10 19:50

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ANALYTICAL RESULTS

Project Location: Tioga Castings, Owego, NY
Date Received: 12/10/2010
Field Sample #: SV-8
Sample ID: 10L0386-03
Sample Matrix: Sub Slab
Sampled: 12/9/2010 12:34

Sample Description/Location:
Sub Description/Location:
Canister ID: 1174
Canister Size: 6 liter
Flow Controller ID: 4075
Sample Type: 30 min

Work Order: 10L0386
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Acetone	~~50~~	~~0.10~~ 5.0	U	~~12~~	~~0.25~~ 12	2	12/18/10 20:29	XC
Benzene	0.10	0.10		0.33	0.32	2	12/18/10 20:29	XC
Benzyl chloride	ND	0.10		ND	0.52	2	12/18/10 20:29	XC
Bromodichloromethane	ND	0.10		ND	0.67	2	12/18/10 20:29	XC
Bromoform	ND	0.10		ND	1.0	2	12/18/10 20:29	XC
Bromomethane	ND	0.10		ND	0.39	2	12/18/10 20:29	XC
1,3-Butadiene	ND	0.10		ND	0.22	2	12/18/10 20:29	XC
2-Butanone (MEK)	~~0.47~~	~~0.10~~ 0.99	U	~~1.4~~	~~0.29~~ 1.4	2	12/18/10 20:29	XC
Carbon Disulfide	ND	0.10		ND	0.31	2	12/18/10 20:29	XC
Carbon Tetrachloride	ND	0.10		ND	0.63	2	12/18/10 20:29	XC
Chlorobenzene	ND	0.10		ND	0.46	2	12/18/10 20:29	XC
Chloroethane	ND	0.10		ND	0.26	2	12/18/10 20:29	XC
Chloroform	ND	0.10		ND	0.49	2	12/18/10 20:29	XC
Chloromethane	ND	0.10		ND	0.21	2	12/18/10 20:29	XC
Cyclohexane	0.23	0.10		0.78	0.34	2	12/18/10 20:29	XC
Dibromochloromethane	ND	0.10		ND	0.85	2	12/18/10 20:29	XC
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	12/18/10 20:29	XC
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 20:29	XC
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 20:29	XC
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 20:29	XC
Dichlorodifluoromethane (Freon 12)	0.53	0.10		2.6	0.49	2	12/18/10 20:29	XC
1,1-Dichloroethane	ND	0.10		ND	0.40	2	12/18/10 20:29	XC
1,2-Dichloroethane	ND	0.10		ND	0.40	2	12/18/10 20:29	XC
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 20:29	XC
cis-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 20:29	XC
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 20:29	XC
1,2-Dichloropropane	ND	0.10		ND	0.46	2	12/18/10 20:29	XC
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	12/18/10 20:29	XC
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	12/18/10 20:29	XC
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	12/18/10 20:29	XC
Ethanol	~~47~~	~~9.3~~ 19	UJ	~~25~~	~~17~~ 36	2	12/18/10 20:29	XC
Ethyl Acetate	ND	0.10		ND	0.36	2	12/18/10 20:29	XC
Ethylbenzene	ND	0.10		ND	0.43	2	12/18/10 20:29	XC
4-Ethyltoluene	ND	0.10		ND	0.49	2	12/18/10 20:29	XC
Heptane	1.0	0.10		4.2	0.41	2	12/18/10 20:29	XC
Hexachlorobutadiene	ND	0.10		ND	1.1	2	12/18/10 20:29	XC
Hexane	1.4	0.10		5.0	0.35	2	12/18/10 20:29	XC
2-Hexanone (MBK)	ND	0.10		ND	0.41	2	12/18/10 20:29	XC

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ANALYTICAL RESULTS

Project Location: Tioga Castings, Owego, NY
Date Received: 12/10/2010
Field Sample #: SV-8
Sample ID: 10L0386-03
Sample Matrix: Sub Slab
Sampled: 12/9/2010 12:34

Sample Description/Location:
Sub Description/Location:
Canister ID: 1174
Canister Size: 6 liter
Flow Controller ID: 4075
Sample Type: 30 min

Work Order: 10L0386
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Isopropanol	0.37	0.10	UJ	0.90	0.25	2	12/18/10 20:29	XC
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	12/18/10 20:29	XC
Methylene Chloride	0.76	0.40		2.6	1.4	2	12/18/10 20:29	XC
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	12/18/10 20:29	XC
Propene	ND	0.40		ND	0.69	2	12/18/10 20:29	XC
Styrene	ND	0.10		ND	0.43	2	12/18/10 20:29	XC
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	12/18/10 20:29	XC
Tetrachloroethylene	ND	0.10		ND	0.68	2	12/18/10 20:29	XC
Tetrahydrofuran	ND	0.10		ND	0.29	2	12/18/10 20:29	XC
Toluene	0.20	0.10		0.75	0.38	2	12/18/10 20:29	XC
1,2,4-Trichlorobenzene	ND	0.10	V-05	ND	0.74	2	12/18/10 20:29	XC
1,1,1-Trichloroethane	0.33	0.10		1.8	0.55	2	12/18/10 20:29	XC
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	12/18/10 20:29	XC
Trichloroethylene	ND	0.10		ND	0.54	2	12/18/10 20:29	XC
Trichlorofluoromethane (Freon 11)	0.18	0.10		0.99	0.56	2	12/18/10 20:29	XC
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10		ND	0.77	2	12/18/10 20:29	XC
1,2,4-Trimethylbenzene	ND	0.10		ND	0.49	2	12/18/10 20:29	XC
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	12/18/10 20:29	XC
Vinyl Acetate	ND	0.10		ND	0.35	2	12/18/10 20:29	XC
Vinyl Chloride	ND	0.10		ND	0.26	2	12/18/10 20:29	XC
m&p-Xylene	ND	0.20		ND	0.87	2	12/18/10 20:29	XC
o-Xylene	ND	0.10		ND	0.43	2	12/18/10 20:29	XC

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	102	70-130	12/18/10 20:29

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ANALYTICAL RESULTS

Project Location: Tioga Castings, Owego, NY
Date Received: 12/10/2010
Field Sample #: SV-X
Sample ID: 10L0386-04
Sample Matrix: Sub Slab
Sampled: 12/9/2010 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 1670
Canister Size: 6 liter
Flow Controller ID: 4016
Sample Type: 30 min

Work Order: 10L0386
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Acetone	ND	0.40		ND	0.95	2	12/18/10 21:48	XC
Benzene	0.30	0.10	NJ	0.96	0.32	2	12/18/10 21:48	XC
Benzyl chloride	ND	0.10		ND	0.52	2	12/18/10 21:48	XC
Bromodichloromethane	ND	0.10		ND	0.67	2	12/18/10 21:48	XC
Bromoform	ND	0.10		ND	1.0	2	12/18/10 21:48	XC
Bromomethane	ND	0.10		ND	0.39	2	12/18/10 21:48	XC
1,3-Butadiene	ND	0.10		ND	0.22	2	12/18/10 21:48	XC
2-Butanone (MEK)	~~0.27~~ 0.27 U	~~0.10~~		~~0.79~~	~~0.29~~ 0.79 U	2	12/18/10 21:48	XC
Carbon Disulfide	0.56	0.10		1.7	0.31	2	12/18/10 21:48	XC
Carbon Tetrachloride	ND	0.10		ND	0.63	2	12/18/10 21:48	XC
Chlorobenzene	ND	0.10		ND	0.46	2	12/18/10 21:48	XC
Chloroethane	ND	0.10		ND	0.26	2	12/18/10 21:48	XC
Chloroform	ND	0.10		ND	0.49	2	12/18/10 21:48	XC
Chloromethane	ND	0.10		ND	0.21	2	12/18/10 21:48	XC
Cyclohexane	0.30	0.10		1.0	0.34	2	12/18/10 21:48	XC
Dibromochloromethane	ND	0.10		ND	0.85	2	12/18/10 21:48	XC
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	12/18/10 21:48	XC
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 21:48	XC
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 21:48	XC
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	12/18/10 21:48	XC
Dichlorodifluoromethane (Freon 12)	0.29	0.10		1.4	0.49	2	12/18/10 21:48	XC
1,1-Dichloroethane	ND	0.10		ND	0.40	2	12/18/10 21:48	XC
1,2-Dichloroethane	ND	0.10		ND	0.40	2	12/18/10 21:48	XC
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 21:48	XC
cis-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 21:48	XC
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	12/18/10 21:48	XC
1,2-Dichloropropane	ND	0.10		ND	0.46	2	12/18/10 21:48	XC
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	12/18/10 21:48	XC
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	12/18/10 21:48	XC
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	12/18/10 21:48	XC
Ethanol	ND	1.0	UJ	ND	1.9	2	12/18/10 21:48	XC
Ethyl Acetate	ND	0.10		ND	0.36	2	12/18/10 21:48	XC
Ethylbenzene	ND	0.10		ND	0.43	2	12/18/10 21:48	XC
4-Ethyltoluene	ND	0.10		ND	0.49	2	12/18/10 21:48	XC
Heptane	6.3	0.10		26	0.41	2	12/18/10 21:48	XC
Hexachlorobutadiene	ND	0.10		ND	1.1	2	12/18/10 21:48	XC
Hexane	17	0.10		60	0.35	2	12/18/10 21:48	XC
2-Hexanone (MBK)	ND	0.10		ND	0.41	2	12/18/10 21:48	XC

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ANALYTICAL RESULTS

Project Location: Tioga Castings, Owego, NY
Date Received: 12/10/2010
Field Sample #: SV-X
Sample ID: 10L0386-04
Sample Matrix: Sub Slab
Sampled: 12/9/2010 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 1670
Canister Size: 6 liter
Flow Controller ID: 4016
Sample Type: 30 min

Work Order: 10L0386
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	Results	RL	Flag	Results	RL	Dilution	Analyzed	Analyst
Isopropanol	ND	0.10	UJ	ND	0.25	2	12/18/10 21:48	XC
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	12/18/10 21:48	XC
Methylene Chloride	ND	0.40		ND	1.4	2	12/18/10 21:48	XC
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	12/18/10 21:48	XC
Propene	ND	0.40		ND	0.69	2	12/18/10 21:48	XC
Styrene	ND	0.10		ND	0.43	2	12/18/10 21:48	XC
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	12/18/10 21:48	XC
Tetrachloroethylene	ND	0.10		ND	0.68	2	12/18/10 21:48	XC
Tetrahydrofuran	ND	0.10		ND	0.29	2	12/18/10 21:48	XC
Toluene	0.38	0.10		1.4	0.38	2	12/18/10 21:48	XC
1,2,4-Trichlorobenzene	ND	0.10	V-05	ND	0.74	2	12/18/10 21:48	XC
1,1,1-Trichloroethane	0.31	0.10		1.7	0.55	2	12/18/10 21:48	XC
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	12/18/10 21:48	XC
Trichloroethylene	ND	0.10		ND	0.54	2	12/18/10 21:48	XC
Trichlorofluoromethane (Freon 11)	ND	0.10		ND	0.56	2	12/18/10 21:48	XC
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10		ND	0.77	2	12/18/10 21:48	XC
1,2,4-Trimethylbenzene	ND	0.10		ND	0.49	2	12/18/10 21:48	XC
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	12/18/10 21:48	XC
Vinyl Acetate	ND	0.10		ND	0.35	2	12/18/10 21:48	XC
Vinyl Chloride	ND	0.10		ND	0.26	2	12/18/10 21:48	XC
m&p-Xylene	ND	0.20		ND	0.87	2	12/18/10 21:48	XC
o-Xylene	ND	0.10		ND	0.43	2	12/18/10 21:48	XC

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	101	70-130	12/18/10 21:48

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ANALYTICAL RESULTS

Project Location: Tioga Castings, Owego, NY
Date Received: 12/10/2010
Field Sample #: AA-2
Sample ID: 10L0386-05
Sample Matrix: Ambient Air
Sampled: 12/9/2010 12:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 1497
Canister Size: 6 liter
Flow Controller ID: 4078
Sample Type: 30 min

Work Order: 10L0386
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): --
Receipt Vacuum(in Hg): -2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	Results	RL	Flag	Results	RL	Dilution	Analyzed	Analyst
Acetone	~~2.8~~	~~0.11~~ 2.8 U		~~6.7~~	~~0.26~~ 6.7 U	0.702	12/18/10 17:10	XC
Benzene	0.11	0.035		0.34	0.11	0.702	12/18/10 17:10	XC
Benzyl chloride	ND	0.035		ND	0.18	0.702	12/18/10 17:10	XC
Bromodichloromethane	ND	0.035		ND	0.24	0.702	12/18/10 17:10	XC
Bromoform	ND	0.035		ND	0.36	0.702	12/18/10 17:10	XC
Bromomethane	ND	0.035		ND	0.14	0.702	12/18/10 17:10	XC
1,3-Butadiene	ND	0.035		ND	0.078	0.702	12/18/10 17:10	XC
2-Butanone (MEK)	~~0.36~~	~~0.035~~ 0.54 U		~~1.0~~	~~0.10~~ 1.6 U	0.702	12/18/10 17:10	XC
Carbon Disulfide	ND	0.035		ND	0.11	0.702	12/18/10 17:10	XC
Carbon Tetrachloride	0.073	0.035		0.46	0.22	0.702	12/18/10 17:10	XC
Chlorobenzene	ND	0.035		ND	0.16	0.702	12/18/10 17:10	XC
Chloroethane	ND	0.035		ND	0.093	0.702	12/18/10 17:10	XC
Chloroform	ND	0.035		ND	0.17	0.702	12/18/10 17:10	XC
Chloromethane	0.51	0.035		1.1	0.072	0.702	12/18/10 17:10	XC
Cyclohexane	ND	0.035		ND	0.12	0.702	12/18/10 17:10	XC
Dibromochloromethane	ND	0.035		ND	0.30	0.702	12/18/10 17:10	XC
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	12/18/10 17:10	XC
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/18/10 17:10	XC
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/18/10 17:10	XC
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/18/10 17:10	XC
Dichlorodifluoromethane (Freon 12)	0.22	0.035		1.1	0.17	0.702	12/18/10 17:10	XC
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	12/18/10 17:10	XC
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	12/18/10 17:10	XC
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/18/10 17:10	XC
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/18/10 17:10	XC
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/18/10 17:10	XC
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	12/18/10 17:10	XC
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/18/10 17:10	XC
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/18/10 17:10	XC
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	12/18/10 17:10	XC
Ethanol	~~0.86~~	~~0.35~~ 0.86 UJ		~~1.6~~	~~0.66~~ 1.6 UJ	0.702	12/18/10 17:10	XC
Ethyl Acetate	ND	0.035		ND	0.13	0.702	12/18/10 17:10	XC
Ethylbenzene	ND	0.035		ND	0.15	0.702	12/18/10 17:10	XC
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	12/18/10 17:10	XC
Heptane	ND	0.035		ND	0.14	0.702	12/18/10 17:10	XC
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	12/18/10 17:10	XC
Hexane	ND	0.035		ND	0.12	0.702	12/18/10 17:10	XC
2-Hexanone (MBK)	0.10	0.035		0.43	0.14	0.702	12/18/10 17:10	XC

con-test ANALYTICAL LABORATORY
39 Spruce Street * East Longmeacow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Tioga Castings, Owego, NY
Date Received: 12/10/2010
Field Sample #: AA-2
Sample ID: 10L0386-05
Sample Matrix: Ambient Air
Sampled: 12/9/2010 12:31

Sample Description Location:
Sub Description/Location:
Canister ID: 1497
Canister Size: 6 liter
Flow Controller ID: 4078
Sample Type: 30 min

Work Order: 10L0386
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
(+/-) Pre and Post-Sampling

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Isopropanol	0.12	0.035	J	0.29	0.086	0.702	12/18/10 17:10	XC
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	12/18/10 17:10	XC
Methylene Chloride	0.15	0.14		0.52	0.49	0.702	12/18/10 17:10	XC
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	12/18/10 17:10	XC
Propene	ND	0.14		ND	0.24	0.702	12/18/10 17:10	XC
Styrene	ND	0.035		ND	0.15	0.702	12/18/10 17:10	XC
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	12/18/10 17:10	XC
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	12/18/10 17:10	XC
Tetrahydrofuran	ND	0.035		ND	0.10	0.702	12/18/10 17:10	XC
Toluene	0.050	0.035		0.19	0.13	0.702	12/18/10 17:10	XC
1,2,4-Trichlorobenzene	ND	0.035	V-05	ND	0.26	0.702	12/18/10 17:10	XC
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	12/18/10 17:10	XC
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	12/18/10 17:10	XC
Trichloroethylene	ND	0.035		ND	0.19	0.702	12/18/10 17:10	XC
Trichlorofluoromethane (Freon 11)	0.19	0.035		1.0	0.20	0.702	12/18/10 17:10	XC
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.060	0.035		0.46	0.27	0.702	12/18/10 17:10	XC
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.702	12/18/10 17:10	XC
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	12/18/10 17:10	XC
Vinyl Acetate	ND	0.035		ND	0.12	0.702	12/18/10 17:10	XC
Vinyl Chloride	ND	0.035		ND	0.090	0.702	12/18/10 17:10	XC
m&p-Xylene	ND	0.070		ND	0.30	0.702	12/18/10 17:10	XC
o-Xylene	ND	0.035		ND	0.15	0.702	12/18/10 17:10	XC

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	103	70-130	12/18/10 17:10