

New York State Department of Environmental Conservation

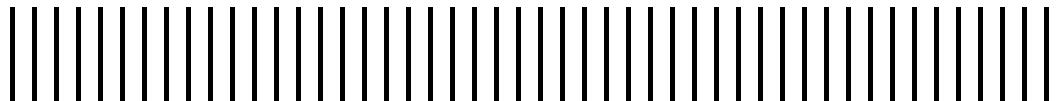
625 Broadway • Albany, New York 12233

Construction Completion Report

**Techem Site #1-30-097
1840 Falmouth Avenue
New Hyde Park, New York**

Work Assignment # D-004439-5

March 2011



Report Prepared By:

Malcolm Pirnie, Inc.

0266356

855 Route 146, Suite 210
Clifton Park, New York 12065
518-250-7300

**MALCOLM
PIRNIE**

New York State Department of
Environmental Conservation
Albany, New York

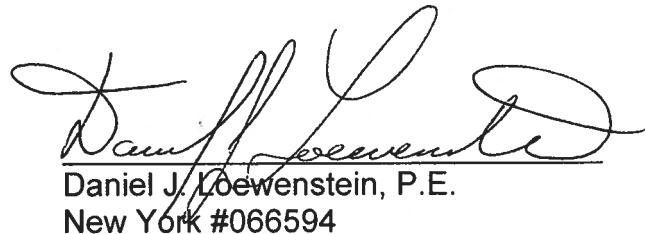
Construction Certification Report

Techem Site
New Hyde Park, New York
Site # 1-30-097

Work Assignment # D-004439-5

March 2011

I certify that this Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved Standby Contractor Authorization Form and any DER-approved modifications.



Daniel J. Loewenstein, P.E.
New York #066594

Malcolm Pirnie, Inc
855 Route 146, Suite 210
Clifton Park, New York 12065

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1. Introduction

The New York State Department of Environmental Conservation (NYSDEC) tasked Malcolm Pirnie, Inc. (Malcolm Pirnie) to perform a Remedial Investigation/Feasibility Study (RI/FS) at the Techem, Inc. (Techem) Site (No. 1-30-097), located at 1840 Falmouth Avenue in the Town of New Hyde Park, Nassau County, New York (Site). The RI/FS was conducted under the NYSDEC State Superfund Standby Contract Work Assignment No. D004439-5. Based on the results of the RI/FS, the NYSDEC determined to implement several interim remedial measures (IRMs). This report summarizes the construction activities associated with implementation of the soil excavation, piezometer abandonment, and cesspool filling IRMs . The work was performed in February 2011 by the NYSDEC's Standby Contractor, Fenley & Nicol Environmental, Inc., in accordance with the NYSDEC's December 2010 Standby Contractor Authorization Form.



2. Background

2.1. Site Description

The Techem site is located at 1840 Falmouth Avenue, New Hyde Park, in Nassau County, New York (Figure 1). The site is located in a mixed industrial and residential area. The site is the former location of Techem, Inc. and consists of 0.18 acres. A chain-link fence surrounds the southern and eastern perimeter of the site. The site contains a one-story slab on-grade masonry block building that was constructed in approximately 1955 (Figures 2 and 3) (Lawler, Matusky, and Skelly, 2000). The building has an attached metal enclosure on its south side. The metal enclosure is approximately the same width as the Techem building and appears to extend to the southern border of the property. The west side of the building contains a narrow (approximately 4 feet) covered alley. The alley is secured by a locked metal door, and two approximately 275 gallon above ground storage tanks (ASTs) are in the northern portion of the alley. The ground surface in the alley is mainly gravel. With the exception of two grass-covered areas on the north side of the Techem building that total approximately 200 square feet (ft^2) and the narrow alley on the west side, the site is covered either by concrete or asphalt.

2.2. Site History

The Techem facility formerly manufactured acid-based chromium, cadmium, cyanide, nickel, and zinc electroplating solutions. Materials used in the manufacturing solutions included: chromic acid, hydrochloric acid, sulfuric acid, cadmium oxide, caustic soda, sodium cyanide, sodium stannate, copper cyanide, ethylenediamine, and ammonium hydroxide. Techem Inc. occupied the site from 1973 through 1994 and was owned by Mr. Sidney Gerwertz. During this time, Mr. Gerwertz claimed that he produced no wastes. Previous investigations found no documentation of any wastes manifested from the site (Lawler, Matusky, and Skelly, 2000).

2.3. Conceptual Site Model

The Techem property is situated at an elevation of approximately 100 feet above mean sea level (AMSL) in central Nassau County. Land use in the immediate vicinity of the site is mixed-use light industrial and commercial, with the closest residential area east of Denton Avenue. The topography in the vicinity of the site slopes gradually to the southwest. Based on soil cores evaluated during the RI, sub-surface soil beneath the site generally consists of orange-brown medium-coarse to medium-fine sands, with varying amounts of gravel. Saturated soil conditions were generally noted at a depth of approximately 33 feet. A water level survey completed during the RI indicated that the groundwater elevation in April 2010 was approximately 67 feet amsl and the direction of



groundwater flow is generally toward the south. Surface water was not observed on the Techem property during site activities. Based on site conditions, storm water would runoff and enter municipal storm water sewers.

Based on previous sampling and investigations at the site between 1982 and 1993, past activities at the site have contributed to impacts to soil and groundwater at the site, including the metals cadmium, chromium, iron, copper, lead, nickel, and selenium (Lawler, Matusky, and Skelly, 2000). Between 1993 and 1995 USEPA removed approximately 1,500 small containers and 1,250 drums of hazardous chemicals identified during the site inventory and excavated soil beneath the former sump and several areas containing affected soil (Figure 4). The excavations were backfilled with clean soil and resurfaced with concrete (Lawler, Matusky, and Skelly, 2000). A limited Phase II ESA was conducted at the Techem site in 1998 found that nickel and zinc were present in sub-surface soil in the vicinity of the cesspool (Lawler, Matusky, and Skelly, 2000).

In 1999, a NYSDEC PSA confirmed the presence of metals (arsenic, beryllium, cadmium, chromium, cobalt, mercury, nickel, selenium, and zinc) in soil and/or groundwater greater than the applicable NYSDEC Standards. In addition 1,1,1-TCA was present in groundwater samples collected from temporary wells located in the vicinity of the former sump at concentrations greater than the applicable NYSDEC Class GA Standard (Lawler, Matusky, and Skelly, 2000).

Based on the results of the RI, sub-surface soil samples collected from the interval from 0 to 5 feet bgs near the cesspool, former sump/drywell, and the access way on the east side of the building, indicated the presence of cadmium, chromium, copper, nickel and/or cyanide greater than the applicable NYSDEC Cleanup Objectives. In addition sub-surface soil samples collected up to 25 feet bgs from the northeast corner of the site near the cesspool; up to 15 feet bgs in the access way on the east side of the building; and up to 35 feet bgs near the former sump/dry well, contain concentrations of cadmium greater than the corresponding NYSDEC Cleanup Objective.

Groundwater samples collected during the RI indicated the presence of cadmium, chromium, copper, iron, lead, manganese, nickel, selenium, and sodium at concentrations greater than the applicable NYSDEC Class GA Standards. Due to elevated sample turbidity, the groundwater samples were also filtered and submitted for dissolved metals analysis. The cadmium, chromium, iron, nickel, selenium, and sodium concentrations in the dissolved samples, exceeded the corresponding NYSDEC Class GA Groundwater Standards.

Soil vapor intrusion samples collected during the RI indicate the presence of PCE in soil vapor, and the presence of PCE and carbon tetrachloride in indoor and ambient air.

Although no VOCs were detected in sub-surface soil or groundwater samples, historical indications of VOCs in soil and groundwater indicate a potential source for VOCs in soil



vapor. Based on the concentrations of these compounds, the NYSDOH decision matrix criteria indicate that further action is required to identify the source(s) and reduce the potential exposure to carbon tetrachloride and to continue to monitor and/or mitigate potential exposure pathways to PCE.



3. Interim Remedial Measures

The following activities were conducted as IRMs by Fenley & Nicol Environmental, Inc. as a Standby Contractor to the NYSDEC in February 2011 in accordance with the NYSDEC's December 2010 Standby Contractor Authorization Form (Appendix A):

- Excavation and disposal of surface/shallow subsurface soil from between the site building and the sidewalk along Falmouth Avenue
- Abandonment of five piezometers
- Filling of a former cesspool with flowable fill and concrete

The locations of the excavation area, piezometers and cesspool are shown on Figure 5. Photographs depicting IRM activities are provided in Appendix B.

3.1. Soil Excavation

Based on surface soil samples collected during the RI, three grass-covered areas on the north side of the Techem building that totaled approximately 425 square feet (ft^2) contained metals at concentrations exceeding the respective 6 NYCRR Part 375 Commercial Soil Cleanup Objectives. Approximately 54 tons (36 cubic yards) of soil was excavated from these areas and transported to an off-site disposal facility as non-hazardous waste in accordance with applicable federal, state, and local regulations. Analytical data used for characterization of this material are included in Appendix C. Scale tickets from the disposal facility documenting disposal of the soil are included in Appendix D. The horizontal limits of the excavations were defined by the site building to the south, a concrete retaining wall to the west, the sidewalk to the north, and the concrete sidewalks to the east. Soil samples were collected at the bottom of the excavations to verify that soil containing metals at concentrations greater than 6 NYCRR Part 375 Commercial Soil Cleanup Objectives did not remain. As shown on Table 1, these data confirmed removal of metals-impacted soil. Analytical laboratory reporting forms are provided in Appendix C.

As shown in Appendix B, a four inch diameter sewer line was damaged by the backhoe during the IRM excavation. The sewer was confirmed to be for the western-most bathroom in the building. The sewer line exited the north side of the building near the western end of the excavation at a depth of approximately two feet below ground surface.



The sewer line then turned 90 degrees to the east and paralleled the north side of the building. Damage to the line occurred along the portion that parallels the north side of the building. The damaged section was removed and replaced with a section of four inch Schedule 80 PVC pipe. The new section of pipe was joined to the existing line with flexible rubber (i.e. Fernco) fittings. Following the repair the line was flushed and no leaks were observed.

As shown in Appendix B, a metal entryway door to the Techem building was damaged by the backhoe during the IRM excavation. The outrigger from the backhoe contacted the eastern-most entry door causing damage to the bottom portion of the door. The excavation was stopped and the backhoe repositioned and completed the excavation. The damaged door was straightened and confirmed to operate properly. However, cosmetic damage was still present.

The excavation areas were backfilled with sand from New York State Department of Transportation (NYSDOT) source #10-34F. The backfill submittal to the NYSDEC for this source by Fenley & Nicol is provided in Appendix E. The backfill was mechanically compacted in one-foot lifts. The excavation area was covered with topsoil and grass seed to restore it to pre-excavation conditions.

3.2. Piezometer Abandonment

Prior to IRM activities the depth to water in each piezometer was measured using an oil/water interface probe and recorded. Groundwater elevations are summarized in Table 2. The five 40 feet deep, 1-inch diameter piezometers on the site (PZ-1 through PZ-5) were abandoned in general accordance with NYSDEC Commissioner Policy 43: Groundwater Monitoring Well Decommissioning Policy (CP-43), with the exception of PZ-1. Piezometer PZ-1 (located in the western portion of the excavation) was damaged during the IRM excavation. The backhoe was excavating near PZ-1 and accidentally caught, broke, and removed an approximately 10 feet section of the piezometer riser pipe. The piezometer boring filled in with soil and could not be relocated or properly abandoned. Piezometer PZ-1 was screened across the water table in the Upper Glacial Aquifer (UGA). Since the metals-impacted soil were removed from the area of PZ-1 and replaced with clean backfill, no impacts to groundwater from the damaged piezometer are expected. For the remaining piezometers, the surface protective casing (curb box) was removed after filling the piezometer with grout to five feet below ground surface. The piezometer riser was left in place and the top portion of the casing and associated piezometer materials were removed from the ground. The uppermost portion of the borehole was filled with material similar to the native soils/fill. The surface of the borehole was restored to the condition of the area surrounding the borehole (i.e. concrete or topsoil with grass seed).



3.3. Cesspool Filling

An approximately 3-foot diameter, 20-foot deep former cesspool was located outside the site building. The cesspool was previously filled to within approximately 6 feet of the ground surface with soil. The cesspool was filled with flowable fill to within one-foot of ground surface. The flowable fill consisted of a free-flowing, self-consolidating, self-leveling, non-segregating, low-shrink cement/sand mix with a minimum unconfined compressive strength at 28 days of 100 psi. The flowable fill submittal to the NYSDEC by Fenley & Nicol is provided in Appendix E. The cesspool was covered at the top with a one-foot layer of concrete.



4. References

Lawler, Matusky, and Skelly, 2000, Preliminary Site Assessment Report, Volume I, Techem Inc. Site, 1840 Falmouth Avenue, New Hyde Park, New York, Site No. 1-30-097. Lawler, Matusky, and Skelly Engineers, LLP, May 2000.

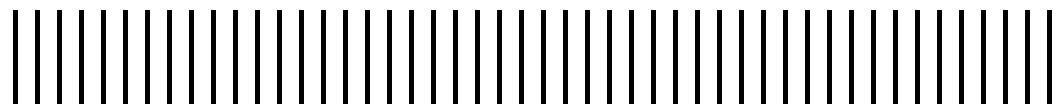
New York State Department of Environmental Conservation, 2010, DER-10 Technical Guidance for Site Investigation and Remediation, May 2010.

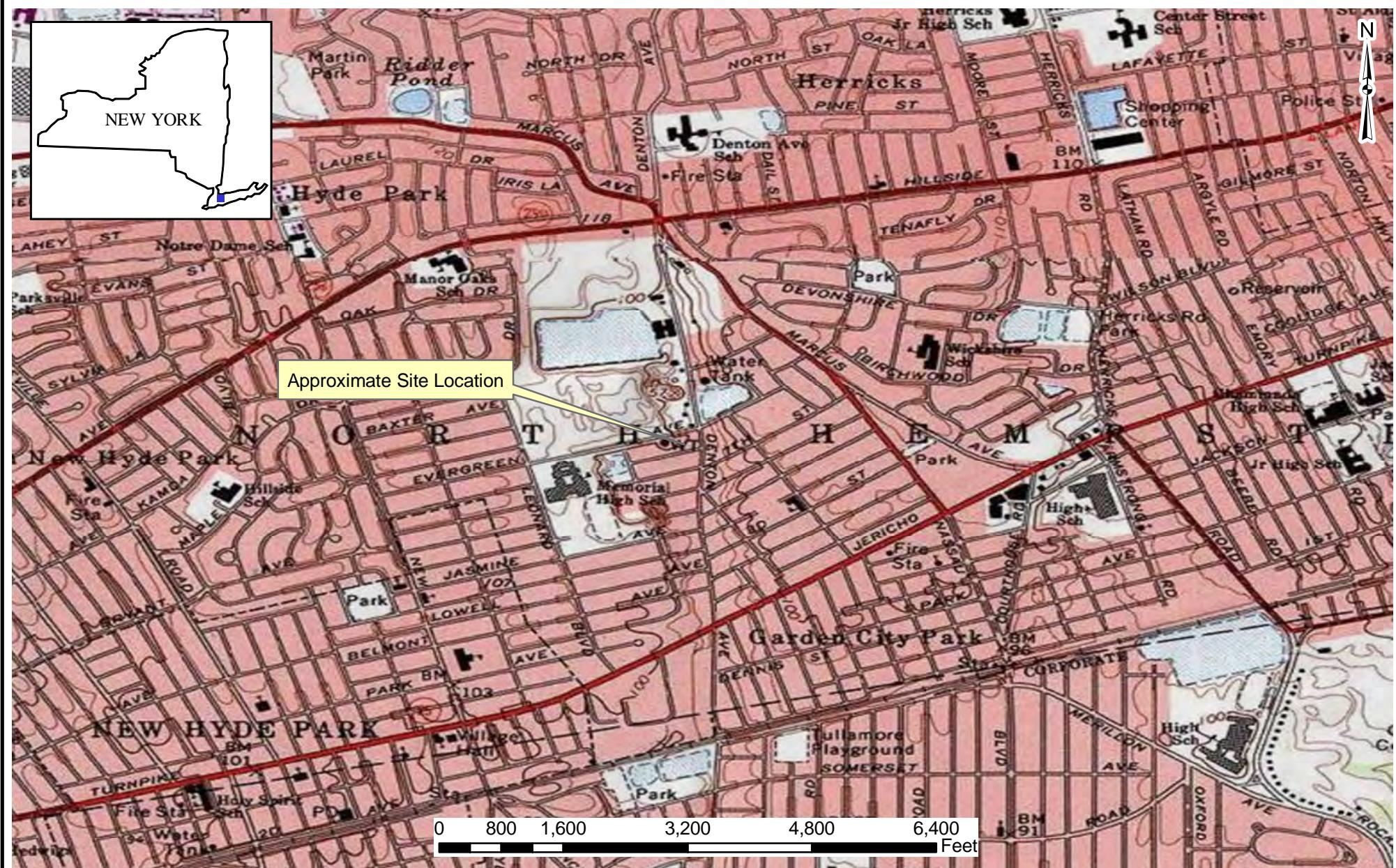
Stumm, Frederick, Lange, Andrew D., and Jennifer Candela, 2002, Hydrogeology and Extent of Saltwater Intrusion on Manhasset Neck, Nassau County, New York: U.S. Geological Survey – Water Resources Investigations Report 00-4193, p. 42.



New York State Department of Environmental Conservation
Construction Completion Report – Techem Site

Figures

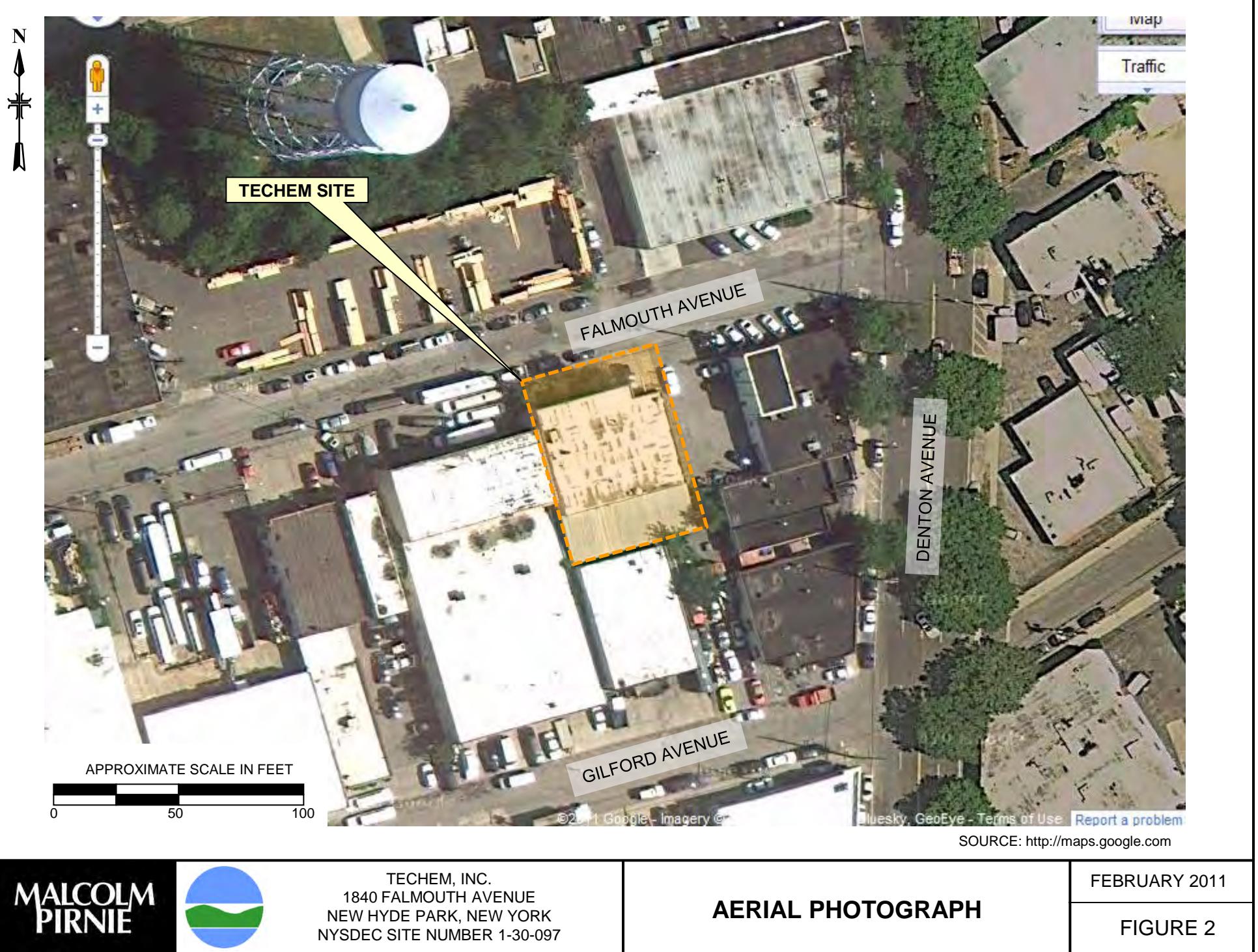


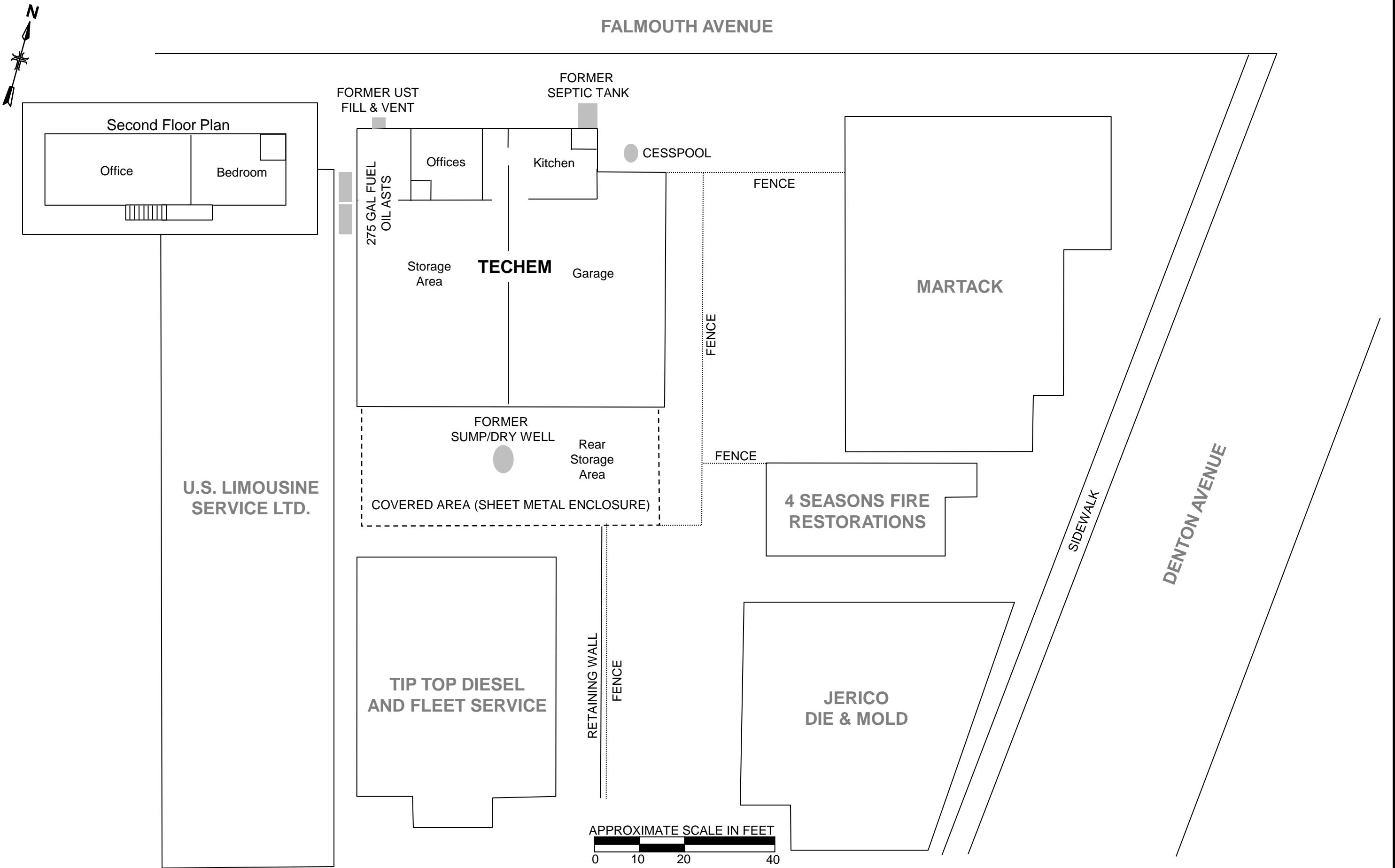


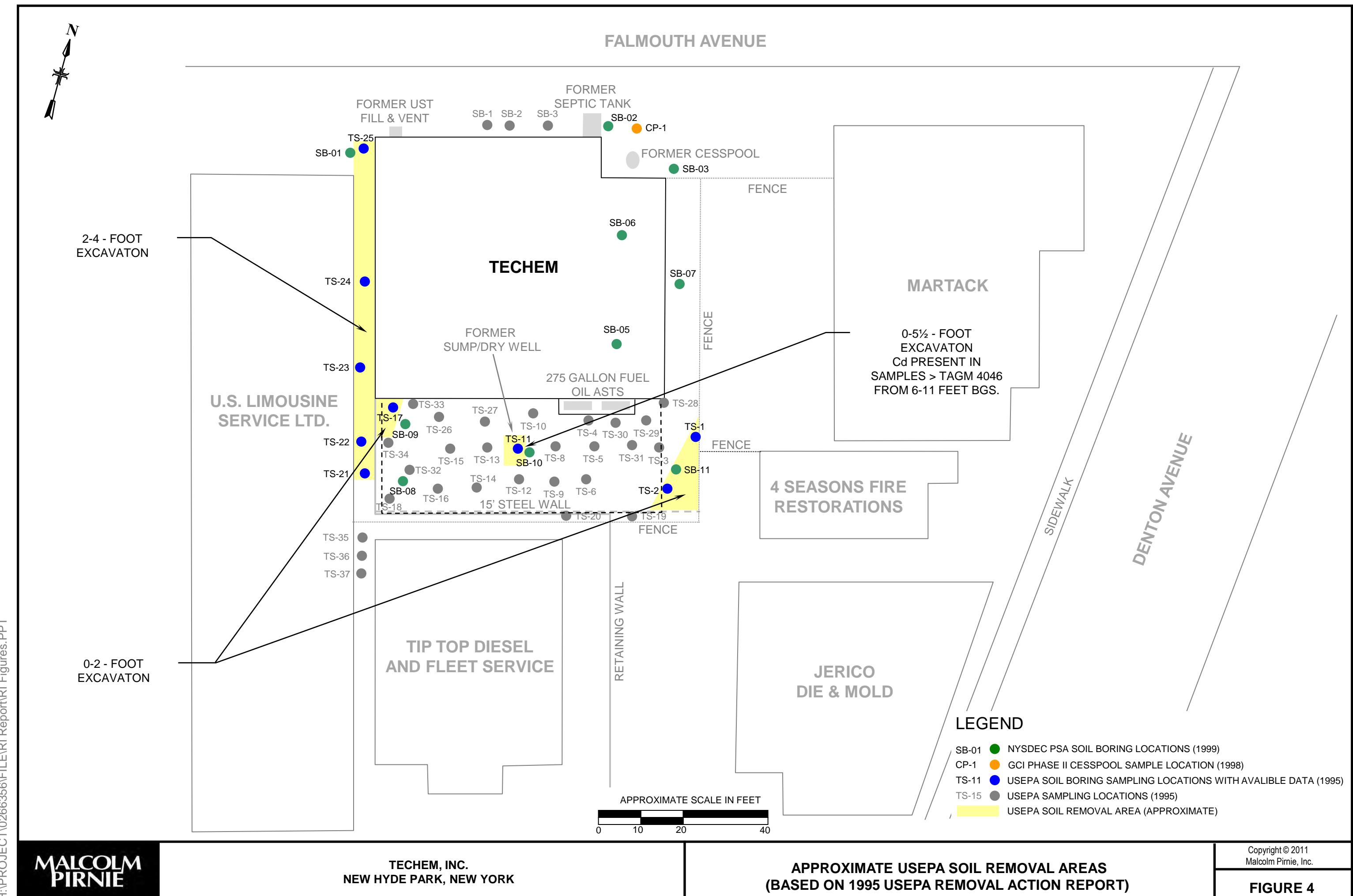
TECHEM, INC.
1840 FALMOUTH AVENUE
NEW HYDE PARK, NEW YORK
NYSDEC SITE # 1-30-097

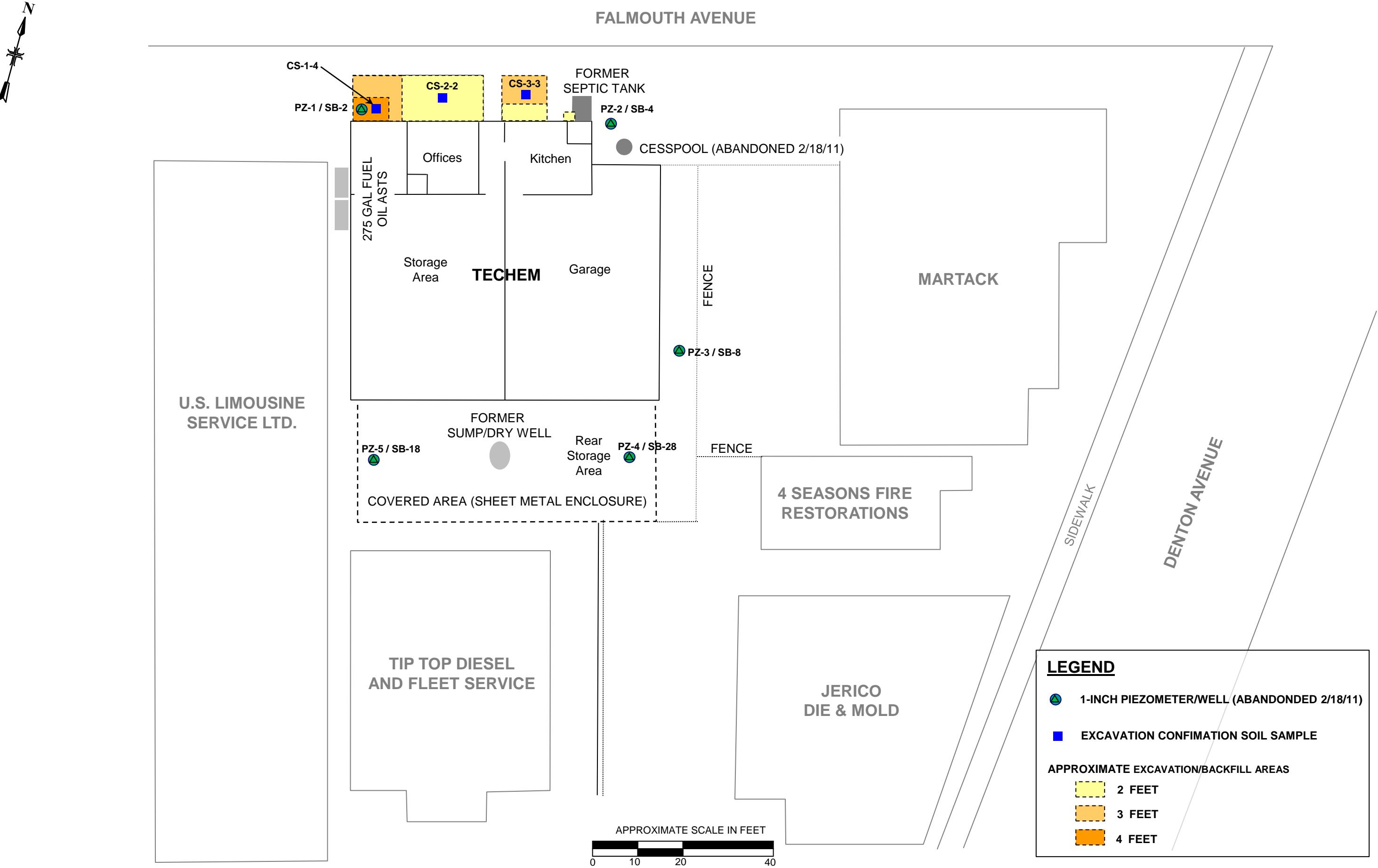
SITE LOCATION

MALCOLM PIRNIE, INC.
FEBRUARY 2011
FIGURE 1









New York State Department of Environmental Conservation
Construction Completion Report – Techem Site

Tables

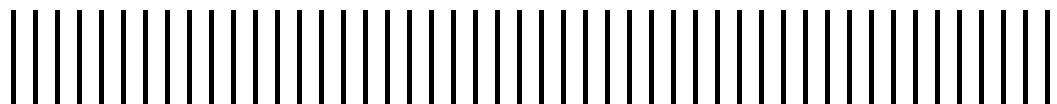


Table 1
Summary of Confirmatory Soil Sampling Results - Metals
Interim Remedial Measure
Techem Site No. 1-30-097

Sample Date Units	NYCRR Part 375 Unrestricted Use Soil Cleanup Objective	NYCRR Part 375 Commercial Soil Cleanup Objective	CS-1-4 2/16/2011 mg/Kg	CS-2-2 2/16/2011 mg/Kg	CS-3-3 2/17/2011 mg/Kg
Compound					
Aluminum			4520	3030	7010
Antimony			0.46 J	0.367 J	0.716 J
Arsenic	13	16	3.26	2	5.22
Barium	350	400	33.7	20.3	33.9
Beryllium	7.2	590	0.214 J	0.156 J	0.316 J
Cadmium	2.5	9.3	0.556	0.563	1.08
Calcium			966	1020	3120
Chromium	30	400	6.37	6.91	16.3
Cobalt			2.57 J	2.28 J	4.36 J
Copper	50	270	8.44	6.41	24.9
Cyanide	27	27	--	--	--
Iron			8040	7910	14300
Lead	63	1,000	21.8	11.8	26.8
Magnesium			726	944	1470
Manganese	1,600	10,000	96	138	189
Mercury	0.81	2.8	0.08 J	0.12 U	0.05 J
Nickel	30	310	7.58	5.71	11.4
Potassium			193 J	262 J	347 J
Selenium	3.9	1,500	3.74 U	3.18 U	0.504 J
Silver	2	1,500	1.07 U	0.909 U	1.75
Sodium			54.9 J	19 J	69.3 J
Thallium			2.67 U	2.27 U	2.35 U
Vanadium			7.54	7.26	15.9
Zinc	109	10,000	65.5	24.7	41.5

Qualifiers

U - Compound not detected below the indicated reporting limit.

J - Analyte identified, but associated concentration is an approximate value.

UJ - Compound not detected. Reported quantitation limit is an estimate.

 - Exceeds 6 NYCRR PART 375 Soil Cleanup Objective (SCO)

Table 2
Summary of Groundwater Elevations
Interim Remedial Measure
Techem Site No. 1-30-097

Well	Top of Casing Elevation* (Feet)	2/8/2010		4/20/2010		2/15/2011	
		Depth to Water (Feet BTOC)	Elevation (Feet)	Depth to Water (Feet BTOC)	Elevation (Feet)	Depth to Water (Feet BTOC)	Elevation (Feet)
PZ-1	99.00	32.16	66.84	27.03	71.97	31.04	67.96
PZ-2	99.41	32.60	66.81	27.45	71.96	31.50	67.91
PZ-3	99.90	33.07	66.83	27.96	71.94	31.97	67.93
PZ-4	100.00	33.27	66.73	28.15	71.85	32.12	67.88
PZ-5	100.03	33.33	66.70	28.28	71.75	32.23	67.80

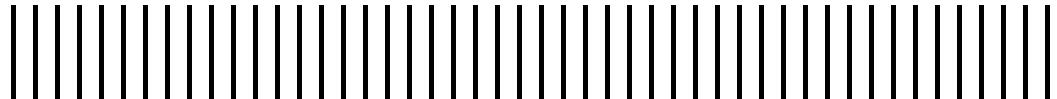
Notes:

* - Referenced from on-site datum designated as 100 feet above mean sea level (amsl)

BTOC - Below top of casing

New York State Department of Environmental Conservation
Construction Completion Report – Techem Site

Appendix A:
Standby Contractor Authorization
Form





NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION

STANDBY CONTRACTOR AUTHORIZATION FORM
For Response & Containment, Investigation & Remediation
and Laboratory Services Contractors

General Information

Region: 1 **Site No.:** 130097 **CallOut ID:** 119516

CallOut 12/13/2010

Contract No.: C100800 **PIN (if applicable):**

Contractor Selected: FENLEY & NICOL ENVIRONMENTAL, INC. (RES)

Location of Site: Techem, Inc., 1840 Falmouth Avenue, New Hyde Park (Nassau Co.)

SCOPE OF WORK (Provide brief detailed description):

The call-out contractor shall provide the following services:

- Excavation and disposal of approximately 800 ft³ of soil
- Abandonment of 5 piezometers
- Filling a former cesspool with flowable fill

Item 1. Soil Excavation

The call-out contractor shall provide all necessary excavation equipment and a plate compactor with licensed operator(s) to conduct soil excavation and backfilling at the Site. The call-out contractor shall excavate soil containing metals and compact clean backfill material. Approximately 800 cubic feet (400 ft² by two foot thick) of soil will be excavated and disposed

of off-site in accordance with applicable federal, state, and local regulations. Based on soil analytical results from samples collected at the site (Tables 1 to 6), it is anticipated that the surface soil will be disposed of as non-hazardous waste. Appropriate clearance must be maintained from power lines (shown in the attached photographs) located adjacent to and above the excavation area. The call-out contractor shall:

- Be solely responsible for all permits and mobilization and demobilization of equipment;
- Allow samples to be obtained by others at the sidewalls or bottom of the excavation. The call-out contractor should assume 48-hour turn-around time for the soil sample analytical results;
- Provide certified clean fill (certified for metals) to backfill the excavation;
- Mechanically compact the backfill in one-foot lifts;
- Restore the excavation area to pre-excavation conditions (including topsoil, grass seed, straw, and concrete/asphalt where applicable);
- Fully decontaminate the equipment prior to leaving the Site;
- Be solely responsible for providing all decontamination equipment, labor, materials and supplies; and
- Dispose of all decontamination wastes at an off-site facility licensed to receive wastes of that type.

Item 2. Piezometer Abandonment

The call-out contractor shall abandon the 5 piezometers located on site in accordance with NYSDEC Commissioner Policy 43: Groundwater Monitoring Well Decommissioning Policy (CP-43), which was issued on November 3, 2009. The piezometers are 1-inch in diameter and are approximately 40 feet deep. The soil boring/piezometer construction logs are attached. The surface protective casing (curb box) will be removed after filling the monitoring well with grout to five feet below ground surface. If the well riser will be left in place, top of the riser will be cut five feet below ground surface. The top portion of the casing and associated well materials will be removed from the ground. The uppermost five feet of the borehole

shall be filled with material similar to the native soils/fill. The surface of the borehole shall be restored to the condition of the area surrounding the borehole (i.e. concrete, asphalt, or topsoil with grass seed). All solid waste materials generated shall be disposed of properly.

Item 3. Cesspool Filling

An approximately 3 feet diameter, 20 foot deep former cesspool is located outside the site building. The cesspool is filled to within approximately 6 feet of the ground surface with soil. The call-out contractor shall fill in the cesspool with flowable fill to within one-foot of ground surface. The flowable fill shall consist of a free-flowing, self-consolidating, self-leveling, non-segregating, low-shrink cement/sand mix with a minimum unconfined compressive strength at 28 days of 100 psi. The call-out contractor shall submit flowable fill specifications for NYSDEC review prior to mobilizing to the site. The cesspool shall be covered at the top with a one-foot layer of concrete.

3. ADDITIONAL RESPONSIBILITIES

The NYSDEC will coordinate site access as necessary. The call-out contractor will be responsible for underground utility clearance. The call-out contractor will provide copies of the utility clearance tickets and all utility clearance confirmation documents to the NYSDEC prior to mobilizing to the site. If work is being performed in a high traffic area with people and/or vehicle activity, safety cones and/or yellow caution tape may be necessary to properly mark out the work area. The call-out contractor shall be responsible for securing open excavations. The call-out contractor shall procure all permits necessary to conduct this work and provide these to the NYSDEC prior to mobilizing to the site.

As the work involves activity at an Inactive Hazardous Waste Site, all field personnel must have successfully completed the requisite OSHA HAZWOPER training. Documentation of personnel compliance with the OSHA regulations shall be provided to NYSDEC's Project Manager prior to commencing work at the site. All site activities shall be conducted in accordance with a Site-specific Health and Safety Plan prepared by the call-out contractor in accordance with applicable OSHA regulations.

4. SCHEDULE

The IRM activities are anticipated to be conducted in December 2010 or January 2011.

If your firm wishes to be considered for this work, please provide the following information:

- 1 Availability of your firm to start the project.
- 2 Proposed Schedule

see attached for additional information

ESTIMATED BUDGET: \$ 19,575.00

This serves as authorization to incur costs up to the budgeted amount indicated, to perform the scope of work outlined above in connection with the above-referenced spill/site call out number. The contractor is responsible for immediately notifying the DER project manager if it becomes apparent that the scope of work can not be completed within the budget and/or the scope of work should be amended. The contractor should not incur costs that exceed the budget or perform activities outside the scope of work without the verbal or written approval of the DER project manager. The DER project manager must confirm that approval in writing in an amended Standby Contractor Authorization Form signed by the DER project manager and Rep within two business days.

DER Project Manager Name/Title:

Matthew A. Whitfield EE2
(Print)

Matthew A. Whitfield
(Signature)

Date: 12/20/10

Authorized DER Representative Name/Title:

Daniel J. Evans EE3
(Print)

Daniel J. Evans
(Signature)

Date: 12/20/10

**SCOPE OF WORK FOR INTERIM REMEDIAL MEASURES TECHEM, INC. (1-30-097)
NEW HYDE PARK, NASSAU COUNTY, NEW YORK**

1. PROJECT DESCRIPTION

The New York State Department of Environmental Conservation (NYSDEC) is requesting call-out contractor services at the Techem Inc. (Techem) site located at 1840 Falmouth Avenue in New Hyde Park, New York (Figure 1). A remedial investigation is being performed at the site which requires implementation of interim remedial measures (IRMs).

The site is located in a mixed industrial and residential area. The site is the former location of Techem, Inc. and consists of 0.18 acres. A chain-link fence surrounds the southern and eastern perimeter of the site. The site contains a one-story slab on-grade masonry block building that was constructed in approximately 1955. The building has an attached metal enclosure on its south side. The metal enclosure is approximately the same width as the Techem building and appears to extend to the southern border of the property. The west side of the building contains a narrow (approximately 4 feet) covered alley. With the exception of two grass-covered areas on the north side of the Techem building that total approximately 400 square feet (² ft) and the narrow alley on the west side, the site is covered either by concrete or asphalt.

The Techem facility formerly manufactured acid-based chromium, cadmium, cyanide, nickel, and zinc electroplating solutions. Materials used in the manufacturing solutions included: chromic acid, hydrochloric acid, sulfuric acid, cadmium oxide, caustic soda, sodium cyanide, sodium stannate, copper cyanide, ethylenediamine, and ammonium hydroxide. Techem Inc. occupied the site from 1973 through 1994 and the owner claimed that no wastes were produced. Metals, including cadmium, chromium, copper, and nickel are present in surface and subsurface soil at the site at concentrations exceeding the respective 6 NYCRR Part 375 commercial soil cleanup objectives.

2. SCOPE OF SERVICES

The call-out contractor shall provide the following services:

- Excavation and disposal of approximately 800 ft ³ of soil
- Abandonment of 5 piezometers
- Filling a former cesspool with flowable fill

Item 1. Soil Excavation

The call-out contractor shall provide all necessary excavation equipment and a plate compactor with licensed operator(s) to conduct soil excavation and backfilling at the Site. The call-out contractor shall excavate soil containing metals and compact clean backfill material.

Approximately 800 cubic feet (400 ft ² by two foot thick) of soil will be excavated and disposed

of off-site in accordance with applicable federal, state, and local regulations. Based on soil analytical results from samples collected at the site (Tables 1 to 6), it is anticipated that the surface soil will be disposed of as non-hazardous waste. Appropriate clearance must be maintained from power lines (shown in the attached photographs) located adjacent to and above the excavation area. The call-out contractor shall:

- Be solely responsible for all permits and mobilization and demobilization of equipment;
- Allow samples to be obtained by others at the sidewalls or bottom of the excavation. The call-out contractor should assume 48-hour turn-around time for the soil sample analytical results;
- Provide certified clean fill (certified for metals) to backfill the excavation;
- Mechanically compact the backfill in one-foot lifts;
- Restore the excavation area to pre-excavation conditions (including topsoil, grass seed, straw, and concrete/asphalt where applicable);
- Fully decontaminate the equipment prior to leaving the Site;
- Be solely responsible for providing all decontamination equipment, labor, materials and supplies; and
- Dispose of all decontamination wastes at an off-site facility licensed to receive wastes of that type.

Item 2. Piezometer Abandonment

The call-out contractor shall abandon the 5 piezometers located on site in accordance with NYSDEC Commissioner Policy 43: Groundwater Monitoring Well Decommissioning Policy (CP-43), which was issued on November 3, 2009. The piezometers are 1-inch in diameter and are approximately 40 feet deep. The soil boring/piezometer construction logs are attached. The surface protective casing (curb box) will be removed after filling the monitoring well with grout to five feet below ground surface. If the well riser will be left in place, top of the riser will be cut five feet below ground surface. The top portion of the casing and associated well materials will be removed from the ground. The uppermost five feet of the borehole shall be filled with material similar to the native soils/fill. The surface of the borehole shall be restored to the condition of the area surrounding the borehole (i.e. concrete, asphalt, or topsoil with grass seed). All solid waste materials generated shall be disposed of properly.

Item 3. Cesspool Filling

An approximately 3 feet diameter, 20 foot deep former cesspool is located outside the site building. The cesspool is filled to within approximately 6 feet of the ground surface with soil. The call-out contractor shall fill in the cesspool with flowable fill to within one-foot of ground surface. The flowable fill shall consist of a free-flowing, self-consolidating, self-leveling, non-segregating, low-shrink cement/sand mix with a minimum unconfined compressive strength at 28 days of 100 psi. The call-out contractor shall submit flowable fill specifications for NYSDEC review prior to mobilizing to the site. The cesspool shall be covered at the top with a one-foot layer of concrete.

4. ADDITIONAL RESPONSIBILITIES

The NYSDEC will coordinate site access as necessary. The call-out contractor will be responsible for underground utility clearance. The call-out contractor will provide copies of the utility clearance tickets and all utility clearance confirmation documents to the NYSDEC prior to mobilizing to the site. If work is being performed in a high traffic area with people and/or vehicle activity, safety cones and/or yellow caution tape may be necessary to properly mark out the work area. The call-out contractor shall be responsible for securing open excavations. The call-out contractor shall procure all permits necessary to conduct this work and provide these to the NYSDEC prior to mobilizing to the site.

As the work involves activity at an Inactive Hazardous Waste Site, all field personnel must have successfully completed the requisite OSHA HAZWOPER training. Documentation of personnel compliance with the OSHA regulations shall be provided to NYSDEC's Project Manager prior to commencing work at the site. All site activities shall be conducted in accordance with a Site-specific Health and Safety Plan prepared by the call-out contractor in accordance with applicable OSHA regulations.

5. SCHEDULE

The IRM activities are anticipated to be conducted in December 2010 or January 2011.

6. PROPOSAL INFORMATION

If your firm wishes to be considered for this work, please provide the following information:

- 1 Availability of your firm to start the project.
- 2 Proposed Schedule

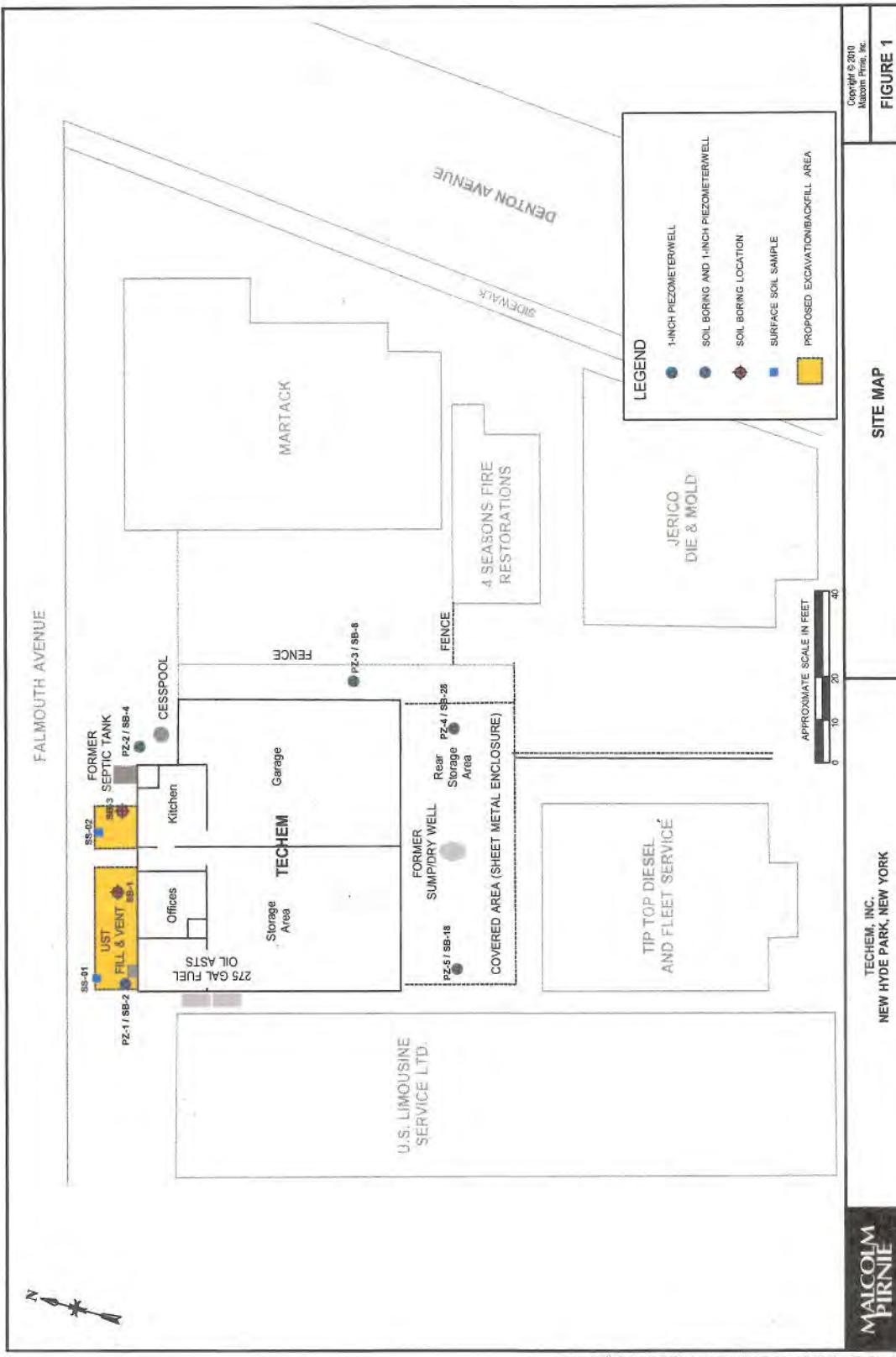


Table 1
Summary of Surface Soil Sampling Results - Metals
Remedial Investigation
Techem Site No. 1-30-097

Sample Date Units	NYCRR Part 375 Commercial Soil Cleanup Objective	SS-01 1/21/2010 mg/Kg	SS-02 1/21/2010 mg/Kg
Compound			
Aluminum		6470	6900
Antimony		0.255	U
Arsenic	16	3.67	J
Barium	400	52.9	J
Beryllium	590	0.305	0.321
Cadmium	9.3	6.39	J
Calcium		4380	3100
Chromium	400	58.5	437
Cobalt		5.64	12.7
Copper	270	54.3	321
Cyanide	27	0.679	U
Iron		13500	18100
Lead	1,000	96.5	J
Magnesium		2110	1450
Manganese	10,000	214	278
Mercury	2.8	0.11	0.18
Nickel	310	53.9	339
Potassium		514	J
Selenium	1,500	0.102	UJ
Silver	1,500	1.29	0.997
Sodium		92.9	117
Thallium		0.204	UJ
Vanadium		20	27.6
Zinc	10,000	190	351

Qualifiers

U - Compound not detected at indicated concentration.

J - Analyte identified, but associated concentration is an approximate value.

UJ - Compound not detected. Reported quantitation limit is an estimate.

[Yellow Box] - Exceeds 6 NYCRR PART 375 Restricted Use Commercial Soil Cleanup Objective (SCO)

Table 2
Summary of Surface Soil Sampling Results - SVOCs
Remedial Investigation
Techem Site No. 1-30-097

Sample Date Units	NYCRR Part 375 Commercial Soil Cleanup Objective	SS-01 1/21/2010 mg/Kg	SS-02 1/21/2010 mg/Kg
Compound			
1,1-Biphenyl		2.2	U
2,2-oxybis(1-Chloropropane)		2.2	U
2,4,5-Trichlorophenol		5.6	U
2,4,6-Trichlorophenol		2.2	U
2,4-Dichlorophenol		2.2	U
2,4-Dimethylphenol		2.2	U
2,4-Dinitrophenol		5.6	UJ
2,4-Dinitrotoluene		2.2	U
2,6-Dinitrotoluene		2.2	U
2-Chloronaphthalene		2.2	U
2-Chlorophenol		2.2	U
2-Methylnaphthalene		2.2	U
2-Methylphenol		2.2	U
2-Nitroaniline		5.6	U
2-Nitrophenol		2.2	U
3,3-Dichlorobenzidine		2.2	U
3+4-Methylphenols		2.2	U
3-Nitroaniline		5.6	U
4,6-Dinitro-2-methylphenol		5.6	UJ
4-Bromophenyl-phenylether		2.2	U
4-Chloro-3-methylphenol		2.2	U
4-Chloronaphthalene		2.2	U
4-Chlorophenyl-phenylether		2.2	U
4-Nitroaniline		5.6	U
4-Nitrophenol		5.6	U
Acenaphthene	500	2.2	U
Acenaphthylene	500	2.2	U
Acetophenone		2.2	U
Anthracene	500	2.2	U
Atrazine		2.2	U
Benzaldehyde		2.2	U
Benzo(a)anthracene	5.6	2.2	U
Benzo(a)pyrene	1	2.2	U
Benzo(b)fluoranthene	5.6	2.2	U
Benzo(g,h,i)perylene	500	2.2	U
Benzo(k)fluoranthene	56	2.2	U
bis(2-Chloroethoxy)methane		2.2	U
bis(2-Chloroethyl)ether		2.2	U
bis(2-Ethylhexyl)phthalate		2.2	U
Butylbenzylphthalate		2.2	U
Caprolactam		2.2	U
Carbazole		2.2	U
Chrysene	56	2.2	U
Dibenz(a,h)anthracene	0.56	2.2	U
Dibenzofuran		2.2	U
Diethylphthalate		2.2	U

Table 2
Summary of Surface Soil Sampling Results - SVOCs
Remedial Investigation
Techem Site No. 1-30-097

Sample Date Units	NYCRR Part 375 Commercial Soil Cleanup Objective	SS-01 1/21/2010 mg/Kg	SS-02 1/21/2010 mg/Kg
Compound			
Dimethylphthalate		2.2	U
Di-n-butylphthalate		2.2	U
Di-n-octyl phthalate		2.2	U
Fluoranthene	500	2.2	U
Fluorene	500	2.2	U
Hexachlorobenzene		2.2	U
Hexachlorobutadiene		2.2	U
Hexachlorocyclopentadiene		2.2	U
Hexachloroethane		2.2	U
Indeno(1,2,3-cd)pyrene	5.6	2.2	U
Isophorone		2.2	U
Naphthalene	500	2.2	U
Nitrobenzene		2.2	U
N-Nitroso-di-n-propylamine		2.2	U
N-Nitrosodiphenylamine		2.2	U
Pentachlorophenol	6.7	5.6	UJ
Phenanthrene	500	2.2	U
Phenol	500	2.2	U
Pyrene	500	2.2	U
			0.00026 J

Qualifiers

U - Compound not detected at indicated concentration.

J - Analyte identified, but associated concentration is an approximate value.

UJ - Compound not detected. Reported quantitation limit is an estimate.

■ - Exceeds 6 NYCRR PART 375 Restricted Use Commercial Soil Cleanup Objective (SCO) -

Table 3
Summary of Surface Soil Sampling Results - Pesticides/PCBs
Remedial Investigation
Techem Site No. 1-30-097

Sample Date Units	NYCRR Part 375 Commercial Soil Cleanup Objective	SS-01 1/21/2010 mg/Kg	SS-02 1/21/2010 mg/Kg
Compound			
4,4-DDD	92	0.0089	U
4,4-DDE	62	0.0089	U
4,4-DDT	47	0.0089	UJ
Aldrin	0.68	0.0046	U
alpha-BHC	3.4	0.0046	U
alpha-Chlordane	24	0.0046	U
Aroclor-1016	1	0.089	U
Aroclor-1221	1	0.18	U
Aroclor-1232	1	0.089	U
Aroclor-1242	1	0.089	U
Aroclor-1248	1	0.089	J
Aroclor-1254	1	0.089	U
Aroclor-1260	1	0.089	U
beta-BHC	3	0.0046	U
delta-BHC	500	0.0046	U
Dieldrin	1.4	0.0089	U
Endosulfan I	200	0.0046	U
Endosulfan II	200	0.0089	U
Endosulfan Sulfate	200	0.0089	U
Endrin	89	0.0089	U
Endrin aldehyde		0.0089	U
Endrin ketone		0.0089	U
gamma-BHC		0.0046	U
gamma-Chlordane		0.0046	U
Heptachlor	15	0.0046	U
Heptachlor epoxide		0.0046	U
Methoxychlor		0.046	UJ
Toxaphene		0.46	U
		0.48	U

Qualifiers

U - Compound not detected at indicated concentration.

J - Analyte identified, but associated concentration is an approximate value.

UJ - Compound not detected. Reported quantitation limit is an estimate.

 - Exceeds 6 NYCRR PART 375 Restricted Use Commercial Soil Cleanup Objective (SCO)

Table 4
Summary of Sub-Surface Soil Sampling Results - VOCs
Remedial Investigation
Techem Site No. 1-30-097

Sample Date Units	NYCRR Part 375 Commercial Soil Cleanup Objective	SB-1 (35-37' bgs) 1/18/2010 mg/Kg	SB-2 (31-32' bgs) 1/19/2010 mg/Kg	SB-3 (30-32' bgs) 1/19/2010 mg/Kg
Compound				
1,1,1-Trichloroethane	500	0.012 U	0.01 U	0.01 U
1,1,2,2-Tetrachloroethane		0.012 U	0.01 U	0.01 U
1,1,2-Trichloroethane		0.012 U	0.01 U	0.01 U
1,1,2-Trichlorotrifluoroethane		0.012 U	0.01 U	0.01 U
1,1-Dichloroethane	240	0.012 U	0.01 U	0.01 U
1,1-Dichloroethene	500	0.012 U	0.01 U	0.01 U
1,2,4-Trichlorobenzene		0.012 U	0.01 U	0.01 U
1,2-Dibromo-3-Chloropropane		0.012 U	0.01 U	0.01 U
1,2-Dibromoethane		0.012 U	0.01 U	0.01 U
1,2-Dichlorobenzene	500	0.012 U	0.01 U	0.01 U
1,2-Dichloroethane	30	0.012 U	0.01 U	0.01 U
1,2-Dichloropropane		0.012 U	0.01 U	0.01 U
1,3-Dichlorobenzene	280	0.012 U	0.01 U	0.01 U
1,4-Dichlorobenzene	130	0.012 U	0.01 U	0.01 U
2-Butanone	500	0.062 U	0.052 U	0.051 U
2-Hexanone		0.062 U	0.052 U	0.051 U
4-Methyl-2-Pentanone		0.062 U	0.052 U	0.051 U
Acetone	500	0.062 U	0.052 U	0.051 U
Benzene	44	0.012 U	0.01 U	0.01 U
Bromodichloromethane		0.012 U	0.01 U	0.01 U
Bromoform		0.012 U	0.01 U	0.01 U
Bromomethane		0.012 U	0.01 U	0.01 U
Carbon Disulfide		0.012 U	0.01 U	0.01 U
Carbon Tetrachloride	22	0.012 U	0.01 U	0.01 U
Chlorobenzene	500	0.012 U	0.01 U	0.01 U
Chloroethane		0.012 U	0.01 U	0.01 U
Chloroform	350	0.012 U	0.01 U	0.01 U
Chloromethane		0.012 U	0.01 U	0.01 U
cis-1,2-Dichloroethene	500	0.012 U	0.01 U	0.01 U
cis-1,3-Dichloropropene		0.012 U	0.01 U	0.01 U
Cyclohexane		0.012 U	0.01 U	0.01 U
Dibromochloromethane		0.012 U	0.01 U	0.01 U
Dichlorodifluoromethane		0.012 U	0.01 U	0.01 U
Ethyl Benzene	390	0.012 U	0.01 U	0.01 U
Isopropylbenzene		0.012 U	0.01 U	0.01 U
m/p-Xylenes		0.012 U	0.01 U	0.01 U
Methyl Acetate		0.012 U	0.01 U	0.01 U
Methyl tert-butyl Ether	500	0.012 U	0.01 U	0.01 U
Methylcyclohexane		0.012 U	0.01 U	0.01 U
Methylene Chloride	500	0.012 U	0.01 U	0.01 U
o-Xylene	500	0.012 U	0.01 U	0.01 U
Styrene		0.012 U	0.01 U	0.01 U
t-1,3-Dichloropropene		0.012 U	0.01 U	0.01 U
Tetrachloroethene	150	0.012 U	0.01 U	0.01 U
Toluene	500	0.012 U	0.01 U	0.01 U
trans-1,2-Dichloroethene	500	0.012 U	0.01 U	0.01 U
Trichloroethene	200	0.012 U	0.01 U	0.01 U
Trichlorofluoromethane		0.012 U	0.01 U	0.01 U
Vinyl Chloride	13	0.012 U	0.01 U	0.01 U

Notes:

U - Compound not detected at the indicated concentration.

J - Result less than quantitation limit but greater than MDL.

The concentration given is an approximate value.

 - Exceeds 6 NYCRR PART 375 Restricted Use
Commercial Soil Cleanup Objective (SCO)

Table 5
Summary of Sub-Surface Soil Sampling Results - SVOCs
Remedial Investigation
Techem Site No. 1-30-097

Sample Date Units	NYCRR Part 375 Commercial Soil Cleanup Objective	SB-1 (10-15' bgs) 1/19/2010 mg/Kg	SB-1 (35-37' bgs) 1/18/2010 mg/Kg	SB-2 (7-10' bgs) 1/19/2010 mg/Kg	SB-2 (31-32' bgs) 1/19/2010 mg/Kg	SB-3 (7-10' bgs) 1/19/2010 mg/Kg	SB-3 (30-32' bgs) 1/19/2010 mg/Kg
Compound							
1,1-Biphenyl		0.34	U	0.41	U	0.36	U
2,2-oxybis(1-Chloropropane)		0.34	U	0.41	U	0.35	U
2,4,5-Trichlorophenol		0.85	U	1	U	0.87	U
2,4,6-Trichlorophenol		0.34	U	0.41	U	0.35	U
2,4-Dichlorophenol		0.34	U	0.41	U	0.35	U
2,4-Dimethylphenol		0.34	U	0.41	U	0.35	U
2,4-Dinitrophenol		0.85	UJ	1	UJ	0.87	UJ
2,4-Dinitrotoluene		0.34	U	0.41	U	0.35	U
2,6-Dinitrotoluene		0.34	U	0.41	U	0.35	U
2-Chloronaphthalene		0.34	U	0.41	U	0.35	U
2-Chlorophenol		0.34	U	0.41	U	0.35	U
2-Methylnaphthalene		0.34	U	0.41	U	0.35	U
2-Methylphenol		0.34	U	0.41	U	0.35	U
2-Nitroaniline		0.85	U	1	U	0.87	U
2-Nitrophenol		0.34	U	0.41	U	0.35	U
3,3-Dichlorobenzidine		0.34	U	0.41	U	0.35	U
3,4-Methylenephenois		0.34	U	0.41	U	0.35	U
3-Nitroaniline		0.65	U	1	U	0.87	U
4,6-Dinitro-2-methylphenol		0.85	UJ	1	UJ	0.87	UJ
4-Bromophenyl-phenylether		0.34	U	0.41	U	0.35	U
4-Chloro-3-methylphenol		0.34	U	0.41	U	0.35	U
4-Chloroaniline		0.34	U	0.41	U	0.35	U
4-Chlorophenyl-phenylether		0.34	U	0.41	U	0.35	U
4-Nitroaniline		0.85	U	1	U	0.87	U
4-Nitrophenol		0.85	U	1	U	0.87	U
Acenaphthene	500	0.34	U	0.41	U	0.35	U
Acenaphthylene	500	0.34	U	0.41	U	0.35	U
Acetophenone		0.34	U	0.41	U	0.35	U
Anthracene	500	0.34	U	0.41	U	0.35	U
Atrazine		0.34	U	0.41	U	0.35	U
Benzaldehyde		0.34	U	0.41	U	0.35	U
Benz[a]anthracene	5.6	0.34	U	0.41	U	0.08	J
Benz[a]pyrene	1	0.34	U	0.41	U	0.35	U
Benz[b]fluoranthene	5.6	0.34	U	0.41	U	0.081	J
Benz[g,h,i]perylene	500	0.34	U	0.41	U	0.35	U
Benz[k]fluoranthene	56	0.34	U	0.41	U	0.35	U
bis(2-Chloroethoxy)methane		0.34	U	0.41	U	0.35	U
bis(2-Chloroethyl)ether		0.34	U	0.41	U	0.35	U
bis(2-Ethylhexyl)phthalate		0.34	U	0.41	U	0.35	U
Butylbenzylphthalate		0.34	U	0.41	U	0.35	U
Caprolactam		0.34	U	0.41	U	0.35	U
Carbazole		0.34	U	0.41	U	0.35	U
Chrysene	56	0.34	U	0.41	U	0.071	J
Dibenz[a,h]anthracene	0.56	0.34	U	0.41	U	0.35	U
Dibenzofuran		0.34	U	0.41	U	0.35	U
Diethylphthalate		0.34	U	0.41	U	0.35	U
Dimethylphthalate		0.34	U	0.41	U	0.35	U
Di-n-butylphthalate		0.34	U	0.41	U	0.35	U
Di-n-octyl phthalate		0.34	U	0.41	U	0.35	U
Fluoranthene	500	0.34	U	0.41	U	0.17	J
Fluorene	500	0.34	U	0.41	U	0.35	U
Hexachlorobenzene		0.34	U	0.41	U	0.35	U
Hexachlorobutadiene		0.34	U	0.41	U	0.35	U
Hexachlorocyclopentadiene		0.34	U	0.41	U	0.35	U
Hexachloroethane		0.34	U	0.41	U	0.35	U
Indeno[1,2,3-cd]pyrene	5.6	0.34	U	0.41	U	0.35	U
Isophorone		0.34	U	0.41	U	0.35	U
Naphthalene	500	0.34	U	0.41	U	0.35	U
Nitrobenzene		0.34	U	0.41	U	0.35	U
N-Nitroso-di-n-propylamine		0.34	U	0.41	U	0.35	U
N-Nitrosodiphenylamine		0.34	U	0.41	U	0.35	U
Pentachlorophenol	6.7	0.85	UJ	1	UJ	0.87	UJ
Phenanthrene	500	0.34	U	0.41	U	0.11	J
Phenol	500	0.34	U	0.41	U	0.036	NJ
Pyrene	500	0.34	U	0.41	U	0.13	J

Notes:

U - Compound not detected at the indicated concentration.

J - Result less than quantitation limit but greater than MDL.

B - The analyte was found in the laboratory blank as well as the sample.

The concentration given is an approximate value.

■ - Exceeds 6 NYCRR PART 375 Restricted Use
Commercial Soil Cleanup Objective (SCO)

Table 6
Summary of Sub-Surface Soil Sampling Results - Metals
Remedial Investigation
Techem Site No. 1-30-497

Sample Date Units Compound	NYCRR Part 375 Commercial Soil Cleanup Objective mg/Kg	SB-1 (10-15' bgs) 1/19/2010 mg/Kg	SB-1 (35-37' bgs) 1/18/2010 mg/Kg	SB-2 (7'-10' bgs) 1/19/2010 mg/Kg	SB-2 (31-32' bgs) 1/19/2010 mg/Kg	SB-3 (7'-10' bgs) 1/19/2010 mg/Kg	SB-3 (30-32' bgs) 1/19/2010 mg/Kg
Aluminum	1640	J	1050	J	2490	J	1870
Antimony	2.59	U	2.89	U	1.9	J	2.18
Arsenic	16		1.09		0.288	J	1.05
Barium	400		14.3		10.4		11.1
Beryllium	590		0.144	J	0.088	J	0.166
Cadmium	9.3		0.041	J	0.019	J	0.062
Calcium	192		148		290		287
Chromium	400		5.72		2.99		5.18
Cobalt	1.47	J	0.871	J	2.32		2.53
Copper	270		5.98		1.96		4.64
Cyanide	27		0.517	U	0.619	U	0.529
Iron	6630	J	3130	J	6400	J	5350
Lead	1,000		1.76		0.729		7.29
Magnesium	568		259		561		585
Manganese	10,000		73.1	J	41.6	J	125
Mercury	2.8		0.1	U	0.12	U	0.11
Nickel	310		4.3		2.2	J	5.3
Potassium	391	J	156	J	203	J	317
Selenium	1,500		1.03	U	1.16	U	0.761
Silver	1,500		0.517	U	0.578	U	0.381
Sodium	118		118		164		107
Thallium	2.07	J	2.31	U	1.52	U	1.74
Vanadium	5.75		2.97		5.99		6.08
Zinc			9.52	J	6.24	J	8.71
Notes					12.3	J	19.3
U - Compound not detected at indicated concentration.						J	7.58
J - The result is less than the quantitation limit but greater than MDL.							
The concentration given is an approximate value.							
B - The analyte was found in the laboratory blank as well as the sample.							
D - The reported value is from a secondary analysis with a dilution factor.							
The original analysis exceeded the calibration range.							
- Exceeds 6 NYCRR PART 375 Restricted Use							
Commercial Soil Cleanup Objective (SCO)							

- Exceeds 6 NYCRR PART 375 Restricted Use
- Commercial Soil Cleanup Objective (SCO)

MALCOLM PIRNIE				TEST BORING LOG			BORING No.SB-01	
PROJECT Techem		LOCATION New Hyde Park, NY			SHEET 1 OF 2			
CLIENT NYSDEC					PROJECT No. 0266356			
DRILLING CONTRACTOR Aztech					MEAS. PT. ELEV.			
PURPOSE Remedial Investigation					GROUND ELEV.			
WELL MATERIAL					DATUM			
DRILLING METHOD(S) Geoprobe		SAMPLE	CORE	CASING	DATE STARTED 1/18/10			
DRILL RIG TYPE Geoprobe		TYPE			DATE FINISHED 1/18/10			
GROUND WATER DEPTH 35.0'		DIA.	"		DRILLER Aztech - Ray			
MEASURING POINT		WEIGHT	#		PIRNIE STAFF J. Wyckoff			
DATE OF MEASUREMENT 1/18/2010		FALL	"					
DEPTH FT.	SAMPLE TYPE, RECOVERY NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	3		0		Dark brown sand and gravel; brick and concrete. Trace of silt. Gravel size up to 0.75 inch. Sand fine to medium. Moist.			
4					Brown sand and gravel. Sand medium to coarse. Gravel to 0.5 inch. Loose. Moist.	2.0		
6								
8	3		0					
10					Orange-brown sand and gravel. Sand medium to coarse. Gravel to 0.25 inch. Less gravel than above.	9.5		
12					SAA. Lensed with more gravel and iron oxidation bands.	10.0		Collected Metals/SVOCs sample at 10-15 ft
14								
16	3.5		0		Dark brown sand and gravel. Concrete; slag. Loose. Moist.	15.5		
18	4.5		0		Orange-brown sand and gravel. Lensed with oxidation and gravel.	17.0		

MALCOLM PIRNIE				TEST BORING LOG			BORING No.SB-01	
PROJECT Techem			LOCATION New Hyde Park, NY			SHEET 2 OF 2		
CLIENT NYSDEC						PROJECT No. 0266356		
DEPTH FT.	SAMPLE TYPE, RECOVERY NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV DEPTH	WELL Constr.	REMARKS
20.0					SAA. Moist, loose.	20.0		
22.0	4.5		0		Tan sand and gravel. Sand medium-coarse. Gravel lensed with up to 1.5 inch gravel. Moist, loose.	22.0		
24								
26								
28	4.5		0					
30								
32	4.5		0		Driller had to remove inner rod to advance..sample contains materials from above. Brown sand and gravel with some organics and silt. Moist and firm. Glass fragments noted at bottom.	33.0		
34						35.0		
36					Tan sand and gravel. SAA. Saturated.			
38	3		0					
40.0								

Collected VOCs/Metals/SVOCs
sample at 35-37 ft

MALCOLM PIRNIE				TEST BORING LOG			BORING No.SB-02			
PROJECT Techem			LOCATION New Hyde Park, NY			SHEET 1 OF 2				
CLIENT NYSDEC				PROJECT No. 0266356						
DRILLING CONTRACTOR Aztech				MEAS. PT. ELEV.						
PURPOSE Remedial Investigation				GROUND ELEV.						
WELL MATERIAL				DATUM						
DRILLING METHOD(S) Geoprobe			SAMPLE	CORE	CASING	DATE STARTED 1/19/10				
DRILL RIG TYPE Geoprobe			TYPE			DATE FINISHED 1/19/10				
GROUND WATER DEPTH 32.0'			DIA.	"		DRILLER Aztech - Ray				
MEASURING POINT			WEIGHT	#		PIRNIE STAFF J. Wyckoff				
DATE OF MEASUREMENT 1/19/2010			FALL	"						
DEPTH FT.	SAMPLE TYPE, RECOVERY NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS		
1					Dark brown sand and gravel with silt. Fine to medium sand. Gravel to 0.5 inch. Organics, roots. Firm, moist.					
2										
4										
6										
8					Orange-brown sand; medium-coarse, with up to 0.75 inch gravel. Loose, moist.	7.0		Collected Metals/SVOCs sample 7-10 ft.		
10					SAA with oxidation. Sand slightly coarser. Loose. Moist.	10.0				
12										
14										
16										
18										
1.5			0							
3.0			0							
3.5			0							
4.5			0							

MALCOLM PIRNIE				TEST BORING LOG			BORING No.SB-03		
PROJECT Techem		LOCATION New Hyde Park, NY					SHEET 1 OF 2		
CLIENT NYSDEC							PROJECT No. 0266356		
DRILLING CONTRACTOR Aztech							MEAS. PT. ELEV.		
PURPOSE Remedial Investigation							GROUND ELEV.		
WELL MATERIAL							DATUM		
DRILLING METHOD(S) Geoprobe		SAMPLE		CORE	CASING	DATE STARTED 1/19/10			
DRILL RIG TYPE Geoprobe		TYPE				DATE FINISHED 1/19/10			
GROUND WATER DEPTH 32.0'		DIA.	"			DRILLER Aztech - Ray			
MEASURING POINT		WEIGHT	#				PIRNIE STAFF J. Wyckoff		
DATE OF MEASUREMENT 1/19/2010		FALL	"						
DEPTH FT.	SAMPLE TYPE RECOVERY NUMBER	BLOWS ON SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.		ELEV. DEPTH	WELL Constr.	REMARKS
2	2.5		0		Dark brown sand and gravel with silt and organics. Sand fine with medium gravel up to 0.25 inch. Slightly cohesive, moist.		1.0		
4			0		Orange-brown sand and gravel. Sand medium to coarse, with up to 0.5 inch gravel. Loose. Moist.				
6			0		Tan and black sand and gravel. Sand fine to medium, with gravel to 1.5 inch. Gneiss gravel.		7.0		Collected Metals/SVOCs sample at 7-10 ft.
8			0		Brown-orange sand and gravel with some silt. Sand fine to medium. Gravel to 1.0 inch. Moist, slightly cohesive.		7.5		
10			0		Orange-brown sand and gravel. Med-coarse sand, with gravel up to 0.25 inch. Loose, moist.		13.5		
12			0		SAA with increased gravel content. Sand is more tan at 19-20 ft.		15.0		
14			0						
16			0						
18			0						

MALCOLM PIRNIE				TEST BORING LOG			BORING No.SB-03			
PROJECT Techem			LOCATION New Hyde Park, NY			SHEET 2 OF 2				
CLIENT NYSDEC						PROJECT No. 0266356				
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS		
22	3.0		0		SAA with tan sand at 23-25 ft. Larger 1.5 inch gravel at 23 ft.	20.0				
24										
26	4.5		0		SAA. Gravel up to 0.5 inch. Loose, moist. Saturated at 32 ft.	25.0				
28										
30										
32	4.5		0							
34						35.0		Collected VOCs/Metals/SVOCs sample at 30-32 ft.		

MALCOLM PIRNIE				TEST BORING LOG			BORING No.SB-04	
PROJECT Techem			LOCATION New Hyde Park, NY				SHEET 1 OF 2	
CLIENT NYSDEC								PROJECT No. 0266356
DRILLING CONTRACTOR Aztech								MEAS. PT. ELEV.
PURPOSE Remedial Investigation								GROUND ELEV.
WELL MATERIAL								DATUM
DRILLING METHOD(S) Geoprobe			SAMPLE		CORE	CASING	DATE STARTED 1/19/10	
DRILL RIG TYPE Geoprobe			TYPE				DATE FINISHED 1/19/10	
GROUND WATER DEPTH 33.0'			DIA.	"			DRILLER Aztech - Ray	
MEASURING POINT			WEIGHT	#			PIRNIE STAFF J. Wyckoff	
DATE OF MEASUREMENT 1/19/2010			FALL	"				
DEPTH FT.	SAMPLE TYPE RECOVERY NUMBER	BLOWS ON SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2					Concrete			
2.5					Brown-orange sand and gravel. Med-coarse sand with gravel to 1.5 inch. Some silt. Moist. Slightly cohesive.	0.5		
4			0		Dark brown silt. Moist. Cohesive.	3.0		
6					Orange-brown sand and gravel. Med-coarse sand with gravel to 0.5 inch. Loose. Moist. Some silt 5-10 ft.	3.5		
8								
10								
12								
14								
16					Tan sand and gravel. Med-coarse sand with gravel to 0.5 inch. Loose. Moist.	15.0		
18			0		SAA with blue-green layering/banding in the sand.	16.0		Sample collected 16-17 ft. (blue-green banding, slight odor).
					SAA with no colored layering like above.	17.0		VOCs/SVOCs/Metals
					Brown sand and gravel with some silt. Firm. Moist.	18.5		

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TEST BORING LOG

BORING No.SB-04

MALCOLM PIRNIE				TEST BORING LOG			BORING No.SB-08		
PROJECT Techem				LOCATION New Hyde Park, NY			SHEET 1 OF 2		
CLIENT NYSDEC							PROJECT No. 0266356		
DRILLING CONTRACTOR Aztech							MEAS. PT. ELEV.		
PURPOSE Remedial Investigation							GROUND ELEV.		
WELL MATERIAL							DATUM		
DRILLING METHOD(S) Geoprobe				SAMPLE	CORE	CASING	DATE STARTED 1/21/10		
DRILL RIG TYPE Geoprobe				TYPE			DATE FINISHED 1/21/10		
GROUND WATER DEPTH 33.0'				DIA.	"		DRILLER Aztech - Ray		
MEASURING POINT				WEIGHT	#		PIRNIE STAFF J. Wyckoff		
DATE OF MEASUREMENT 1/21/2010				FALL	"				
DEPTH FT.	SAMPLE TYPE RECOVERY NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS	
2	3		0		Concrete Brown medium-coarse sand with some gravel and trace silt. Concrete. Firm, slightly cohesive.	0.5		Collected sample 0.5-3.0 ft Metals/SVOCs	
4					Orange- brown medium-coarse sand with pea gravel. Loose. Moist.	4.5			
6									
8									
10									
12									
14									
16									
18	4.5		0						

MALCOLM PIRNIE				TEST BORING LOG			BORING No.SB-18	
PROJECT Techem			LOCATION New Hyde Park, NY				SHEET 1 OF 2	
CLIENT NYSDEC							PROJECT No. 0266356	
DRILLING CONTRACTOR Aztech							MEAS. PT. ELEV.	
PURPOSE Remedial Investigation							GROUND ELEV.	
WELL MATERIAL							DATUM	
DRILLING METHOD(S) Geoprobe			SAMPLE		CORE	CASING	DATE STARTED 1/26/10	
DRILL RIG TYPE Geoprobe			TYPE				DATE FINISHED 1/27/10	
GROUND WATER DEPTH 33.5'			DIA.	"			DRILLER Aztech - Ray	
MEASURING POINT			WEIGHT	#			PIRNIE STAFF J. Hock	
DATE OF MEASUREMENT 1/27/2010			FALL	"				
DEPTH FT.	SAMPLE TYPE, RECOVERY NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
1					Concrete			
2					Brown medium-fine sand, with silt and gravel. Crushed asphalt at 4.5 ft.			
4								
6					Brown-tan medium-fine sand and gravel. Loose. Crushed concrete at 10-12 ft. Wet and cohesive with silt at 12-13.5 ft.			
8								
10								
12								
14					Orange medium-fine sand with some gravel. Loose.		13.5	Collected sample 12-13.5 ft Metals/SVOCs
16								
18		5						

TEST BORING LOG				BORING No.SB-18	
PROJECT	Techem	LOCATION	New Hyde Park, NY	SHEET	2 OF 2
CLIENT	NYSDEC	PROJECT No. 0266356			
DEPTH FT.	SAMPLE TYPE, RECOVERY NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.
22	4	0			Tan medium-fine sand with gravel. Loose. Saturated at 33.5 ft. bgs.
24					23.5
26	5	0			
28					
30					29.0
32	4.5	0			30.0
34					Collected sample 31.5-33.5 ft. VOCs/Metals/SVOCs.
					35.0
					40.0

MALCOLM PIRNIE				TEST BORING LOG			BORING No.SB-28				
PROJECT Techem			LOCATION New Hyde Park, NY				SHEET 1 OF 2				
CLIENT NYSDEC							PROJECT No. 0266356				
DRILLING CONTRACTOR Aztech							MEAS. PT. ELEV.				
PURPOSE Remedial Investigation							GROUND ELEV.				
WELL MATERIAL							DATUM				
DRILLING METHOD(S) Geoprobe		SAMPLE		CORE	CASING	DATE STARTED 1/29/10					
DRILL RIG TYPE Geoprobe		TYPE				DATE FINISHED 1/29/10					
GROUND WATER DEPTH 33.0'		DIA.		"			DRILLER Aztech - Ray				
MEASURING POINT		WEIGHT #				PIRNIE STAFF J. Hock					
DATE OF MEASUREMENT 1/29/2010		FALL "									
DEPTH FT.	SAMPLE TYPE, RECOVERY NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS			
2	3.5		0		Concrete Brown medium-fine sand. Loose. Dark brown fine sand, and clayey silt with trace gravel.	0.5 1.0		Collected sample 1-3 ft Metals/SVOCs			
4			0		Brown medium-fine sand and gravel. Loose.	3.0					
6			0								
8			0								
10			0		Orange medium-fine sand and gravel. Loose.	10.0					
12			0								
14			0								
16			0								
18	4		0								

MALCOLM PIRNIE

TEST BORING LOG

BORING No.SB-28

New York State Department of Environmental Conservation
Construction Completion Report – Techem Site

Appendix B:
Site Photographs

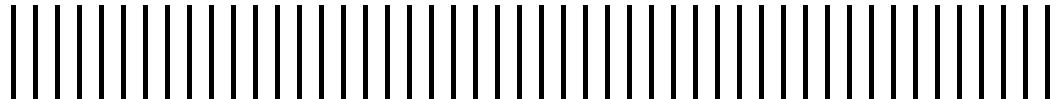




Photo 1. Snow removal during site preparation.



Photo 2. Snow removal during site preparation.

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Photo 3. Sewer connection on north side of building.



Photo 4. Utility connections on north side of building.

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Photo 5. North side of building during site preparation.



Photo 6. Removal of trees during site preparation.

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Photo 7. Excavation of soil on north side of building.



Photo 8. Loading of excavated soil for transport and disposal.

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Photo 9. Excavation of site soil.



Photo 10. Westward view of the excavation area.

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Photo 11. Gas line in western excavation area.



Photo 12. Broken sewer line in excavation.

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Photo 13. Broken sewer line in western excavation.



Photo 14. Southward view of western excavation.



Photo 15. Westward view of the Site.



Photo 16. Eastward view of the Site.



Photo 17. Eastward view of excavation area.



Photo 18. Eastward view of excavation area.



Photo 19. Easternmost excavation area, possible former flower bed.



Photo 20. Door damaged by out-rigger of excavator.



Photo 21. Door after repair.



Photo 22. Westward view of excavation.

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Photo 23. Western excavation area.



Photo 24. Western excavation area.

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Photo 25. Eastward view of the Site.



Photo 26. Southward view of the Site.

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Photo 27. Cesspool.



Photo 28. Inside of cesspool.



Photo 29. Inside cesspool. Apparent former soil borehole present.



Photo 30. Cesspool backfilled to grade.

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Photo 31. Cesspool following backfill.



Photo 32. Decommissioning of PZ-2.

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Photo 33. PZ-2 area following decommissioning.



Photo 34. PZ-3 area following decommissioning.

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Photo 35. PZ-4 following decommissioning.



Photo 36. PZ-5 following decommissioning.

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Photo 37. Repaired sewer line in western excavation.



Photo 38. Backfill sand stockpiled on polyethylene sheeting.



02/25/2011

Photo 39. Backfill of central excavation area.



02/25/2011

Photo 40. Backfill of western excavation area.



Photo 41. Backfill of central and western excavation areas.



Photo 42. Backfill of eastern excavation area.

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Photo 43. Completed backfill and restoration of excavation areas.



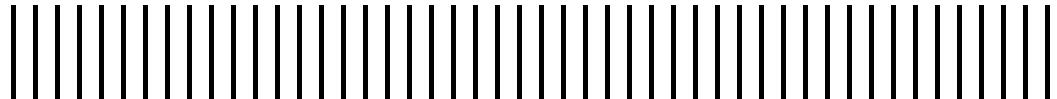
Photo 44. Completed backfill and restoration of excavation areas.



Photo 45. Completed backfill and restoration of excavation areas and street.

New York State Department of Environmental Conservation
Construction Completion Report – Techem Site

Appendix C:
Analytical Laboratory Reporting
Forms



ANALYTICAL REPORT

Job Number: 220-14676-1

Job Description: Techem

For:

New York State D.E.C.
625 Broadway
11th Floor
Albany, NY 12233

Attention: Cynthia X Whitfield



Approved for release.
Johanna Dubauskas
Project Manager I
2/4/2011 4:38 PM

Johanna Dubauskas
Project Manager I
johanna.dubauskas@testamericainc.com
02/04/2011

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

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

Job Number: 220-14676-1

Job Description: Techem

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



Johanna Dubauskas

Approved for release.
Johanna Dubauskas
Project Manager I
2/4/2011 4:38 PM

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**Job Narrative
220-14676-1**

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

Metals

No analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: New York State D.E.C.

Job Number: 220-14676-1

Lab Sample ID Analyte	Client Sample ID DISPOSAL	Result / Qualifier	Reporting Limit	Units	Method
220-14676-1					
Paint Filter		present		NONE	9095A
TCLP					
Barium		1.3	0.025	mg/L	6010B
Cadmium		0.51	0.025	mg/L	6010B
Chromium		0.0058	J	mg/L	6010B
Lead		0.040	J	mg/L	6010B

METHOD SUMMARY

Client: New York State D.E.C.

Job Number: 220-14676-1

Description		Lab Location	Method	Preparation Method
Matrix	Solid			
Metals (ICP)		TAL CT	SW846 6010B	
TCLP Extraction		TAL CT		SW846 1311
Preparation, Total Metals		TAL CT		SW846 3010A
Mercury (CVAA)		TAL CT	SW846 7470A	
TCLP Extraction		TAL CT		SW846 1311
Preparation, Mercury		TAL CT		SW846 7470A
Paint Filter		TAL CT	SW846 9095A	

Lab References:

TAL CT = TestAmerica Connecticut

Method References:

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

METHOD / ANALYST SUMMARY

Client: New York State D.E.C.

Job Number: 220-14676-1

Method	Analyst	Analyst ID
SW846 6010B	Petronchak, Nestor	NP
SW846 7470A	Voytek, Joseph F	JFV
SW846 9095A	Madumadu, Dave	DM

SAMPLE SUMMARY

Client: New York State D.E.C.

Job Number: 220-14676-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-14676-1	DISPOSAL	Solid	02/01/2011 0000	02/01/2011 1702

SAMPLE RESULTS

Analytical Data

Client: New York State D.E.C.

Job Number: 220-14676-1

Client Sample ID: DISPOSALLab Sample ID: 220-14676-1
Client Matrix: SolidDate Sampled: 02/01/2011 0000
Date Received: 02/01/2011 1702**6010B Metals (ICP)-TCLP**

Method:	6010B	Analysis Batch: 220-47717	Instrument ID:	ICAP3
Preparation:	3010A	Prep Batch: 220-47699	Lab File ID:	020411d.prn
Dilution:	1.0	Leachate Batch: 220-47636	Initial Weight/Volume:	20 mL
Date Analyzed:	02/04/2011 1507		Final Weight/Volume:	50 mL
Date Prepared:	02/04/2011 1200			
Date Leached:	02/02/2011 1800			

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.075	U	0.020	0.075
Barium		1.3		0.0012	0.025
Cadmium		0.51		0.0050	0.025
Chromium		0.0058	J	0.0025	0.025
Lead		0.040	J	0.012	0.075
Selenium		0.19	U	0.062	0.19
Silver		0.025	U	0.0012	0.025

7470A Mercury (CVAA)-TCLP

Method:	7470A	Analysis Batch: 220-47716	Instrument ID:	MERC1
Preparation:	7470A	Prep Batch: 220-47702	Lab File ID:	CV020421.TXT
Dilution:	1.0	Leachate Batch: 220-47636	Initial Weight/Volume:	5 mL
Date Analyzed:	02/04/2011 1641		Final Weight/Volume:	50 mL
Date Prepared:	02/04/2011 1221			
Date Leached:	02/02/2011 1800			

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Mercury		0.0020	U	0.0010	0.0020

Analytical Data

Client: New York State D.E.C.

Job Number: 220-14676-1

General Chemistry**Client Sample ID:** DISPOSAL

Lab Sample ID: 220-14676-1

Date Sampled: 02/01/2011 0000

Client Matrix: Solid

Date Received: 02/01/2011 1702

Analyte	Result	Qual	Units	Dil	Method
Paint Filter	present	NONE		1.0	9095A
	Analysis Batch: 220-47648	Date Analyzed: 02/02/2011 1700			DryWt Corrected: N

DATA REPORTING QUALIFIERS

Client: New York State D.E.C.

Job Number: 220-14676-1

Lab Section	Qualifier	Description
Metals	U	Indicates analyzed for but not detected.
	J	Sample result is greater than the MDL but below the CRDL

QUALITY CONTROL RESULTS

Quality Control Results

Client: New York State D.E.C.

Job Number: 220-14676-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 220-47636					
LB 220-47636/1-B	TCLP SPLPE Leachate Blank	P	Solid	1311	
LB 220-47636/1-C	TCLP SPLPE Leachate Blank	P	Solid	1311	
220-14676-1	DISPOSAL	P	Solid	1311	
Prep Batch: 220-47699					
LCS 220-47699/2-A	Lab Control Sample	T	Water	3010A	
MB 220-47699/1-A	Method Blank	T	Water	3010A	
LB 220-47636/1-B	TCLP SPLPE Leachate Blank	P	Solid	3010A	220-47636
220-14676-1	DISPOSAL	P	Solid	3010A	220-47636
Prep Batch: 220-47702					
LCS 220-47702/2-A	Lab Control Sample	T	Water	7470A	
MB 220-47702/1-A	Method Blank	T	Water	7470A	
LB 220-47636/1-C	TCLP SPLPE Leachate Blank	P	Solid	7470A	220-47636
220-14676-1	DISPOSAL	P	Solid	7470A	220-47636
Analysis Batch:220-47716					
LB 220-47636/1-C	TCLP SPLPE Leachate Blank	P	Solid	7470A	220-47702
LCS 220-47702/2-A	Lab Control Sample	T	Water	7470A	220-47702
MB 220-47702/1-A	Method Blank	T	Water	7470A	220-47702
220-14676-1	DISPOSAL	P	Solid	7470A	220-47702
Analysis Batch:220-47717					
LB 220-47636/1-B	TCLP SPLPE Leachate Blank	P	Solid	6010B	220-47699
LCS 220-47699/2-A	Lab Control Sample	T	Water	6010B	220-47699
MB 220-47699/1-A	Method Blank	T	Water	6010B	220-47699
220-14676-1	DISPOSAL	P	Solid	6010B	220-47699

Report Basis

P = TCLP

T = Total

General Chemistry

Analysis Batch:220-47648				
220-14676-1	DISPOSAL	T	Solid	9095A

Report Basis

T = Total

Quality Control Results

Client: New York State D.E.C.

Job Number: 220-14676-1

Method Blank - Batch: 220-47699

Lab Sample ID: MB 220-47699/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 02/04/2011 1450
Date Prepared: 02/04/2011 1200

Analysis Batch: 220-47717
Prep Batch: 220-47699
Units: mg/L

Method: 6010B

Preparation: 3010A

Instrument ID: ICAP3
Lab File ID: 020411d.prn
Initial Weight/Volume: 100 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	MDL	RL
Arsenic	0.015	U	0.0040	0.015
Barium	0.0050	U	0.00025	0.0050
Cadmium	0.0050	U	0.0010	0.0050
Chromium	0.0050	U	0.00050	0.0050
Lead	0.015	U	0.0025	0.015
Selenium	0.038	U	0.012	0.038
Silver	0.0050	U	0.00025	0.0050

TCLP SPLPE Leachate Blank - Batch: 220-47699

Lab Sample ID: LB 220-47636/1-B
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 02/04/2011 1504
Date Prepared: 02/04/2011 1200
Date Leached: 02/02/2011 1800

Analysis Batch: 220-47717
Prep Batch: 220-47699
Units: mg/L

Method: 6010B

Preparation: 3010A

TCLP

Instrument ID: ICAP3
Lab File ID: 020411d.prn
Initial Weight/Volume: 20 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	MDL	RL
Arsenic	0.075	U	0.020	0.075
Barium	0.025	U	0.0012	0.025
Cadmium	0.025	U	0.0050	0.025
Chromium	0.025	U	0.0025	0.025
Lead	0.075	U	0.012	0.075
Selenium	0.19	U	0.062	0.19
Silver	0.025	U	0.0012	0.025

Quality Control Results

Client: New York State D.E.C.

Job Number: 220-14676-1

Lab Control Sample - Batch: 220-47699

Method: 6010B

Preparation: 3010A

Lab Sample ID: LCS 220-47699/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 02/04/2011 1454
Date Prepared: 02/04/2011 1200

Analysis Batch: 220-47717
Prep Batch: 220-47699
Units: mg/L

Instrument ID: ICAP3
Lab File ID: 020411d.prn
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	1.00	0.993	99	80 - 120	
Barium	0.300	0.303	101	80 - 120	
Cadmium	0.300	0.309	103	80 - 120	
Chromium	0.300	0.308	103	80 - 120	
Lead	1.00	1.01	101	80 - 120	
Selenium	0.500	0.518	104	80 - 120	
Silver	0.300	0.300	100	80 - 120	

Quality Control Results

Client: New York State D.E.C.

Job Number: 220-14676-1

Method Blank - Batch: 220-47702

Lab Sample ID: MB 220-47702/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 02/04/2011 1638
Date Prepared: 02/04/2011 1221

Analysis Batch: 220-47716
Prep Batch: 220-47702
Units: mg/L

Method: 7470A

Preparation: 7470A

Instrument ID: MERC1
Lab File ID: CV020421.TXT
Initial Weight/Volume: 25 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	MDL	RL
Mercury	0.00040	U	0.00020	0.00040

TCLP SPLPE Leachate Blank - Batch: 220-47702

Lab Sample ID: LB 220-47636/1-C
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 02/04/2011 1640
Date Prepared: 02/04/2011 1221
Date Leached: 02/02/2011 1800

Analysis Batch: 220-47716
Prep Batch: 220-47702
Units: mg/L

Method: 7470A

Preparation: 7470A

TCLP

Instrument ID: MERC1
Lab File ID: CV020421.TXT
Initial Weight/Volume: 5 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	MDL	RL
Mercury	0.0020	U	0.0010	0.0020

Lab Control Sample - Batch: 220-47702

Lab Sample ID: LCS 220-47702/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 02/04/2011 1638
Date Prepared: 02/04/2011 1221

Analysis Batch: 220-47716
Prep Batch: 220-47702
Units: mg/L

Method: 7470A

Preparation: 7470A

Instrument ID: MERC1
Lab File ID: CV020421.TXT
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.00500	0.00497	99	80 - 120	

Login Sample Receipt Check List

Client: New York State D.E.C.

Job Number: 220-14676-1

Login Number: 14676

List Source: TestAmerica Connecticut

Creator: Lee, Anthony

List Number: 1

Question	T / F / NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

ANALYTICAL RESULTS SUMMARY

PROJECT NAME : TECHEM

**MALCOLM PIRNIE, INC.
855 Route 146, Suite 210**

**Clifton Park , NY - 12065
Phone No: 5182507300**

**ORDER ID : C1320
ATTENTION : Bruce Nelson**



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
FORM S-I
SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

NYSDEC Sample ID/Code	Laboratory Sample ID/Code	VOA GC/MS (Method #)	BNA GC/MS (Method #)	VOA GC (Method #)	Pest PCBs (Method #)	Metals (Method #)	Other (Method #)
CS-1-4	C1320-01					ILM05.2	Chemtech - SOP
CS-2-2	C1320-02					ILM05.2	Chemtech - SOP
CS-3-3	C1320-03					ILM05.2	Chemtech - SOP

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL
CONSERVATION**

FORM S-IV

**SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSES**

Laboratory Sample ID	Matrix	Metals Requested	Date Rec'd at Lab	Date Digested	Date Analyzed
C1320-01	SOIL	Mercury	02/17/11	02/17/11	02/18/11
C1320-02	SOIL	Mercury	02/17/11	02/17/11	02/18/11
C1320-03	SOIL	Mercury	02/18/11	02/21/11	02/21/11

* Details For Test :Mercury

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL
CONSERVATION**

FORM S-IV

**SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSES**

Laboratory Sample ID	Matrix	Metals Requested	Date Rec'd at Lab	Date Digested	Date Analyzed
C1320-01	SOIL	Metals ICP-TAL	02/17/11	02/17/11	02/18/11
C1320-02	SOIL	Metals ICP-TAL	02/17/11	02/17/11	02/18/11
C1320-03	SOIL	Metals ICP-TAL	02/18/11	02/18/11	02/18/11

* Details For Test :Metals ICP-TAL

Cover Page**Order ID :** C1320**Project ID :** Techem**Client :** Malcolm Pirnie, Inc.**Lab Sample Number**

C1320-01
C1320-02
C1320-03

Client Sample Number

CS-1-4
CS-2-2
CS-3-3

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : _____



CASE NARRATIVE

Malcolm Pirnie, Inc.

Project Name: Techem

Project # N/A

Chemtech Project # C1320

A. Number of Samples and Date of Receipt:

2 Solid samples were received on 2/17/11.

1 Solid sample was received on 2/18/11.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Mercury, Metals ICP-TAL, and METALS-TAL. This data package contains results for Mercury, Metals ICP-TAL and METALS-TAL.

C. Analytical Techniques:

The analysis of Mercury was based on method ILM05.4, Metals ICP-TAL was based on method ILM05.4 and METALS-TAL was based on method ILM05.4.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike analysis met criteria for all samples.

The Matrix Spike Duplicate analysis met criteria for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

The Serial Dilution met the acceptable requirements.

E. Additional Comments:

Arsenic is failing for CRI01.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature_____

Report of Analysis

Client:	Malcolm Pirnie, Inc.	Date Collected:	02/16/11
Project:	Techem	Date Received:	02/17/11
Client Sample ID:	CS-1-4	SDG No.:	C1320
Lab Sample ID:	C1320-01	Matrix:	SOIL
Level (low/med):	low	% Solid:	93.5

Cas	Parameter	Cone.	Qua.	DF	MDL	LOD	LOQ	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	4520		1	1.07	10.7	21.4	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-36-0	Antimony	0.46	J	1	0.203	3.21	6.42	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-38-2	Arsenic	3.26		1	0.278	0.535	1.07	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-39-3	Barium	33.7		1	0.267	10.7	21.4	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-41-7	Beryllium	0.214	J	1	0.057	0.2675	0.535	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-43-9	Cadmium	0.556		1	0.034	0.2675	0.535	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-70-2	Calcium	966		1	14.9	267.5	535	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-47-3	Chromium	6.37		1	0.036	0.535	1.07	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-48-4	Cobalt	2.57	J	1	0.03	2.675	5.35	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-50-8	Copper	8.44		1	0.182	1.335	2.67	mg/Kg	02/17/11	02/18/11	ILM05.4
7439-89-6	Iron	8040		1	2.31	5.35	10.7	mg/Kg	02/17/11	02/18/11	ILM05.4
7439-92-1	Lead	21.8		1	0.16	0.535	1.07	mg/Kg	02/17/11	02/18/11	ILM05.4
7439-95-4	Magnesium	726		1	21.9	267.5	535	mg/Kg	02/17/11	02/18/11	ILM05.4
7439-96-5	Manganese	96		1	0.043	0.8	1.6	mg/Kg	02/17/11	02/18/11	ILM05.4
7439-97-6	Mercury	0.08	J	1	0.04	0.055	0.11	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-02-0	Nickel	7.58		1	0.057	2.14	4.28	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-09-7	Potassium	193	J	1	5.3	267.5	535	mg/Kg	02/17/11	02/18/11	ILM05.4
7782-49-2	Selenium	3.74	U	1	0.406	1.87	3.74	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-22-4	Silver	1.07	U	1	0.064	0.535	1.07	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-23-5	Sodium	54.9	J	1	20.2	267.5	535	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-28-0	Thallium	2.67	U	1	0.299	1.335	2.67	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-62-2	Vanadium	7.54		1	0.049	2.675	5.35	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-66-6	Zinc	65.5		1	0.096	3.21	6.42	mg/Kg	02/17/11	02/18/11	ILM05.4

Color Before: Brown

Clarity Before: _____

Texture: MediumColor After: Yellow

Clarity After: _____

Artifacts: _____

Comments: _____

U = Not Detected

J = Estimated Value

LOQ = Limit of Quantitation

B = Analyte Found in Associated Method Blank

MDL = Method Detection Limit

N = Presumptive Evidence of a Compound

LOD = Limit of Detection

E = Value Exceeds Calibration Range

D = Dilution

OR = Over Range

Report of Analysis

Client:	Malcolm Pirnie, Inc.	Date Collected:	02/16/11
Project:	Techem	Date Received:	02/17/11
Client Sample ID:	CS-2-2	SDG No.:	C1320
Lab Sample ID:	C1320-02	Matrix:	SOIL
Level (low/med):	low	% Solid:	85.9

Cas	Parameter	Cone.	Qua.	DF	MDL	LOD	LOQ	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	3030		1	0.909	9.1	18.2	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-36-0	Antimony	0.367	J	1	0.173	2.73	5.46	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-38-2	Arsenic	2		1	0.236	0.4545	0.909	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-39-3	Barium	20.3		1	0.227	9.1	18.2	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-41-7	Beryllium	0.156	J	1	0.048	0.2275	0.455	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-43-9	Cadmium	0.563		1	0.029	0.2275	0.455	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-70-2	Calcium	1020		1	12.6	227.5	455	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-47-3	Chromium	6.91		1	0.031	0.4545	0.909	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-48-4	Cobalt	2.28	J	1	0.025	2.275	4.55	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-50-8	Copper	6.41		1	0.155	1.135	2.27	mg/Kg	02/17/11	02/18/11	ILM05.4
7439-89-6	Iron	7910		1	1.96	4.545	9.09	mg/Kg	02/17/11	02/18/11	ILM05.4
7439-92-1	Lead	11.8		1	0.136	0.4545	0.909	mg/Kg	02/17/11	02/18/11	ILM05.4
7439-95-4	Magnesium	944		1	18.6	227.5	455	mg/Kg	02/17/11	02/18/11	ILM05.4
7439-96-5	Manganese	138		1	0.036	0.68	1.36	mg/Kg	02/17/11	02/18/11	ILM05.4
7439-97-6	Mercury	0.12	U	1	0.04	0.06	0.12	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-02-0	Nickel	5.71		1	0.048	1.82	3.64	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-09-7	Potassium	262	J	1	4.51	227.5	455	mg/Kg	02/17/11	02/18/11	ILM05.4
7782-49-2	Selenium	3.18	U	1	0.346	1.59	3.18	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-22-4	Silver	0.909	U	1	0.055	0.4545	0.909	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-23-5	Sodium	19	J	1	17.2	227.5	455	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-28-0	Thallium	2.27	U	1	0.255	1.135	2.27	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-62-2	Vanadium	7.26		1	0.042	2.275	4.55	mg/Kg	02/17/11	02/18/11	ILM05.4
7440-66-6	Zinc	24.7		1	0.082	2.73	5.46	mg/Kg	02/17/11	02/18/11	ILM05.4

Color Before: Brown

Clarity Before: _____

Texture: MediumColor After: Yellow

Clarity After: _____

Artifacts: _____

Comments: _____

U = Not Detected

J = Estimated Value

LOQ = Limit of Quantitation

B = Analyte Found in Associated Method Blank

MDL = Method Detection Limit

N = Presumptive Evidence of a Compound

LOD = Limit of Detection

E = Value Exceeds Calibration Range

D = Dilution

OR = Over Range

Report of Analysis

Client:	Malcolm Pirnie, Inc.	Date Collected:	02/17/11
Project:	Techem	Date Received:	02/18/11
Client Sample ID:	CS-3-3	SDG No.:	C1320
Lab Sample ID:	C1320-03	Matrix:	SOIL
Level (low/med):	low	% Solid:	91.1

Cas	Parameter	Cone.	Qua.	DF	MDL	LOD	LOQ	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	7010		1	0.938	9.4	18.8	mg/Kg	02/18/11	02/18/11	ILM05.4
7440-36-0	Antimony	0.716	J	1	0.178	2.815	5.63	mg/Kg	02/18/11	02/18/11	ILM05.4
7440-38-2	Arsenic	5.22		1	0.244	0.469	0.938	mg/Kg	02/18/11	02/18/11	ILM05.4
7440-39-3	Barium	33.9		1	0.235	9.4	18.8	mg/Kg	02/18/11	02/18/11	ILM05.4
7440-41-7	Beryllium	0.316	J	1	0.05	0.2345	0.469	mg/Kg	02/18/11	02/18/11	ILM05.4
7440-43-9	Cadmium	1.08		1	0.03	0.2345	0.469	mg/Kg	02/18/11	02/18/11	ILM05.4
7440-70-2	Calcium	3120		1	13	234.5	469	mg/Kg	02/18/11	02/18/11	ILM05.4
7440-47-3	Chromium	16.3		1	0.032	0.469	0.938	mg/Kg	02/18/11	02/18/11	ILM05.4
7440-48-4	Cobalt	4.36	J	1	0.026	2.345	4.69	mg/Kg	02/18/11	02/18/11	ILM05.4
7440-50-8	Copper	24.9		1	0.159	1.175	2.35	mg/Kg	02/18/11	02/18/11	ILM05.4
7439-89-6	Iron	14300		1	2.03	4.69	9.38	mg/Kg	02/18/11	02/18/11	ILM05.4
7439-92-1	Lead	26.8		1	0.141	0.469	0.938	mg/Kg	02/18/11	02/18/11	ILM05.4
7439-95-4	Magnesium	1470		1	19.2	234.5	469	mg/Kg	02/18/11	02/18/11	ILM05.4
7439-96-5	Manganese	189		1	0.038	0.705	1.41	mg/Kg	02/18/11	02/18/11	ILM05.4
7439-97-6	Mercury	0.05	J	1	0.04	0.055	0.11	mg/Kg	02/21/11	02/21/11	ILM05.4
7440-02-0	Nickel	11.4		1	0.05	1.875	3.75	mg/Kg	02/18/11	02/18/11	ILM05.4
7440-09-7	Potassium	347	J	1	4.65	234.5	469	mg/Kg	02/18/11	02/18/11	ILM05.4
7782-49-2	Selenium	0.504	J	1	0.357	1.64	3.28	mg/Kg	02/18/11	02/18/11	ILM05.4
7440-22-4	Silver	1.75		1	0.056	0.469	0.938	mg/Kg	02/18/11	02/18/11	ILM05.4
7440-23-5	Sodium	69.3	J	1	17.7	234.5	469	mg/Kg	02/18/11	02/18/11	ILM05.4
7440-28-0	Thallium	2.35	U	1	0.263	1.175	2.35	mg/Kg	02/18/11	02/18/11	ILM05.4
7440-62-2	Vanadium	15.9		1	0.043	2.345	4.69	mg/Kg	02/18/11	02/18/11	ILM05.4
7440-66-6	Zinc	41.5		1	0.084	2.815	5.63	mg/Kg	02/18/11	02/18/11	ILM05.4

Color Before: Gray

Clarity Before: _____

Texture: MediumColor After: Yellow

Clarity After: _____

Artifacts: _____

Comments: _____

U = Not Detected

J = Estimated Value

LOQ = Limit of Quantitation

B = Analyte Found in Associated Method Blank

MDL = Method Detection Limit

N = Presumptive Evidence of a Compound

LOD = Limit of Detection

E = Value Exceeds Calibration Range

D = Dilution

OR = Over Range



Hit Summary Sheet
SW-846

SDG No.: C1320

Order ID: C1320

Client: Malcolm Pirnie, Inc.

Project ID: Techem

Sample ID	Client ID	Matrix	Parameter	Concentration	C	RDL	MDL	Units
Client ID :	CS-1-4							
C1320-01	CS-1-4	SOIL	Aluminum	4,520.000		21.4	1.070	mg/Kg
C1320-01	CS-1-4	SOIL	Antimony	0.460	J	6.420	0.203	mg/Kg
C1320-01	CS-1-4	SOIL	Arsenic	3.260		1.070	0.278	mg/Kg
C1320-01	CS-1-4	SOIL	Barium	33.700		21.4	0.267	mg/Kg
C1320-01	CS-1-4	SOIL	Beryllium	0.214	J	0.535	0.057	mg/Kg
C1320-01	CS-1-4	SOIL	Cadmium	0.556		0.535	0.034	mg/Kg
C1320-01	CS-1-4	SOIL	Calcium	966.000		535	14.9	mg/Kg
C1320-01	CS-1-4	SOIL	Chromium	6.370		1.070	0.036	mg/Kg
C1320-01	CS-1-4	SOIL	Cobalt	2.570	J	5.350	0.030	mg/Kg
C1320-01	CS-1-4	SOIL	Copper	8.440		2.670	0.182	mg/Kg
C1320-01	CS-1-4	SOIL	Iron	8,040.000		10.7	2.310	mg/Kg
C1320-01	CS-1-4	SOIL	Lead	21.800		1.070	0.160	mg/Kg
C1320-01	CS-1-4	SOIL	Magnesium	726.000		535	21.9	mg/Kg
C1320-01	CS-1-4	SOIL	Manganese	96.000		1.600	0.043	mg/Kg
C1320-01	CS-1-4	SOIL	Mercury	0.080	J	0.11	0.04	mg/Kg
C1320-01	CS-1-4	SOIL	Nickel	7.580		4.280	0.057	mg/Kg
C1320-01	CS-1-4	SOIL	Potassium	193.000	J	535	5.300	mg/Kg
C1320-01	CS-1-4	SOIL	Sodium	54.900	J	535	20.2	mg/Kg
C1320-01	CS-1-4	SOIL	Vanadium	7.540		5.350	0.049	mg/Kg
C1320-01	CS-1-4	SOIL	Zinc	65.500		6.420	0.096	mg/Kg
Client ID :	CS-2-2							
C1320-02	CS-2-2	SOIL	Aluminum	3,030.000		18.2	0.909	mg/Kg
C1320-02	CS-2-2	SOIL	Antimony	0.367	J	5.460	0.173	mg/Kg
C1320-02	CS-2-2	SOIL	Arsenic	2.000		0.909	0.236	mg/Kg
C1320-02	CS-2-2	SOIL	Barium	20.300		18.2	0.227	mg/Kg
C1320-02	CS-2-2	SOIL	Beryllium	0.156	J	0.455	0.048	mg/Kg
C1320-02	CS-2-2	SOIL	Cadmium	0.563		0.455	0.029	mg/Kg
C1320-02	CS-2-2	SOIL	Calcium	1,020.000		455	12.6	mg/Kg
C1320-02	CS-2-2	SOIL	Chromium	6.910		0.909	0.031	mg/Kg
C1320-02	CS-2-2	SOIL	Cobalt	2.280	J	4.550	0.025	mg/Kg
C1320-02	CS-2-2	SOIL	Copper	6.410		2.270	0.155	mg/Kg
C1320-02	CS-2-2	SOIL	Iron	7,910.000		9.090	1.960	mg/Kg
C1320-02	CS-2-2	SOIL	Lead	11.800		0.909	0.136	mg/Kg
C1320-02	CS-2-2	SOIL	Magnesium	944.000		455	18.6	mg/Kg
C1320-02	CS-2-2	SOIL	Manganese	138.000		1.360	0.036	mg/Kg
C1320-02	CS-2-2	SOIL	Nickel	5.710		3.640	0.048	mg/Kg
C1320-02	CS-2-2	SOIL	Potassium	262.000	J	455	4.510	mg/Kg
C1320-02	CS-2-2	SOIL	Sodium	19.000	J	455	17.2	mg/Kg
C1320-02	CS-2-2	SOIL	Vanadium	7.260		4.550	0.042	mg/Kg

Hit Summary Sheet
SW-846

SDG No.: C1320

Order ID: C1320

Client: Malcolm Pirnie, Inc.

Project ID: Techem

Sample ID	Client ID	Matrix	Parameter	Concentration	C	RDL	MDL	Units
C1320-02	CS-2-2	SOIL	Zinc	24.700		5.460	0.082	mg/Kg
Client ID : CS-3-3								
C1320-03	CS-3-3	SOIL	Aluminum	7,010.000		18.8	0.938	mg/Kg
C1320-03	CS-3-3	SOIL	Antimony	0.716	J	5.630	0.178	mg/Kg
C1320-03	CS-3-3	SOIL	Arsenic	5.220		0.938	0.244	mg/Kg
C1320-03	CS-3-3	SOIL	Barium	33.900		18.8	0.235	mg/Kg
C1320-03	CS-3-3	SOIL	Beryllium	0.316	J	0.469	0.050	mg/Kg
C1320-03	CS-3-3	SOIL	Cadmium	1.080		0.469	0.030	mg/Kg
C1320-03	CS-3-3	SOIL	Calcium	3,120.000		469	13.0	mg/Kg
C1320-03	CS-3-3	SOIL	Chromium	16.300		0.938	0.032	mg/Kg
C1320-03	CS-3-3	SOIL	Cobalt	4.360	J	4.690	0.026	mg/Kg
C1320-03	CS-3-3	SOIL	Copper	24.900		2.350	0.159	mg/Kg
C1320-03	CS-3-3	SOIL	Iron	14,300.000		9.380	2.030	mg/Kg
C1320-03	CS-3-3	SOIL	Lead	26.800		0.938	0.141	mg/Kg
C1320-03	CS-3-3	SOIL	Magnesium	1,470.000		469	19.2	mg/Kg
C1320-03	CS-3-3	SOIL	Manganese	189.000		1.410	0.038	mg/Kg
C1320-03	CS-3-3	SOIL	Mercury	0.050	J	0.11	0.04	mg/Kg
C1320-03	CS-3-3	SOIL	Nickel	11.400		3.750	0.050	mg/Kg
C1320-03	CS-3-3	SOIL	Potassium	347.000	J	469	4.650	mg/Kg
C1320-03	CS-3-3	SOIL	Selenium	0.504	J	3.280	0.357	mg/Kg
C1320-03	CS-3-3	SOIL	Silver	1.750		0.938	0.056	mg/Kg
C1320-03	CS-3-3	SOIL	Sodium	69.300	J	469	17.7	mg/Kg
C1320-03	CS-3-3	SOIL	Vanadium	15.900		4.690	0.043	mg/Kg
C1320-03	CS-3-3	SOIL	Zinc	41.500		5.630	0.084	mg/Kg

**Metals****- 3a -****INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY**

Client:	Malcolm Pirnie, Inc.				SDG No.:	C1320				
Contract:	MALC02		Lab Code:	CHEM	Case No.:	C1320		SAS No.:	C1320	
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Mercury	0.06	+/-0.20	U	0.06	0.20	CV	02/18/2011	10:15	LB53836
CCB01	Mercury	0.06	+/-0.20	U	0.06	0.20	CV	02/18/2011	10:21	LB53836
CCB02	Mercury	0.06	+/-0.20	U	0.06	0.20	CV	02/18/2011	10:41	LB53836
ICB01	Aluminum	15.0	+/-200.0	U	15.0	200.0	P	02/18/2011	11:10	LB53845
	Antimony	2.3	+/-60.0	U	2.3	60.0	P	02/18/2011	11:10	LB53845
	Arsenic	3.0	+/-10.0	U	3.0	10.0	P	02/18/2011	11:10	LB53845
	Barium	1.3	+/-200.0	U	1.3	200.0	P	02/18/2011	11:10	LB53845
	Beryllium	0.5	+/-5.0	U	0.5	5.0	P	02/18/2011	11:10	LB53845
	Cadmium	0.5	+/-5.0	J	0.3	5.0	P	02/18/2011	11:10	LB53845
	Calcium	48.9	+/-5000.0	U	48.9	5000.0	P	02/18/2011	11:10	LB53845
	Chromium	0.5	+/-10.0	U	0.5	10.0	P	02/18/2011	11:10	LB53845
	Cobalt	2.3	+/-50.0	U	2.3	50.0	P	02/18/2011	11:10	LB53845
	Copper	2.6	+/-25.0	U	2.6	25.0	P	02/18/2011	11:10	LB53845
	Iron	7.3	+/-100.0	U	7.3	100.0	P	02/18/2011	11:10	LB53845
	Lead	1.7	+/-10.0	U	1.7	10.0	P	02/18/2011	11:10	LB53845
	Magnesium	30.9	+/-5000.0	U	30.9	5000.0	P	02/18/2011	11:10	LB53845
	Manganese	0.6	+/-15.0	J	0.5	15.0	P	02/18/2011	11:10	LB53845
	Nickel	0.5	+/-40.0	J	0.4	40.0	P	02/18/2011	11:10	LB53845
	Potassium	58.4	+/-5000.0	U	58.4	5000.0	P	02/18/2011	11:10	LB53845
	Selenium	3.3	+/-35.0	J	2.8	35.0	P	02/18/2011	11:10	LB53845
	Silver	0.3	+/-10.0	U	0.3	10.0	P	02/18/2011	11:10	LB53845
	Sodium	187.0	+/-5000.0	U	187.0	5000.0	P	02/18/2011	11:10	LB53845
	Thallium	3.0	+/-25.0	U	3.0	25.0	P	02/18/2011	11:10	LB53845
	Vanadium	0.7	+/-50.0	J	0.6	50.0	P	02/18/2011	11:10	LB53845
	Zinc	9.5	+/-60.0	U	9.5	60.0	P	02/18/2011	11:10	LB53845
CCB01	Aluminum	26.2	+/-200.0	J	15.0	200.0	P	02/18/2011	11:30	LB53845
	Antimony	2.9	+/-60.0	J	2.3	60.0	P	02/18/2011	11:30	LB53845
	Arsenic	3.0	+/-10.0	U	3.0	10.0	P	02/18/2011	11:30	LB53845
	Barium	3.8	+/-200.0	J	1.3	200.0	P	02/18/2011	11:30	LB53845
	Beryllium	0.5	+/-5.0	U	0.5	5.0	P	02/18/2011	11:30	LB53845
	Cadmium	0.9	+/-5.0	J	0.3	5.0	P	02/18/2011	11:30	LB53845
	Calcium	48.9	+/-5000.0	U	48.9	5000.0	P	02/18/2011	11:30	LB53845
	Chromium	0.5	+/-10.0	U	0.5	10.0	P	02/18/2011	11:30	LB53845
	Cobalt	2.3	+/-50.0	U	2.3	50.0	P	02/18/2011	11:30	LB53845
	Copper	2.6	+/-25.0	U	2.6	25.0	P	02/18/2011	11:30	LB53845
	Iron	14.1	+/-100.0	J	7.3	100.0	P	02/18/2011	11:30	LB53845
	Lead	1.7	+/-10.0	U	1.7	10.0	P	02/18/2011	11:30	LB53845
	Magnesium	47.4	+/-5000.0	J	30.9	5000.0	P	02/18/2011	11:30	LB53845
	Manganese	1.0	+/-15.0	J	0.5	15.0	P	02/18/2011	11:30	LB53845

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:	Malcolm Pirnie, Inc.				SDG No.:	C1320				
Contract:	MALC02		Lab Code:	CHEM		Case No.:	C1320		SAS No.:	C1320
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Nickel	0.7	+/-40.0	J	0.4	40.0	P	02/18/2011	11:30	LB53845
	Potassium	58.4	+/-5000.0	U	58.4	5000.0	P	02/18/2011	11:30	LB53845
	Selenium	4.4	+/-35.0	J	2.8	35.0	P	02/18/2011	11:30	LB53845
	Silver	0.7	+/-10.0	J	0.3	10.0	P	02/18/2011	11:30	LB53845
	Sodium	187.0	+/-5000.0	U	187.0	5000.0	P	02/18/2011	11:30	LB53845
	Thallium	4.9	+/-25.0	J	3.0	25.0	P	02/18/2011	11:30	LB53845
	Vanadium	1.3	+/-50.0	J	0.6	50.0	P	02/18/2011	11:30	LB53845
	Zinc	9.5	+/-60.0	U	9.5	60.0	P	02/18/2011	11:30	LB53845
CCB02	Aluminum	15.0	+/-200.0	U	15.0	200.0	P	02/18/2011	12:04	LB53845
	Antimony	3.5	+/-60.0	J	2.3	60.0	P	02/18/2011	12:04	LB53845
	Arsenic	3.0	+/-10.0	U	3.0	10.0	P	02/18/2011	12:04	LB53845
	Barium	3.2	+/-200.0	J	1.3	200.0	P	02/18/2011	12:04	LB53845
	Beryllium	0.5	+/-5.0	U	0.5	5.0	P	02/18/2011	12:04	LB53845
	Cadmium	0.8	+/-5.0	J	0.3	5.0	P	02/18/2011	12:04	LB53845
	Calcium	48.9	+/-5000.0	U	48.9	5000.0	P	02/18/2011	12:04	LB53845
	Chromium	0.5	+/-10.0	U	0.5	10.0	P	02/18/2011	12:04	LB53845
	Cobalt	2.3	+/-50.0	U	2.3	50.0	P	02/18/2011	12:04	LB53845
	Copper	2.6	+/-25.0	U	2.6	25.0	P	02/18/2011	12:04	LB53845
	Iron	7.3	+/-100.0	U	7.3	100.0	P	02/18/2011	12:04	LB53845
	Lead	1.7	+/-10.0	U	1.7	10.0	P	02/18/2011	12:04	LB53845
	Magnesium	30.9	+/-5000.0	J	30.9	5000.0	P	02/18/2011	12:04	LB53845
	Manganese	0.9	+/-15.0	J	0.5	15.0	P	02/18/2011	12:04	LB53845
	Nickel	0.6	+/-40.0	J	0.4	40.0	P	02/18/2011	12:04	LB53845
	Potassium	58.4	+/-5000.0	U	58.4	5000.0	P	02/18/2011	12:04	LB53845
	Selenium	3.7	+/-35.0	J	2.8	35.0	P	02/18/2011	12:04	LB53845
	Silver	0.3	+/-10.0	U	0.3	10.0	P	02/18/2011	12:04	LB53845
	Sodium	187.0	+/-5000.0	U	187.0	5000.0	P	02/18/2011	12:04	LB53845
	Thallium	3.0	+/-25.0	U	3.0	25.0	P	02/18/2011	12:04	LB53845
	Vanadium	0.8	+/-50.0	J	0.6	50.0	P	02/18/2011	12:04	LB53845
	Zinc	9.5	+/-60.0	U	9.5	60.0	P	02/18/2011	12:04	LB53845
CCB03	Aluminum	88.5	+/-200.0	J	15.0	200.0	P	02/18/2011	12:55	LB53845
	Antimony	8.9	+/-60.0	J	2.3	60.0	P	02/18/2011	12:55	LB53845
	Arsenic	6.7	+/-10.0	J	3.0	10.0	P	02/18/2011	12:55	LB53845
	Barium	14.3	+/-200.0	J	1.3	200.0	P	02/18/2011	12:55	LB53845
	Beryllium	0.6	+/-5.0	J	0.5	5.0	P	02/18/2011	12:55	LB53845
	Cadmium	3.5	+/-5.0	J	0.3	5.0	P	02/18/2011	12:55	LB53845
	Calcium	106.3	+/-5000.0	J	48.9	5000.0	P	02/18/2011	12:55	LB53845
	Chromium	1.7	+/-10.0	J	0.5	10.0	P	02/18/2011	12:55	LB53845
	Cobalt	3.6	+/-50.0	J	2.3	50.0	P	02/18/2011	12:55	LB53845
	Copper	6.5	+/-25.0	J	2.6	25.0	P	02/18/2011	12:55	LB53845
	Iron	40.6	+/-100.0	J	7.3	100.0	P	02/18/2011	12:55	LB53845
	Lead	5.4	+/-10.0	J	1.7	10.0	P	02/18/2011	12:55	LB53845

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:	Malcolm Pirnie, Inc.				SDG No.:	C1320				
Contract:	MALC02		Lab Code:	CHEM		Case No.:	C1320		SAS No.:	C1320
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB03	Magnesium	97.4	+/-5000.0	J	30.9	5000.0	P	02/18/2011	12:55	LB53845
	Manganese	3.9	+/-15.0	J	0.5	15.0	P	02/18/2011	12:55	LB53845
	Nickel	3.6	+/-40.0	J	0.4	40.0	P	02/18/2011	12:55	LB53845
	Potassium	58.4	+/-5000.0	U	58.4	5000.0	P	02/18/2011	12:55	LB53845
	Selenium	11.4	+/-35.0	J	2.8	35.0	P	02/18/2011	12:55	LB53845
	Silver	1.6	+/-10.0	J	0.3	10.0	P	02/18/2011	12:55	LB53845
	Sodium	187.0	+/-5000.0	U	187.0	5000.0	P	02/18/2011	12:55	LB53845
	Thallium	11.2	+/-25.0	J	3.0	25.0	P	02/18/2011	12:55	LB53845
	Vanadium	4.0	+/-50.0	J	0.6	50.0	P	02/18/2011	12:55	LB53845
	Zinc	9.5	+/-60.0	U	9.5	60.0	P	02/18/2011	12:55	LB53845
ICB01	Aluminum	15.0	+/-200.0	U	15.0	200.0	P	02/18/2011	13:36	LB53849
	Antimony	2.4	+/-60.0	J	2.3	60.0	P	02/18/2011	13:36	LB53849
	Arsenic	3.0	+/-10.0	U	3.0	10.0	P	02/18/2011	13:36	LB53849
	Barium	2.0	+/-200.0	J	1.3	200.0	P	02/18/2011	13:36	LB53849
	Beryllium	0.5	+/-5.0	U	0.5	5.0	P	02/18/2011	13:36	LB53849
	Cadmium	0.6	+/-5.0	J	0.3	5.0	P	02/18/2011	13:36	LB53849
	Calcium	48.9	+/-5000.0	U	48.9	5000.0	P	02/18/2011	13:36	LB53849
	Chromium	0.5	+/-10.0	U	0.5	10.0	P	02/18/2011	13:36	LB53849
	Cobalt	2.3	+/-50.0	U	2.3	50.0	P	02/18/2011	13:36	LB53849
	Copper	2.5	+/-25.0	U	2.5	25.0	P	02/18/2011	13:36	LB53849
	Iron	7.3	+/-100.0	U	7.3	100.0	P	02/18/2011	13:36	LB53849
	Lead	1.7	+/-10.0	U	1.7	10.0	P	02/18/2011	13:36	LB53849
	Magnesium	30.9	+/-5000.0	U	30.9	5000.0	P	02/18/2011	13:36	LB53849
	Manganese	0.7	+/-15.0	J	0.5	15.0	P	02/18/2011	13:36	LB53849
	Nickel	0.8	+/-40.0	J	0.4	40.0	P	02/18/2011	13:36	LB53849
	Potassium	58.4	+/-5000.0	U	58.4	5000.0	P	02/18/2011	13:36	LB53849
	Selenium	2.8	+/-35.0	U	2.8	35.0	P	02/18/2011	13:36	LB53849
	Silver	0.3	+/-10.0	U	0.3	10.0	P	02/18/2011	13:36	LB53849
	Sodium	187.0	+/-5000.0	U	187.0	5000.0	P	02/18/2011	13:36	LB53849
	Thallium	4.9	+/-25.0	J	3.0	25.0	P	02/18/2011	13:36	LB53849
	Vanadium	0.7	+/-50.0	J	0.6	50.0	P	02/18/2011	13:36	LB53849
	Zinc	9.5	+/-60.0	U	9.5	60.0	P	02/18/2011	13:36	LB53849
CCB01	Aluminum	91.5	+/-200.0	J	15.0	200.0	P	02/18/2011	13:50	LB53849
	Antimony	7.5	+/-60.0	J	2.3	60.0	P	02/18/2011	13:50	LB53849
	Arsenic	5.0	+/-10.0	J	3.0	10.0	P	02/18/2011	13:50	LB53849
	Barium	11.6	+/-200.0	J	1.3	200.0	P	02/18/2011	13:50	LB53849
	Beryllium	0.6	+/-5.0	J	0.5	5.0	P	02/18/2011	13:50	LB53849
	Cadmium	3.3	+/-5.0	J	0.3	5.0	P	02/18/2011	13:50	LB53849
	Calcium	118.7	+/-5000.0	J	48.9	5000.0	P	02/18/2011	13:50	LB53849
	Chromium	1.5	+/-10.0	J	0.5	10.0	P	02/18/2011	13:50	LB53849
	Cobalt	3.2	+/-50.0	J	2.3	50.0	P	02/18/2011	13:50	LB53849
	Copper	2.6	+/-25.0	J	2.5	25.0	P	02/18/2011	13:50	LB53849

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:	Malcolm Pirnie, Inc.				SDG No.:		<u>C1320</u>			
Contract:	<u>MALC02</u>		Lab Code:	<u>CHEM</u>		Case No.:		<u>C1320</u>	SAS No.:	
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Iron	40.8	+/-100.0	J	7.3	100.0	P	02/18/2011	13:50	LB53849
	Lead	5.9	+/-10.0	J	1.7	10.0	P	02/18/2011	13:50	LB53849
	Magnesium	103.5	+/-5000.0	J	30.9	5000.0	P	02/18/2011	13:50	LB53849
	Manganese	3.0	+/-15.0	J	0.5	15.0	P	02/18/2011	13:50	LB53849
	Nickel	3.7	+/-40.0	J	0.4	40.0	P	02/18/2011	13:50	LB53849
	Potassium	58.4	+/-5000.0	U	58.4	5000.0	P	02/18/2011	13:50	LB53849
	Selenium	5.2	+/-35.0	J	2.8	35.0	P	02/18/2011	13:50	LB53849
	Silver	1.1	+/-10.0	J	0.3	10.0	P	02/18/2011	13:50	LB53849
	Sodium	187.0	+/-5000.0	U	187.0	5000.0	P	02/18/2011	13:50	LB53849
	Thallium	10.0	+/-25.0	J	3.0	25.0	P	02/18/2011	13:50	LB53849
	Vanadium	3.7	+/-50.0	J	0.6	50.0	P	02/18/2011	13:50	LB53849
	Zinc	9.5	+/-60.0	U	9.5	60.0	P	02/18/2011	13:50	LB53849
CCB02	Aluminum	98.9	+/-200.0	J	15.0	200.0	P	02/18/2011	14:32	LB53849
	Antimony	5.5	+/-60.0	J	2.3	60.0	P	02/18/2011	14:32	LB53849
	Arsenic	4.5	+/-10.0	J	3.0	10.0	P	02/18/2011	14:32	LB53849
	Barium	11.5	+/-200.0	J	1.3	200.0	P	02/18/2011	14:32	LB53849
	Beryllium	0.5	+/-5.0	U	0.5	5.0	P	02/18/2011	14:32	LB53849
	Cadmium	2.9	+/-5.0	J	0.3	5.0	P	02/18/2011	14:32	LB53849
	Calcium	118.2	+/-5000.0	J	48.9	5000.0	P	02/18/2011	14:32	LB53849
	Chromium	1.2	+/-10.0	J	0.5	10.0	P	02/18/2011	14:32	LB53849
	Cobalt	2.7	+/-50.0	J	2.3	50.0	P	02/18/2011	14:32	LB53849
	Copper	2.5	+/-25.0	U	2.5	25.0	P	02/18/2011	14:32	LB53849
	Iron	36.2	+/-100.0	J	7.3	100.0	P	02/18/2011	14:32	LB53849
	Lead	3.3	+/-10.0	J	1.7	10.0	P	02/18/2011	14:32	LB53849
	Magnesium	94.9	+/-5000.0	J	30.9	5000.0	P	02/18/2011	14:32	LB53849
	Manganese	2.7	+/-15.0	J	0.5	15.0	P	02/18/2011	14:32	LB53849
	Nickel	3.0	+/-40.0	J	0.4	40.0	P	02/18/2011	14:32	LB53849
	Potassium	58.4	+/-5000.0	U	58.4	5000.0	P	02/18/2011	14:32	LB53849
	Selenium	5.5	+/-35.0	J	2.8	35.0	P	02/18/2011	14:32	LB53849
	Silver	0.7	+/-10.0	J	0.3	10.0	P	02/18/2011	14:32	LB53849
	Sodium	187.0	+/-5000.0	U	187.0	5000.0	P	02/18/2011	14:32	LB53849
	Thallium	9.7	+/-25.0	J	3.0	25.0	P	02/18/2011	14:32	LB53849
	Vanadium	3.1	+/-50.0	J	0.6	50.0	P	02/18/2011	14:32	LB53849
	Zinc	9.5	+/-60.0	U	9.5	60.0	P	02/18/2011	14:32	LB53849
CCB03	Aluminum	15.0	+/-200.0	U	15.0	200.0	P	02/18/2011	15:06	LB53849
	Antimony	2.3	+/-60.0	U	2.3	60.0	P	02/18/2011	15:06	LB53849
	Arsenic	3.0	+/-10.0	U	3.0	10.0	P	02/18/2011	15:06	LB53849
	Barium	1.3	+/-200.0	U	1.3	200.0	P	02/18/2011	15:06	LB53849
	Beryllium	0.5	+/-5.0	U	0.5	5.0	P	02/18/2011	15:06	LB53849
	Cadmium	0.3	+/-5.0	U	0.3	5.0	P	02/18/2011	15:06	LB53849
	Calcium	48.9	+/-5000.0	U	48.9	5000.0	P	02/18/2011	15:06	LB53849
	Chromium	0.5	+/-10.0	U	0.5	10.0	P	02/18/2011	15:06	LB53849

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Malcolm Pirnie, Inc.

SDG No.: C1320

Contract: MALC02

Lab Code: CHEM

Case No.: C1320

SAS No.: C1320

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB03	Cobalt	2.3	+/-50.0	U	2.3	50.0	P	02/18/2011	15:06	LB53849
	Copper	2.5	+/-25.0	U	2.5	25.0	P	02/18/2011	15:06	LB53849
	Iron	7.3	+/-100.0	U	7.3	100.0	P	02/18/2011	15:06	LB53849
	Lead	1.7	+/-10.0	U	1.7	10.0	P	02/18/2011	15:06	LB53849
	Magnesium	30.9	+/-5000.0	U	30.9	5000.0	P	02/18/2011	15:06	LB53849
	Manganese	0.5	+/-15.0	U	0.5	15.0	P	02/18/2011	15:06	LB53849
	Nickel	0.4	+/-40.0	U	0.4	40.0	P	02/18/2011	15:06	LB53849
	Potassium	58.4	+/-5000.0	U	58.4	5000.0	P	02/18/2011	15:06	LB53849
	Selenium	2.8	+/-35.0	U	2.8	35.0	P	02/18/2011	15:06	LB53849
	Silver	0.3	+/-10.0	U	0.3	10.0	P	02/18/2011	15:06	LB53849
	Sodium	187.0	+/-5000.0	U	187.0	5000.0	P	02/18/2011	15:06	LB53849
	Thallium	3.4	+/-25.0	J	3.0	25.0	P	02/18/2011	15:06	LB53849
	Vanadium	0.6	+/-50.0	U	0.6	50.0	P	02/18/2011	15:06	LB53849
	Zinc	9.5	+/-60.0	U	9.5	60.0	P	02/18/2011	15:06	LB53849
CCB04	Aluminum	54.9	+/-200.0	J	15.0	200.0	P	02/18/2011	15:41	LB53849
	Antimony	2.3	+/-60.0	U	2.3	60.0	P	02/18/2011	15:41	LB53849
	Arsenic	3.0	+/-10.0	U	3.0	10.0	P	02/18/2011	15:41	LB53849
	Barium	2.1	+/-200.0	J	1.3	200.0	P	02/18/2011	15:41	LB53849
	Beryllium	0.5	+/-5.0	U	0.5	5.0	P	02/18/2011	15:41	LB53849
	Cadmium	0.3	+/-5.0	U	0.3	5.0	P	02/18/2011	15:41	LB53849
	Calcium	48.9	+/-5000.0	U	48.9	5000.0	P	02/18/2011	15:41	LB53849
	Chromium	0.5	+/-10.0	U	0.5	10.0	P	02/18/2011	15:41	LB53849
	Cobalt	2.3	+/-50.0	U	2.3	50.0	P	02/18/2011	15:41	LB53849
	Copper	5.7	+/-25.0	J	2.5	25.0	P	02/18/2011	15:41	LB53849
	Iron	7.3	+/-100.0	U	7.3	100.0	P	02/18/2011	15:41	LB53849
	Lead	1.7	+/-10.0	U	1.7	10.0	P	02/18/2011	15:41	LB53849
	Magnesium	30.9	+/-5000.0	U	30.9	5000.0	P	02/18/2011	15:41	LB53849
	Manganese	0.5	+/-15.0	U	0.5	15.0	P	02/18/2011	15:41	LB53849
	Nickel	0.4	+/-40.0	U	0.4	40.0	P	02/18/2011	15:41	LB53849
	Potassium	58.4	+/-5000.0	U	58.4	5000.0	P	02/18/2011	15:41	LB53849
	Selenium	2.8	+/-35.0	U	2.8	35.0	P	02/18/2011	15:41	LB53849
	Silver	0.3	+/-10.0	U	0.3	10.0	P	02/18/2011	15:41	LB53849
	Sodium	187.0	+/-5000.0	U	187.0	5000.0	P	02/18/2011	15:41	LB53849
	Thallium	4.0	+/-25.0	J	3.0	25.0	P	02/18/2011	15:41	LB53849
	Vanadium	0.6	+/-50.0	U	0.6	50.0	P	02/18/2011	15:41	LB53849
	Zinc	9.5	+/-60.0	U	9.5	60.0	P	02/18/2011	15:41	LB53849
CCB05	Aluminum	15.0	+/-200.0	U	15.0	200.0	P	02/18/2011	16:15	LB53849
	Antimony	2.3	+/-60.0	U	2.3	60.0	P	02/18/2011	16:15	LB53849
	Arsenic	3.0	+/-10.0	U	3.0	10.0	P	02/18/2011	16:15	LB53849
	Barium	1.3	+/-200.0	U	1.3	200.0	P	02/18/2011	16:15	LB53849
	Beryllium	0.5	+/-5.0	U	0.5	5.0	P	02/18/2011	16:15	LB53849
	Cadmium	0.3	+/-5.0	U	0.3	5.0	P	02/18/2011	16:15	LB53849

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:	Malcolm Pirnie, Inc.				SDG No.:	C1320				
Contract:	MALC02		Lab Code:	CHEM		Case No.:	C1320		SAS No.:	C1320
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB05	Calcium	48.9	+/-5000.0	U	48.9	5000.0	P	02/18/2011	16:15	LB53849
	Chromium	0.5	+/-10.0	U	0.5	10.0	P	02/18/2011	16:15	LB53849
	Cobalt	2.3	+/-50.0	U	2.3	50.0	P	02/18/2011	16:15	LB53849
	Copper	2.5	+/-25.0	U	2.5	25.0	P	02/18/2011	16:15	LB53849
	Iron	7.3	+/-100.0	U	7.3	100.0	P	02/18/2011	16:15	LB53849
	Lead	1.7	+/-10.0	U	1.7	10.0	P	02/18/2011	16:15	LB53849
	Magnesium	30.9	+/-5000.0	U	30.9	5000.0	P	02/18/2011	16:15	LB53849
	Manganese	0.5	+/-15.0	U	0.5	15.0	P	02/18/2011	16:15	LB53849
	Nickel	0.5	+/-40.0	J	0.4	40.0	P	02/18/2011	16:15	LB53849
	Potassium	58.4	+/-5000.0	U	58.4	5000.0	P	02/18/2011	16:15	LB53849
	Selenium	2.8	+/-35.0	U	2.8	35.0	P	02/18/2011	16:15	LB53849
	Silver	0.3	+/-10.0	U	0.3	10.0	P	02/18/2011	16:15	LB53849
	Sodium	187.0	+/-5000.0	U	187.0	5000.0	P	02/18/2011	16:15	LB53849
	Thallium	4.1	+/-25.0	J	3.0	25.0	P	02/18/2011	16:15	LB53849
CCB06	Vanadium	0.6	+/-50.0	U	0.6	50.0	P	02/18/2011	16:15	LB53849
	Zinc	9.5	+/-60.0	U	9.5	60.0	P	02/18/2011	16:15	LB53849
	Aluminum	15.0	+/-200.0	U	15.0	200.0	P	02/18/2011	16:49	LB53849
	Antimony	2.3	+/-60.0	U	2.3	60.0	P	02/18/2011	16:49	LB53849
	Arsenic	3.0	+/-10.0	U	3.0	10.0	P	02/18/2011	16:49	LB53849
	Barium	1.3	+/-200.0	U	1.3	200.0	P	02/18/2011	16:49	LB53849
	Beryllium	0.5	+/-5.0	U	0.5	5.0	P	02/18/2011	16:49	LB53849
	Cadmium	0.3	+/-5.0	U	0.3	5.0	P	02/18/2011	16:49	LB53849
	Calcium	48.9	+/-5000.0	U	48.9	5000.0	P	02/18/2011	16:49	LB53849
	Chromium	0.5	+/-10.0	U	0.5	10.0	P	02/18/2011	16:49	LB53849
	Cobalt	2.3	+/-50.0	U	2.3	50.0	P	02/18/2011	16:49	LB53849
	Copper	2.5	+/-25.0	U	2.5	25.0	P	02/18/2011	16:49	LB53849
	Iron	7.3	+/-100.0	U	7.3	100.0	P	02/18/2011	16:49	LB53849
	Lead	1.7	+/-10.0	U	1.7	10.0	P	02/18/2011	16:49	LB53849
ICB01	Magnesium	30.9	+/-5000.0	U	30.9	5000.0	P	02/18/2011	16:49	LB53849
	Manganese	0.5	+/-15.0	U	0.5	15.0	P	02/18/2011	16:49	LB53849
	Nickel	0.6	+/-40.0	J	0.4	40.0	P	02/18/2011	16:49	LB53849
	Potassium	58.4	+/-5000.0	U	58.4	5000.0	P	02/18/2011	16:49	LB53849
	Selenium	2.8	+/-35.0	U	2.8	35.0	P	02/18/2011	16:49	LB53849
	Silver	0.3	+/-10.0	U	0.3	10.0	P	02/18/2011	16:49	LB53849
	Sodium	187.0	+/-5000.0	U	187.0	5000.0	P	02/18/2011	16:49	LB53849
	Thallium	4.0	+/-25.0	J	3.0	25.0	P	02/18/2011	16:49	LB53849
	Vanadium	0.6	+/-50.0	U	0.6	50.0	P	02/18/2011	16:49	LB53849
	Zinc	9.5	+/-60.0	U	9.5	60.0	P	02/18/2011	16:49	LB53849
CCB01	Mercury	0.05	+/-0.20	U	0.05	0.20	CV	02/21/2011	12:40	LB53860
CCB01	Mercury	0.05	+/-0.20	U	0.05	0.20	CV	02/21/2011	12:49	LB53860
CCB02	Mercury	0.05	+/-0.20	U	0.05	0.20	CV	02/21/2011	13:05	LB53860

Metals**- 3b -****PREPARATION BLANK SUMMARY****Client:** Malcolm Pirnie, Inc.**SDG No.:** C1320**Instrument:** CV2

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	MDL mg/Kg	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB53823BL	SOIL				Batch Number:	PB53823			Prep Date:	02/17/2011
	Mercury	0.035	<0.100	U	0.035	0.100	CV	02/18/2011	10:23	LB53836
PB53822BL	SOIL				Batch Number:	PB53822			Prep Date:	02/17/2011
	Aluminum	1.282	<20.000	J	1.000	20.000	P	02/18/2011	11:32	LB53845
	Antimony	0.190	<6.000	U	0.190	6.000	P	02/18/2011	11:32	LB53845
	Arsenic	0.260	<1.000	U	0.260	1.000	P	02/18/2011	11:32	LB53845
	Barium	0.250	<20.000	U	0.250	20.000	P	02/18/2011	11:32	LB53845
	Beryllium	0.053	<0.500	U	0.053	0.500	P	02/18/2011	11:32	LB53845
	Cadmium	0.032	<0.500	U	0.032	0.500	P	02/18/2011	11:32	LB53845
	Calcium	13.900	<500.000	U	13.900	500.000	P	02/18/2011	11:32	LB53845
	Chromium	0.034	<1.000	U	0.034	1.000	P	02/18/2011	11:32	LB53845
	Cobalt	0.029	<5.000	J	0.028	5.000	P	02/18/2011	11:32	LB53845
	Copper	0.217	<2.500	J	0.170	2.500	P	02/18/2011	11:32	LB53845
	Iron	2.160	<10.000	U	2.160	10.000	P	02/18/2011	11:32	LB53845
	Lead	0.150	<1.000	U	0.150	1.000	P	02/18/2011	11:32	LB53845
	Magnesium	20.500	<500.000	U	20.500	500.000	P	02/18/2011	11:32	LB53845
	Manganese	0.040	<1.500	U	0.040	1.500	P	02/18/2011	11:32	LB53845
	Nickel	0.053	<4.000	U	0.053	4.000	P	02/18/2011	11:32	LB53845
	Potassium	4.960	<500.000	U	4.960	500.000	P	02/18/2011	11:32	LB53845
	Selenium	0.380	<3.500	U	0.380	3.500	P	02/18/2011	11:32	LB53845
	Silver	0.060	<1.000	U	0.060	1.000	P	02/18/2011	11:32	LB53845
	Sodium	18.900	<500.000	U	18.900	500.000	P	02/18/2011	11:32	LB53845
	Thallium	0.280	<2.500	U	0.280	2.500	P	02/18/2011	11:32	LB53845
	Vanadium	0.046	<5.000	U	0.046	5.000	P	02/18/2011	11:32	LB53845
	Zinc	0.090	<6.000	U	0.090	6.000	P	02/18/2011	11:32	LB53845
PB53826BL	SOIL				Batch Number:	PB53826			Prep Date:	02/18/2011
	Aluminum	1.000	<20.000	U	1.000	20.000	P	02/18/2011	13:59	LB53849
	Antimony	0.240	<6.000	J	0.190	6.000	P	02/18/2011	13:59	LB53849
	Arsenic	0.260	<1.000	U	0.260	1.000	P	02/18/2011	13:59	LB53849
	Barium	0.250	<20.000	U	0.250	20.000	P	02/18/2011	13:59	LB53849
	Beryllium	0.053	<0.500	U	0.053	0.500	P	02/18/2011	13:59	LB53849
	Cadmium	0.032	<0.500	U	0.032	0.500	P	02/18/2011	13:59	LB53849
	Calcium	13.900	<500.000	U	13.900	500.000	P	02/18/2011	13:59	LB53849
	Chromium	0.034	<1.000	U	0.034	1.000	P	02/18/2011	13:59	LB53849
	Cobalt	0.028	<5.000	U	0.028	5.000	P	02/18/2011	13:59	LB53849
	Copper	0.248	<2.500	J	0.170	2.500	P	02/18/2011	13:59	LB53849
	Iron	2.160	<10.000	U	2.160	10.000	P	02/18/2011	13:59	LB53849
	Lead	0.150	<1.000	U	0.150	1.000	P	02/18/2011	13:59	LB53849

Metals**- 3b -****PREPARATION BLANK SUMMARY****Client:** Malcolm Pirnie, Inc.**SDG No.:** C1320**Instrument:** P5

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	MDL mg/Kg	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
	Magnesium	20.500	<500.000	U	20.500	500.000	P	02/18/2011	13:59	LB53849
	Manganese	0.040	<1.500	U	0.040	1.500	P	02/18/2011	13:59	LB53849
	Nickel	0.053	<4.000	U	0.053	4.000	P	02/18/2011	13:59	LB53849
	Potassium	4.960	<500.000	U	4.960	500.000	P	02/18/2011	13:59	LB53849
	Selenium	0.380	<3.500	U	0.380	3.500	P	02/18/2011	13:59	LB53849
	Silver	0.060	<1.000	U	0.060	1.000	P	02/18/2011	13:59	LB53849
	Sodium	18.900	<500.000	U	18.900	500.000	P	02/18/2011	13:59	LB53849
	Thallium	0.280	<2.500	U	0.280	2.500	P	02/18/2011	13:59	LB53849
	Vanadium	0.046	<5.000	U	0.046	5.000	P	02/18/2011	13:59	LB53849
	Zinc	0.090	<6.000	U	0.090	6.000	P	02/18/2011	13:59	LB53849

PB53861BL **SOIL** **Batch Number:** **PB53861** **Prep Date:** **02/21/2011**
Mercury 0.036 <0.100 U 0.036 0.100 CV 02/21/2011 12:51 LB53860

Metals

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INTERFERENCE CHECK SAMPLE

Client:	Malcolm Pirnie, Inc.	SDG No.:	C1320
Contract:	MALC02	Lab Code:	CHEM
ICS Source:	EPA	Case No.:	C1320
		Instrument ID:	P5

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window	Analysis Date	Analysis Time	Run Number
ICSA01	Aluminum	251000	244100	102.8	80 - 120%	02/18/2011	11:21	LB53845
	Antimony	2.4				02/18/2011	11:21	LB53845
	Arsenic	4.6				02/18/2011	11:21	LB53845
	Barium	3.0				02/18/2011	11:21	LB53845
	Beryllium	0.92				02/18/2011	11:21	LB53845
	Cadmium	4.7				02/18/2011	11:21	LB53845
	Calcium	244000	234900	103.9		02/18/2011	11:21	LB53845
	Chromium	44.0	43	102.3		02/18/2011	11:21	LB53845
	Cobalt	2.6				02/18/2011	11:21	LB53845
	Copper	24.2				02/18/2011	11:21	LB53845
	Iron	95100	95600	99.5		02/18/2011	11:21	LB53845
	Lead	12.1				02/18/2011	11:21	LB53845
	Magnesium	248000	247500	100.2		02/18/2011	11:21	LB53845
	Manganese	15.9	19	83.7		02/18/2011	11:21	LB53845
	Nickel	17.4				02/18/2011	11:21	LB53845
	Potassium	-40.0				02/18/2011	11:21	LB53845
	Selenium	-2.1				02/18/2011	11:21	LB53845
	Silver	-1.5				02/18/2011	11:21	LB53845
	Sodium	692				02/18/2011	11:21	LB53845
	Thallium	0.091				02/18/2011	11:21	LB53845
	Vanadium	1.6				02/18/2011	11:21	LB53845
	Zinc	20.9				02/18/2011	11:21	LB53845
ICSA01	Aluminum	245000	241100	101.6	80 - 120%	02/18/2011	11:24	LB53845
	Antimony	611	589	103.7		02/18/2011	11:24	LB53845
	Arsenic	108	101	106.9		02/18/2011	11:24	LB53845
	Barium	493	495	99.6		02/18/2011	11:24	LB53845
	Beryllium	477	475	100.4		02/18/2011	11:24	LB53845
	Cadmium	1000	940	106.4		02/18/2011	11:24	LB53845
	Calcium	240000	231100	103.9		02/18/2011	11:24	LB53845
	Chromium	523	511	102.3		02/18/2011	11:24	LB53845
	Cobalt	501	461	108.7		02/18/2011	11:24	LB53845
	Copper	506	548	92.3		02/18/2011	11:24	LB53845
	Iron	93300	94800	98.4		02/18/2011	11:24	LB53845
	Lead	62.1	61	101.8		02/18/2011	11:24	LB53845
	Magnesium	244000	251100	97.2		02/18/2011	11:24	LB53845
	Manganese	491	502	97.8		02/18/2011	11:24	LB53845
	Nickel	1030	984	104.7		02/18/2011	11:24	LB53845
	Potassium	-117				02/18/2011	11:24	LB53845
	Selenium	44.8	53	84.5		02/18/2011	11:24	LB53845
	Silver	209	206	101.5		02/18/2011	11:24	LB53845
	Sodium	738				02/18/2011	11:24	LB53845
	Thallium	100	103	97.1		02/18/2011	11:24	LB53845
	Vanadium	456	494	92.3		02/18/2011	11:24	LB53845
	Zinc	999	1028	97.2		02/18/2011	11:24	LB53845
ICSA02	Aluminum	256000	244100	104.9	80 - 120%	02/18/2011	12:47	LB53845
	Antimony	4.9				02/18/2011	12:47	LB53845

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INTERFERENCE CHECK SAMPLE

Client:	Malcolm Pirnie, Inc.	SDG No.:	C1320
Contract:	MALC02	Lab Code:	CHEM
ICS Source:	EPA	Case No.:	C1320
		Instrument ID:	P5

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window	Analysis Date	Analysis Time	Run Number
ICSA02	Arsenic	6.5				02/18/2011	12:47	LB53845
	Barium	3.2				02/18/2011	12:47	LB53845
	Beryllium	0.74				02/18/2011	12:47	LB53845
	Cadmium	4.7				02/18/2011	12:47	LB53845
	Calcium	241000	234900	102.6	80 - 120%	02/18/2011	12:47	LB53845
	Chromium	43.1	43	100.2	80 - 120%	02/18/2011	12:47	LB53845
	Cobalt	2.7				02/18/2011	12:47	LB53845
	Copper	24.0				02/18/2011	12:47	LB53845
	Iron	93100	95600	97.4	80 - 120%	02/18/2011	12:47	LB53845
	Lead	14.4				02/18/2011	12:47	LB53845
	Magnesium	243000	247500	98.2	80 - 120%	02/18/2011	12:47	LB53845
	Manganese	15.8	19	83.2	80 - 120%	02/18/2011	12:47	LB53845
	Nickel	17.5				02/18/2011	12:47	LB53845
	Potassium	-65.3				02/18/2011	12:47	LB53845
	Selenium	-2.7				02/18/2011	12:47	LB53845
	Silver	-1.5				02/18/2011	12:47	LB53845
	Sodium	721				02/18/2011	12:47	LB53845
	Thallium	-1.9				02/18/2011	12:47	LB53845
	Vanadium	1.9				02/18/2011	12:47	LB53845
	Zinc	24.3				02/18/2011	12:47	LB53845
ICSA02	Aluminum	257000	241100	106.6	80 - 120%	02/18/2011	12:50	LB53845
	Antimony	622	589	105.6	80 - 120%	02/18/2011	12:50	LB53845
	Arsenic	105	101	104.0	80 - 120%	02/18/2011	12:50	LB53845
	Barium	523	495	105.7	80 - 120%	02/18/2011	12:50	LB53845
	Beryllium	494	475	104.0	80 - 120%	02/18/2011	12:50	LB53845
	Cadmium	957	940	101.8	80 - 120%	02/18/2011	12:50	LB53845
	Calcium	246000	231100	106.4	80 - 120%	02/18/2011	12:50	LB53845
	Chromium	512	511	100.2	80 - 120%	02/18/2011	12:50	LB53845
	Cobalt	486	461	105.4	80 - 120%	02/18/2011	12:50	LB53845
	Copper	532	548	97.1	80 - 120%	02/18/2011	12:50	LB53845
	Iron	95500	94800	100.7	80 - 120%	02/18/2011	12:50	LB53845
	Lead	61.4	61	100.7	80 - 120%	02/18/2011	12:50	LB53845
	Magnesium	249000	251100	99.2	80 - 120%	02/18/2011	12:50	LB53845
	Manganese	509	502	101.4	80 - 120%	02/18/2011	12:50	LB53845
	Nickel	1000	984	101.6	80 - 120%	02/18/2011	12:50	LB53845
	Potassium	-132				02/18/2011	12:50	LB53845
	Selenium	44.0	53	83.0	80 - 120%	02/18/2011	12:50	LB53845
	Silver	209	206	101.5	80 - 120%	02/18/2011	12:50	LB53845
	Sodium	735				02/18/2011	12:50	LB53845
	Thallium	99.2	103	96.3	80 - 120%	02/18/2011	12:50	LB53845
	Vanadium	462	494	93.5	80 - 120%	02/18/2011	12:50	LB53845
	Zinc	1030	1028	100.2	80 - 120%	02/18/2011	12:50	LB53845
ICSA01	Aluminum	249000	244100	102.0	80 - 120%	02/18/2011	13:42	LB53849
	Antimony	3.8				02/18/2011	13:42	LB53849
	Arsenic	5.0				02/18/2011	13:42	LB53849
	Barium	4.4				02/18/2011	13:42	LB53849

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INTERFERENCE CHECK SAMPLE

Client:	Malcolm Pirnie, Inc.	SDG No.:	C1320				
Contract:	MALC02	Lab Code:	CHEM	Case No.:	C1320	SAS No.:	C1320
ICS Source:	EPA	Instrument ID:	P5				

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window	Analysis Date	Analysis Time	Run Number
ICSA01	Beryllium	0.88				02/18/2011	13:42	LB53849
	Cadmium	4.9				02/18/2011	13:42	LB53849
	Calcium	248000	234900	105.6	80 - 120%	02/18/2011	13:42	LB53849
	Chromium	45.2	43	105.1	80 - 120%	02/18/2011	13:42	LB53849
	Cobalt	2.9				02/18/2011	13:42	LB53849
	Copper	26.9				02/18/2011	13:42	LB53849
	Iron	96500	95600	100.9	80 - 120%	02/18/2011	13:42	LB53849
	Lead	9.4				02/18/2011	13:42	LB53849
	Magnesium	253000	247500	102.2	80 - 120%	02/18/2011	13:42	LB53849
	Manganese	16.7	19	87.9	80 - 120%	02/18/2011	13:42	LB53849
	Nickel	18.1				02/18/2011	13:42	LB53849
	Potassium	6.5				02/18/2011	13:42	LB53849
	Selenium	-6.7				02/18/2011	13:42	LB53849
	Silver	-0.98				02/18/2011	13:42	LB53849
	Sodium	719				02/18/2011	13:42	LB53849
	Thallium	2.5				02/18/2011	13:42	LB53849
	Vanadium	2.2				02/18/2011	13:42	LB53849
	Zinc	21.3				02/18/2011	13:42	LB53849
ICSA01	Aluminum	253000	241100	104.9	80 - 120%	02/18/2011	13:45	LB53849
	Antimony	607	589	103.1	80 - 120%	02/18/2011	13:45	LB53849
	Arsenic	104	101	103.0	80 - 120%	02/18/2011	13:45	LB53849
	Barium	508	495	102.6	80 - 120%	02/18/2011	13:45	LB53849
	Beryllium	499	475	105.1	80 - 120%	02/18/2011	13:45	LB53849
	Cadmium	1020	940	108.5	80 - 120%	02/18/2011	13:45	LB53849
	Calcium	252000	231100	109.0	80 - 120%	02/18/2011	13:45	LB53849
	Chromium	547	511	107.0	80 - 120%	02/18/2011	13:45	LB53849
	Cobalt	499	461	108.2	80 - 120%	02/18/2011	13:45	LB53849
	Copper	523	548	95.4	80 - 120%	02/18/2011	13:45	LB53849
	Iron	97900	94800	103.3	80 - 120%	02/18/2011	13:45	LB53849
	Lead	61.6	61	101.0	80 - 120%	02/18/2011	13:45	LB53849
	Magnesium	257000	251100	102.3	80 - 120%	02/18/2011	13:45	LB53849
	Manganese	516	502	102.8	80 - 120%	02/18/2011	13:45	LB53849
	Nickel	1040	984	105.7	80 - 120%	02/18/2011	13:45	LB53849
	Potassium	-1.7				02/18/2011	13:45	LB53849
	Selenium	46.7	53	88.1	80 - 120%	02/18/2011	13:45	LB53849
	Silver	214	206	103.9	80 - 120%	02/18/2011	13:45	LB53849
	Sodium	814				02/18/2011	13:45	LB53849
	Thallium	100	103	97.1	80 - 120%	02/18/2011	13:45	LB53849
	Vanadium	480	494	97.2	80 - 120%	02/18/2011	13:45	LB53849
	Zinc	1040	1028	101.2	80 - 120%	02/18/2011	13:45	LB53849
ICSA02	Aluminum	253000	244100	103.6	80 - 120%	02/18/2011	14:58	LB53849
	Antimony	3.7				02/18/2011	14:58	LB53849
	Arsenic	3.6				02/18/2011	14:58	LB53849
	Barium	4.5				02/18/2011	14:58	LB53849
	Beryllium	0.91				02/18/2011	14:58	LB53849
	Cadmium	4.7				02/18/2011	14:58	LB53849

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INTERFERENCE CHECK SAMPLE

Client:	Malcolm Pirnie, Inc.	SDG No.:	C1320
Contract:	MALC02	Lab Code:	CHEM
ICS Source:	EPA	Case No.:	C1320
		Instrument ID:	P5

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window	Analysis Date	Analysis Time	Run Number
ICSA02	Calcium	250000	234900	106.4	80 - 120%	02/18/2011	14:58	LB53849
	Chromium	45.2	43	105.1	80 - 120%	02/18/2011	14:58	LB53849
	Cobalt	2.7				02/18/2011	14:58	LB53849
	Copper	27.2				02/18/2011	14:58	LB53849
	Iron	96700	95600	101.2	80 - 120%	02/18/2011	14:58	LB53849
	Lead	10.7				02/18/2011	14:58	LB53849
	Magnesium	254000	247500	102.6	80 - 120%	02/18/2011	14:58	LB53849
	Manganese	16.7	19	87.9	80 - 120%	02/18/2011	14:58	LB53849
	Nickel	18.2				02/18/2011	14:58	LB53849
	Potassium	35.1				02/18/2011	14:58	LB53849
	Selenium	-4.0				02/18/2011	14:58	LB53849
	Silver	-1.9				02/18/2011	14:58	LB53849
	Sodium	740				02/18/2011	14:58	LB53849
	Thallium	-0.22				02/18/2011	14:58	LB53849
	Vanadium	1.9				02/18/2011	14:58	LB53849
ICSA02	Zinc	21.4				02/18/2011	14:58	LB53849
	Aluminum	261000	241100	108.3	80 - 120%	02/18/2011	15:01	LB53849
	Antimony	610	589	103.6	80 - 120%	02/18/2011	15:01	LB53849
	Arsenic	105	101	104.0	80 - 120%	02/18/2011	15:01	LB53849
	Barium	520	495	105.1	80 - 120%	02/18/2011	15:01	LB53849
	Beryllium	516	475	108.6	80 - 120%	02/18/2011	15:01	LB53849
	Cadmium	1030	940	109.6	80 - 120%	02/18/2011	15:01	LB53849
	Calcium	256000	231100	110.8	80 - 120%	02/18/2011	15:01	LB53849
	Chromium	567	511	111.0	80 - 120%	02/18/2011	15:01	LB53849
	Cobalt	500	461	108.5	80 - 120%	02/18/2011	15:01	LB53849
	Copper	534	548	97.4	80 - 120%	02/18/2011	15:01	LB53849
	Iron	98400	94800	103.8	80 - 120%	02/18/2011	15:01	LB53849
	Lead	61.3	61	100.5	80 - 120%	02/18/2011	15:01	LB53849
	Magnesium	259000	251100	103.1	80 - 120%	02/18/2011	15:01	LB53849
	Manganese	527	502	105.0	80 - 120%	02/18/2011	15:01	LB53849
	Nickel	1050	984	106.7	80 - 120%	02/18/2011	15:01	LB53849
	Potassium	-14.2				02/18/2011	15:01	LB53849
	Selenium	42.7	53	80.6	80 - 120%	02/18/2011	15:01	LB53849
	Silver	219	206	106.3	80 - 120%	02/18/2011	15:01	LB53849
	Sodium	736				02/18/2011	15:01	LB53849
	Thallium	103	103	100.0	80 - 120%	02/18/2011	15:01	LB53849
	Vanadium	500	494	101.2	80 - 120%	02/18/2011	15:01	LB53849
	Zinc	1020	1028	99.2	80 - 120%	02/18/2011	15:01	LB53849
ICSA03	Aluminum	254000	244100	104.1	80 - 120%	02/18/2011	16:07	LB53849
	Antimony	3.1				02/18/2011	16:07	LB53849
	Arsenic	6.8				02/18/2011	16:07	LB53849
	Barium	3.5				02/18/2011	16:07	LB53849
	Beryllium	0.98				02/18/2011	16:07	LB53849
	Cadmium	4.8				02/18/2011	16:07	LB53849
	Calcium	248000	234900	105.6	80 - 120%	02/18/2011	16:07	LB53849
	Chromium	46.6	43	108.4	80 - 120%	02/18/2011	16:07	LB53849

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INTERFERENCE CHECK SAMPLE

Client: Malcolm Pirnie, Inc. **SDG No.:** C1320
Contract: MALC02 **Lab Code:** CHEM **Case No.:** C1320 **SAS No.:** C1320
ICS Source: EPA **Instrument ID:** P5

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window	Analysis Date	Analysis Time	Run Number
ICSA03	Cobalt	2.8				02/18/2011	16:07	LB53849
	Copper	24.1				02/18/2011	16:07	LB53849
	Iron	95600	95600	100.0	80 - 120%	02/18/2011	16:07	LB53849
	Lead	9.7				02/18/2011	16:07	LB53849
	Magnesium	251000	247500	101.4	80 - 120%	02/18/2011	16:07	LB53849
	Manganese	16.1	19	84.7	80 - 120%	02/18/2011	16:07	LB53849
	Nickel	19.1				02/18/2011	16:07	LB53849
	Potassium	4.6				02/18/2011	16:07	LB53849
	Selenium	-4.4				02/18/2011	16:07	LB53849
	Silver	-2.1				02/18/2011	16:07	LB53849
	Sodium	790				02/18/2011	16:07	LB53849
	Thallium	-0.68				02/18/2011	16:07	LB53849
	Vanadium	1.7				02/18/2011	16:07	LB53849
	Zinc	26.3				02/18/2011	16:07	LB53849
ICSA03	Aluminum	258000	241100	107.0	80 - 120%	02/18/2011	16:09	LB53849
	Antimony	604	589	102.5	80 - 120%	02/18/2011	16:09	LB53849
	Arsenic	103	101	102.0	80 - 120%	02/18/2011	16:09	LB53849
	Barium	514	495	103.8	80 - 120%	02/18/2011	16:09	LB53849
	Beryllium	509	475	107.2	80 - 120%	02/18/2011	16:09	LB53849
	Cadmium	1010	940	107.4	80 - 120%	02/18/2011	16:09	LB53849
	Calcium	252000	231100	109.0	80 - 120%	02/18/2011	16:09	LB53849
	Chromium	553	511	108.2	80 - 120%	02/18/2011	16:09	LB53849
	Cobalt	493	461	106.9	80 - 120%	02/18/2011	16:09	LB53849
	Copper	528	548	96.4	80 - 120%	02/18/2011	16:09	LB53849
	Iron	97400	94800	102.7	80 - 120%	02/18/2011	16:09	LB53849
	Lead	65.1	61	106.7	80 - 120%	02/18/2011	16:09	LB53849
	Magnesium	255000	251100	101.6	80 - 120%	02/18/2011	16:09	LB53849
	Manganese	519	502	103.4	80 - 120%	02/18/2011	16:09	LB53849
	Nickel	1030	984	104.7	80 - 120%	02/18/2011	16:09	LB53849
	Potassium	-0.57				02/18/2011	16:09	LB53849
	Selenium	43.4	53	81.9	80 - 120%	02/18/2011	16:09	LB53849
	Silver	213	206	103.4	80 - 120%	02/18/2011	16:09	LB53849
	Sodium	808				02/18/2011	16:09	LB53849
	Thallium	100	103	97.1	80 - 120%	02/18/2011	16:09	LB53849
	Vanadium	491	494	99.4	80 - 120%	02/18/2011	16:09	LB53849
	Zinc	1030	1028	100.2	80 - 120%	02/18/2011	16:09	LB53849
ICSA04	Aluminum	259000	244100	106.1	80 - 120%	02/18/2011	16:41	LB53849
	Antimony	2.4				02/18/2011	16:41	LB53849
	Arsenic	3.2				02/18/2011	16:41	LB53849
	Barium	4.5				02/18/2011	16:41	LB53849
	Beryllium	0.71				02/18/2011	16:41	LB53849
	Cadmium	4.4				02/18/2011	16:41	LB53849
	Calcium	252000	234900	107.3	80 - 120%	02/18/2011	16:41	LB53849
	Chromium	47.0	43	109.3	80 - 120%	02/18/2011	16:41	LB53849
	Cobalt	2.7				02/18/2011	16:41	LB53849
	Copper	26.1				02/18/2011	16:41	LB53849

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INTERFERENCE CHECK SAMPLE

Client:	Malcolm Pirnie, Inc.	SDG No.:	C1320				
Contract:	MALC02	Lab Code:	CHEM	Case No.:	C1320	SAS No.:	C1320
ICS Source:	EPA	Instrument ID:	P5				

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window	Analysis Date	Analysis Time	Run Number
ICSA04	Iron	96500	95600	100.9	80 - 120%	02/18/2011	16:41	LB53849
	Lead	11.8			80 - 120%	02/18/2011	16:41	LB53849
	Magnesium	253000	247500	102.2	80 - 120%	02/18/2011	16:41	LB53849
	Manganese	16.1	19	84.7	80 - 120%	02/18/2011	16:41	LB53849
	Nickel	18.0			80 - 120%	02/18/2011	16:41	LB53849
	Potassium	-21.0			80 - 120%	02/18/2011	16:41	LB53849
	Selenium	-7.2			80 - 120%	02/18/2011	16:41	LB53849
	Silver	-3.1			80 - 120%	02/18/2011	16:41	LB53849
	Sodium	741			80 - 120%	02/18/2011	16:41	LB53849
	Thallium	-1.5			80 - 120%	02/18/2011	16:41	LB53849
	Vanadium	2.0			80 - 120%	02/18/2011	16:41	LB53849
	Zinc	25.6			80 - 120%	02/18/2011	16:41	LB53849
ICSA04	Aluminum	260000	241100	107.8	80 - 120%	02/18/2011	16:43	LB53849
	Antimony	604	589	102.5	80 - 120%	02/18/2011	16:43	LB53849
	Arsenic	104	101	103.0	80 - 120%	02/18/2011	16:43	LB53849
	Barium	518	495	104.6	80 - 120%	02/18/2011	16:43	LB53849
	Beryllium	514	475	108.2	80 - 120%	02/18/2011	16:43	LB53849
	Cadmium	1020	940	108.5	80 - 120%	02/18/2011	16:43	LB53849
	Calcium	254000	231100	109.9	80 - 120%	02/18/2011	16:43	LB53849
	Chromium	558	511	109.2	80 - 120%	02/18/2011	16:43	LB53849
	Cobalt	493	461	106.9	80 - 120%	02/18/2011	16:43	LB53849
	Copper	537	548	98.0	80 - 120%	02/18/2011	16:43	LB53849
	Iron	97800	94800	103.2	80 - 120%	02/18/2011	16:43	LB53849
	Lead	61.6	61	101.0	80 - 120%	02/18/2011	16:43	LB53849
	Magnesium	257000	251100	102.3	80 - 120%	02/18/2011	16:43	LB53849
	Manganese	522	502	104.0	80 - 120%	02/18/2011	16:43	LB53849
	Nickel	1040	984	105.7	80 - 120%	02/18/2011	16:43	LB53849
	Potassium	-31.6			80 - 120%	02/18/2011	16:43	LB53849
	Selenium	46.6	53	87.9	80 - 120%	02/18/2011	16:43	LB53849
	Silver	216	206	104.9	80 - 120%	02/18/2011	16:43	LB53849
	Sodium	842			80 - 120%	02/18/2011	16:43	LB53849
	Thallium	97.5	103	94.7	80 - 120%	02/18/2011	16:43	LB53849
	Vanadium	494	494	100.0	80 - 120%	02/18/2011	16:43	LB53849
	Zinc	1030	1028	100.2	80 - 120%	02/18/2011	16:43	LB53849

Metals**- 5a -****MATRIX SPIKE SUMMARY**

Client:	Malcolm Pirnie, Inc.	Level:	LOW	SDG No.:	C1320
Contract:	MALC02	Lab Code:	CHEM	Case No.:	C1320
Matrix:	SOIL	Sample ID:	C1320-01	Client ID:	CS-1-4S
Percent Solids for Sample:	93.5	Spiked ID:	C1320-01S	Percent Solids for Spike Sample:	93.5

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	mg/Kg	75 - 125	23.1713		0.4597	J	21.39	106.2	P	
Arsenic	mg/Kg	75 - 125	11.7240		3.2590		8.56	98.9	P	
Barium	mg/Kg	75 - 125	507.4344		33.6579		427.81	110.7	P	
Beryllium	mg/Kg	75 - 125	11.3251		0.2142	J	10.70	103.8	P	
Cadmium	mg/Kg	75 - 125	11.2990		0.5556		10.70	100.4	P	
Chromium	mg/Kg	75 - 125	51.1790		6.3710		42.78	104.7	P	
Cobalt	mg/Kg	75 - 125	111.7969		2.5678	J	106.95	102.1	P	
Copper	mg/Kg	75 - 125	65.3805		8.4377		53.48	106.5	P	
Lead	mg/Kg	75 - 125	25.0108		21.8242		4.28	74.5	P	
Manganese	mg/Kg	75 - 125	207.0940		95.9546		106.95	103.9	P	
Nickel	mg/Kg	75 - 125	116.9420		7.5776		106.95	102.3	P	
Selenium	mg/Kg	75 - 125	10.4058		0.4064	U	10.70	97.3	P	
Silver	mg/Kg	75 - 125	10.8431		0.0642	U	10.70	101.3	P	
Thallium	mg/Kg	75 - 125	10.6292		0.2995	U	10.70	99.3	P	
Vanadium	mg/Kg	75 - 125	120.8348		7.5357		106.95	105.9	P	
Zinc	mg/Kg	75 - 125	172.5115		65.5417		106.95	100.0	P	

Metals**- 5a -****MATRIX SPIKE SUMMARY**

Client:	<u>Malcolm Pirnie, Inc.</u>		Level:	<u>LOW</u>		SDG No.:	<u>C1320</u>			
Contract:	<u>MALC02</u>		Lab Code:	<u>CHEM</u>		Case No.:	<u>C1320</u>	SAS No.:	<u>C1320</u>	
Matrix:	<u>SOIL</u>		Sample ID:	<u>C1320-02</u>		Client ID:	<u>CS-2-2S</u>			
Percent Solids for Sample:	<u>85.9</u>		Spiked ID:	<u>C1320-02S</u>		Percent Solids for Spike Sample:	<u>85.9</u>			
Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/Kg	75 - 125	0.5821		0.0407	U	0.58	100		CV

Metals**- 5a -****MATRIX SPIKE SUMMARY**

Client:	<u>Malcolm Pirnie, Inc.</u>		Level:	<u>LOW</u>		SDG No.:	<u>C1320</u>			
Contract:	<u>MALC02</u>		Lab Code:	<u>CHEM</u>		Case No.:	<u>C1320</u>	SAS No.:	<u>C1320</u>	
Matrix:	<u>SOIL</u>		Sample ID:	<u>C1320-03</u>		Client ID:	<u>CS-3-3S</u>			
Percent Solids for Sample:	<u>91.1</u>		Spiked ID:	<u>C1320-03S</u>		Percent Solids for Spike Sample:	<u>91.1</u>			
Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/Kg	75 - 125	0.5873		0.0483		0.55	98		CV

Metals**- 5a -****MATRIX SPIKE SUMMARY**

Client:	Malcolm Pirnie, Inc.	Level:	LOW	SDG No.:	C1320
Contract:	MALC02	Lab Code:	CHEM	Case No.:	C1320
Matrix:	SOIL	Sample ID:	C1332-02	Client ID:	I-U-PE09B34B-NS
Percent Solids for Sample:	81.3	Spiked ID:	C1332-03S	Percent Solids for Spike Sample:	81.3

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	mg/Kg	75 - 125	25.8047		0.2930	J	24.60	103.7	P	
Arsenic	mg/Kg	75 - 125	15.1309		5.3143		9.84	99.8	P	
Barium	mg/Kg	75 - 125	552.3541		3.0749	J	492.00	111.6	P	
Beryllium	mg/Kg	75 - 125	13.3679		0.1438	J	12.30	107.5	P	
Cadmium	mg/Kg	75 - 125	13.1637		0.3377	J	12.30	104.3	P	
Chromium	mg/Kg	75 - 125	58.5032		2.3888		49.20	114.1	P	
Cobalt	mg/Kg	75 - 125	127.5921		2.2883	J	123.00	101.9	P	
Copper	mg/Kg	75 - 125	69.9280		1.7392	J	61.50	110.9	P	
Lead	mg/Kg	75 - 125	6.1931		1.3468		4.92	98.5	P	
Manganese	mg/Kg	75 - 125	148.7892		9.7136		123.00	113.1	P	
Nickel	mg/Kg	75 - 125	130.5343		2.2930	J	123.00	104.3	P	
Selenium	mg/Kg	75 - 125	11.7525		0.4674	U	12.30	95.5	P	
Silver	mg/Kg	75 - 125	12.8698		0.0738	U	12.30	104.6	P	
Thallium	mg/Kg	75 - 125	12.6264		0.3444	U	12.30	102.7	P	
Vanadium	mg/Kg	75 - 125	143.3943		2.4345	J	123.00	114.6	P	
Zinc	mg/Kg	75 - 125	134.2846		6.0228	J	123.00	104.3	P	

Metals**- 6 -****DUPLICATE SAMPLE SUMMARY**

Client:	Malcolm Pirnie, Inc.	Level:	LOW	SDG No.:	C1320
Contract:	MALC02	Lab Code:	CHEM	Case No.:	C1320
Matrix:	SOIL	Sample ID:	C1320-01	Client ID:	CS-1-4D
Percent Solids for Sample:	93.5	Duplicate ID	C1320-01D	Percent Solids for Spike Sample:	93.5

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	mg/Kg	20	4524.6050		4506.0390		0.4	P	
Antimony	mg/Kg	20	0.4597	J	0.3720	J	21.1	P	
Arsenic	mg/Kg	20	3.2590		3.0681		6.0	P	
Barium	mg/Kg	20	33.6579		33.5439		0.3	P	
Beryllium	mg/Kg	20	0.2142	J	0.2278	J	6.2	P	
Cadmium	mg/Kg	20	0.5556		0.5497		1.1	P	
Calcium	mg/Kg	20	966.2709		950.8148		1.6	P	
Chromium	mg/Kg	20	6.3710		6.2468		2.0	P	
Cobalt	mg/Kg	20	2.5678	J	2.5298	J	1.5	P	
Copper	mg/Kg	20	8.4377		8.6735		2.8	P	
Iron	mg/Kg	20	8043.3050		7931.6950		1.4	P	
Lead	mg/Kg	20	21.8242		21.7751		0.2	P	
Magnesium	mg/Kg	20	725.6791		708.9677		2.3	P	
Manganese	mg/Kg	20	95.9546		95.0463		1.0	P	
Nickel	mg/Kg	20	7.5776		7.5066		0.9	P	
Potassium	mg/Kg	20	192.5671	J	181.7567	J	5.8	P	
Selenium	mg/Kg	20	0.4064	U	0.4064	U		P	
Silver	mg/Kg	20	0.0642	U	0.0642	U		P	
Sodium	mg/Kg	20	54.9195	J	61.0857	J	10.6	P	
Thallium	mg/Kg	20	0.2995	U	0.2995	U		P	
Vanadium	mg/Kg	20	7.5357		7.5614		0.3	P	
Zinc	mg/Kg	20	65.5417		64.2459		2.0	P	

Metals**- 6 -****DUPLICATE SAMPLE SUMMARY**

Client:	Malcolm Pirnie, Inc.	Level:	LOW	SDG No.:	C1320		
Contract:	MALC02	Lab Code:	CHEM	Case No.:	C1320	SAS No.:	C1320
Matrix:	SOIL	Sample ID:	C1320-02	Client ID:	CS-2-2D		
Percent Solids for Sample:	85.9	Duplicate ID	C1320-02D	Percent Solids for Spike Sample:	85.9		

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	mg/Kg	20	0.0407	U	0.0407	U			CV

Metals**- 6 -****DUPLICATE SAMPLE SUMMARY**

Client:	Malcolm Pirnie, Inc.	Level:	LOW	SDG No.:	C1320		
Contract:	MALC02	Lab Code:	CHEM	Case No.:	C1320	SAS No.:	C1320
Matrix:	SOIL	Sample ID:	C1320-03	Client ID:	CS-3-3D		
Percent Solids for Sample:	91.1	Duplicate ID	C1320-03D	Percent Solids for Spike Sample:	91.1		

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	mg/Kg	20	0.0483		0.0505	J	4		CV

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client:	Malcolm Pirnie, Inc.	Level:	LOW	SDG No.:	C1320
Contract:	MALC02	Lab Code:	CHEM	Case No.:	C1320
Matrix:	SOIL	Sample ID:	C1332-02	Client ID:	I-U-PE09B34B-ND
Percent Solids for Sample:	81.3	Duplicate ID	C1332-04D	Percent Solids for Spike Sample:	81.3

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	mg/Kg	20	497.3664		485.5727		2.4	P	
Antimony	mg/Kg	20	0.2930	J	0.2484	J	16.5	P	
Arsenic	mg/Kg	20	5.3143		5.1653		2.8	P	
Barium	mg/Kg	20	3.0749	J	3.1642	J	2.9	P	
Beryllium	mg/Kg	20	0.1438	J	0.1056	J	30.6	P	
Cadmium	mg/Kg	20	0.3377	J	0.3495	J	3.4	P	
Calcium	mg/Kg	20	72.4513	J	65.2688	J	10.4	P	
Chromium	mg/Kg	20	2.3888		2.2431		6.3	P	
Cobalt	mg/Kg	20	2.2883	J	2.2507	J	1.7	P	
Copper	mg/Kg	20	1.7392	J	2.0970	J	18.7	P	
Iron	mg/Kg	20	5872.6480		5877.6280		0.1	P	
Lead	mg/Kg	20	1.3468		1.3275		1.4	P	
Magnesium	mg/Kg	20	25.2153	U	25.2153	U		P	
Manganese	mg/Kg	20	9.7136		9.6155		1.0	P	
Nickel	mg/Kg	20	2.2930	J	2.2794	J	0.6	P	
Potassium	mg/Kg	20	122.4601	J	117.3282	J	4.3	P	
Selenium	mg/Kg	20	0.4674	U	0.4674	U		P	
Silver	mg/Kg	20	0.0738	U	0.0738	U		P	
Sodium	mg/Kg	20	73.7602	J	68.8110	J	6.9	P	
Thallium	mg/Kg	20	0.3444	U	0.3444	U		P	
Vanadium	mg/Kg	20	2.4345	J	2.3751	J	2.5	P	
Zinc	mg/Kg	20	6.0228	J	5.8256	J	3.3	P	

LABORATORY CONTROL SAMPLE SUMMARYClient: Malcolm Pirnie, Inc.SDG No.: C1320Contract: MALC02Lab Code: CHEMCase No.: C1320SAS No.: C1320

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB53822BS							
Aluminum	mg/Kg	115.0	105.71		91.9	54.7 - 175	P
Antimony	mg/Kg	66.0	69.72		105.6	27.6 - 104	P
Arsenic	mg/Kg	253.0	252.93		100.0	154 - 352	P
Barium	mg/Kg	1.6	1.64	J	102.5	1 - 2.2	P
Beryllium	mg/Kg	4.9	4.82		98.4	3 - 6.8	P
Cadmium	mg/Kg	10.9	10.58		97.1	7.7 - 14	P
Calcium	mg/Kg	44200.0	46287.45		104.7	30300 - 58200	P
Chromium	mg/Kg	27.1	25.52		94.2	18.5 - 35.7	P
Cobalt	mg/Kg	37.4	36.25		96.9	24.2 - 50.6	P
Copper	mg/Kg	1770.0	1733.28		97.9	1320 - 2230	P
Iron	mg/Kg	6470.0	6364.49		98.4	4280 - 8660	P
Lead	mg/Kg	56.9	53.18		93.5	41.4 - 72.4	P
Magnesium	mg/Kg	29200.0	28185.94		96.5	20500 - 37900	P
Manganese	mg/Kg	61.0	58.13		95.3	41.6 - 80.5	P
Nickel	mg/Kg	16.3	15.03		92.2	9 - 23.7	P
Potassium	mg/Kg	39.7	6.83	J	17.2	0 - 85.3	P
Selenium	mg/Kg	10.0	10.05		100.5	4.1 - 15.9	P
Silver	mg/Kg	5.9	5.85		99.2	2.7 - 9.1	P
Sodium	mg/Kg	72.5	19.23	J	26.5	0 - 216	P
Thallium	mg/Kg	9.5	8.76		92.2	2.9 - 16.1	P
Vanadium	mg/Kg	17.6	15.86		90.1	11.6 - 23.7	P
Zinc	mg/Kg	47.5	48.21		101.5	20.5 - 74.4	P

LABORATORY CONTROL SAMPLE SUMMARYClient: Malcolm Pirnie, Inc.SDG No.: C1320Contract: MALC02Lab Code: CHEMCase No.: C1320SAS No.: C1320

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB53823BS Mercury	mg/Kg	3.6	2.51		70	1.86 - 5.32	CV

LABORATORY CONTROL SAMPLE SUMMARYClient: Malcolm Pirnie, Inc.SDG No.: C1320Contract: MALC02Lab Code: CHEMCase No.: C1320SAS No.: C1320

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB53826BS							
Aluminum	mg/Kg	115.0	108.56		94.4	54.7 - 175	P
Antimony	mg/Kg	66.0	70.55		106.9	27.6 - 104	P
Arsenic	mg/Kg	253.0	259.41		102.5	154 - 352	P
Barium	mg/Kg	1.6	1.67	J	104.4	1 - 2.2	P
Beryllium	mg/Kg	4.9	4.99		101.8	3 - 6.8	P
Cadmium	mg/Kg	10.9	11.13		102.1	7.7 - 14	P
Calcium	mg/Kg	44200.0	47615.55		107.7	30300 - 58200	P
Chromium	mg/Kg	27.1	28.41		104.8	18.5 - 35.7	P
Cobalt	mg/Kg	37.4	37.09		99.2	24.2 - 50.6	P
Copper	mg/Kg	1770.0	1749.07		98.8	1320 - 2230	P
Iron	mg/Kg	6470.0	6546.63		101.2	4280 - 8660	P
Lead	mg/Kg	56.9	53.99		94.9	41.4 - 72.4	P
Magnesium	mg/Kg	29200.0	29005.44		99.3	20500 - 37900	P
Manganese	mg/Kg	61.0	59.74		97.9	41.6 - 80.5	P
Nickel	mg/Kg	16.3	15.55		95.4	9 - 23.7	P
Potassium	mg/Kg	39.7	14.63	J	36.9	0 - 85.3	P
Selenium	mg/Kg	10.0	9.92		99.2	4.1 - 15.9	P
Silver	mg/Kg	5.9	6.24		105.8	2.7 - 9.1	P
Sodium	mg/Kg	72.5	18.90	U	10.1	0 - 216	P
Thallium	mg/Kg	9.5	8.88		93.5	2.9 - 16.1	P
Vanadium	mg/Kg	17.6	16.78		95.3	11.6 - 23.7	P
Zinc	mg/Kg	47.5	48.32		101.7	20.5 - 74.4	P

LABORATORY CONTROL SAMPLE SUMMARY

Client: Malcolm Pirnie, Inc.SDG No.: C1320Contract: MALC02Lab Code: CHEMCase No.: C1320SAS No.: C1320

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB53861BS Mercury	mg/Kg	3.6	2.87		80	1.86 - 5.32	CV

Metals

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ICP SERIAL DILUTIONS

SAMPLE NO.

CS-1-4L

Lab Name: Chemtech Consulting GroupContract: MALC02Lab Code: CHEMCase No.: C1320SAS No.: C1320SDG No.: C1320Matrix (soil/water): WATERLevel (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I) C	Serial Dilution Result (S) C	% Difference	Q	M
Aluminum	42305.06	41839.14	1.1	P	
Antimony	4.30 J	11.45 U	100.0	P	
Arsenic	30.47	31.11 J	2.1	P	
Barium	314.70	308.67 J	1.9	P	
Beryllium	2.00 J	2.60 U	100.0	P	
Cadmium	5.19	5.01 J	3.5	P	
Calcium	9034.63	9064.49 J	0.3	P	
Chromium	59.57	62.85	5.5	P	
Cobalt	24.01 J	24.21 J	0.8	P	
Copper	78.89	83.57 J	5.9	P	
Iron	75204.90	74707.15	0.7	P	
Lead	204.06	209.71	2.8	P	
Magnesium	6785.10	6710.01 J	1.1	P	
Manganese	897.18	889.19	0.9	P	
Nickel	70.85	72.41 J	2.2	P	
Potassium	1800.50 J	1543.81 J	14.3	P	
Selenium	2.80 U	25.89 J	100.0	P	
Silver	0.44 J	1.65 U	100.0	P	
Sodium	513.50 J	935.00 U	100.0	P	
Thallium	2.98 U	14.90 U		P	
Vanadium	70.46	72.60 J	3.0	P	
Zinc	612.82	612.68	0.0	P	

Metals

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ICP SERIAL DILUTIONS**SAMPLE NO.**

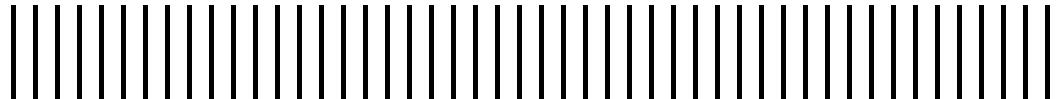
I-U-PE09B34B-NL

Lab Name: Chemtech Consulting Group**Contract:** MALC02**Lab Code:** CHEM**Case No.:** C1320**SAS No.:** C1320**SDG No.:** C1320**Matrix (soil/water):** WATER**Level (low/med):** LOW**Concentration Units:** ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	4043.59		4010.35		0.8		P
Antimony	2.38	J	11.45	U	100.0		P
Arsenic	43.21		41.43	J	4.1		P
Barium	25.00	J	28.55	J	14.2		P
Beryllium	1.17	J	2.60	U	100.0		P
Cadmium	2.75	J	3.07	J	11.6		P
Calcium	589.03	J	820.14	J	39.2		P
Chromium	19.42		46.85	J	141.2		P
Cobalt	18.60	J	19.46	J	4.6		P
Copper	14.14	J	20.37	J	44.1		P
Iron	47744.63		48284.17		1.1		P
Lead	10.95		8.50	U	100.0		P
Magnesium	157.23	J	193.09	J	22.8		P
Manganese	78.97		102.96		30.4		P
Nickel	18.64	J	38.18	J	104.8		P
Potassium	995.60	J	1138.84	J	14.4		P
Selenium	2.80	U	14.00	U			P
Silver	0.33	U	1.65	U			P
Sodium	599.67	J	1895.51	J	216.1		P
Thallium	2.98	U	14.90	U			P
Vanadium	19.79	J	20.93	J	5.8		P
Zinc	48.97	J	47.55	U	100.0		P

New York State Department of Environmental Conservation
Construction Completion Report – Techem Site

Appendix D:
Disposal Facility Scale Tickets



SOIL SAFE, INC.

Log Number

R91021611

NON-HAZARDOUS MATERIAL MANIFEST

GENERATOR

Generator Name _____ Generator Site/Location _____

Address _____ Address 1840 Falmouth Ave.
New Hyde Park, NY

Phone No. _____ Phone No. _____

Approval Number
5-4
7730

Description of Material

Non-Regulated Petroleum
Contaminated Soil

Non DOT/RCRA Regulated

ID	734	GROSS	46.02	T	GROSS
TARE		19.75		T	TARE
RECALLED					
NET		32.27		T	NET
LOG	IS				
02/16/2011					
02:38PM					
		TONNAGE			

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Generator Authorized Agent Name

Signature

Shipment Date

TRANSPORTER

Transporter Name Nicholas J

Driver Name (Print) Rich Bianucci

Address 102 LANDING RD

Vehicle License No. / State / EPA No. AM489 A

LANDING NJ 07850

Truck Number 206 SS# 734

I hereby certify that the above named material was picked up at the generator site listed above.

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature

Shipment Date

Driver Signature

Delivery Date

DESTINATION

Site Name Soil Safe, Inc. - Bridgeport Phone No. 1-856-467-8030

Address 378 Route 130 Logan Township, NJ 08085

No left turn on Rt. 130 North into the facility.

Business hours are: Monday through Friday 7 AM to 5 PM. 5 PM to 10 PM By Appointment only. Saturday by appointment only.

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent

Signature

Receipt Date

White - Facility

Green - Facility

Yellow - Generator

Pink - Broker

Goldenrod - Contractor

Blue - Trucking Co.

SOIL SAFE, INC.

Log Number

R91021711

NON-HAZARDOUS MATERIAL MANIFEST

GENERATOR

Generator Name

Generator Site/Location

Address

Address 1840 Falmouth Ave
New Hyde Park, NY

Phone No.

Phone No.

Approval
Number
S-4
7130

Description of Material

Non-Regulated Petroleum
Contaminated Soil
Non DOT/RCRA Regulated

ID	396	GROSS
GROSS	34.43	TARE
TARE	12.86	T
RECALLED		
NET	21.57	T NET
LOG	11	
02/17/2011		TONNAGE
2.13PM		

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Generator Authorized Agent Name

Signature

Shipment Date

TRANSPORTER

Transporter Name RAINBOW TRANS CORP.

Driver Name (Print) Rich B. Ancelli

Address 1670 Rt. 46

Vehicle License No. / State / EPA No. AM3514 NJ

Ledgewood NJ 07852

Truck Number 91 / 55 # 396

I hereby certify that the above named material was picked up at the generator site listed above.

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature

Shipment Date

Driver Signature

Delivery Date

DESTINATION

Site Name Soil Safe, Inc. - Bridgeport Phone No. 1-856-467-8030

Address 378 Route 130 Logan Township, NJ 08085

No left turn on Rt. 130 North into the facility.

Business hours are: Monday through Friday 7 AM to 5 PM. 5 PM to 10 PM By Appointment only. Saturday by appointment only.

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent

Signature

Receipt Date

White - Facility

Green - Facility

Yellow - Generator

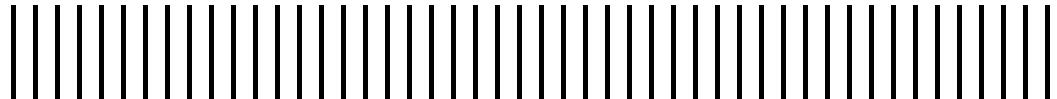
Pink - Broker

Goldenrod - Contractor

Blue - Trucking Co.

New York State Department of Environmental Conservation
Construction Completion Report – Techem Site

Appendix E:
Backfill and Flowable Fill Submittals





“SOLUTIONS AT WORK”®

445 Brook Avenue, Deer Park, NY 11729 (631) 586-4900 · NYC (718) 204-4993

FAX (631) 586-4920

January 11, 2011

NYSDEC Division of Environmental Remediation
Remedial Bureau A, Section B
625 Broadway
11th floor
Albany NY, 12233-7015

Re: Techem, Inc.
1840 Falmouth Avenue
New Hyde Park, New York

Attn: Cynthia Whitfield, P.E.

Ms. Whitfield:

Attached are the submittals for the concrete slurry mix and the soil to be used for backfilling. If you have any questions please give me a call at 631-586-4900 ext. 153 or send me an e-mail at RFerguson@FenleyNicol.com.

Sincerely,

Robert J. Ferguson
Sr. Hydrogeologist



State of New York
 Department of Transportation
 State Office Building
 250 Veterans Memorial Highway
 Hauppauge, N.Y. 11788-5518

Subimal Chakraborti, P.E.
 Regional Director

Astrid C. Glynn
 Acting Commissioner

March 20, 2009

110 Sand Company
 170 Cabot St.
 West Babylon, NY 11704

To Whom It May Concern:

Updated Department Test Number(s)

Source # 10-34F

Sand Test # 08AF105

The above test number(s) are to be used for the next two years at which time the source will be sampled and tested again. If there any questions regarding your aggregate approval, please contact Mr. Thomas Iraggi of my staff at (631) 952-6184.

Very truly yours,

Sid Bhattacharya

Sid Bhattacharya, P.E.
 Materials Engineer
 N.Y.S.D.O.T., Region 10

cc: Kuros Sorbi
 Technical Services Supervisor

Post-it® Fax Note	7671	Date	1/7/11	# of pages ►	1
To	Rob	From	Marie		
Co./Dept.	Fm-AFC	Co.	110 Sand Co.		
Phone #		Phone #			
Fax #	586-4920	Fax #			

Commercial Concrete Corporation

Quality Ready Mix Concrete
P.O. Box 10155 Westbury, NY 11590
Phone (516) 333-7422
Fax (516) 333-8179

Client: Commercial Concrete
P.O. Box 10155
Westbury, NY 11590

Cement: NYS Type I/II - Lehigh
ASTM C 150
Fine Agg. L.I. Natural – East Coast Mines

Project:

Coarse Agg. Tilcon Quarries

Admix 1: Airmix 200
Euclid

Contractor:

Cubic Yard Weights

	#1	#2	#3	#4
Cement	150	300	450	600
Fine Agg	2600	2600	2600	2600
Coarse Agg				
Water	25	26	29	35
Admix 1	5	5	5	5
W/C Ratio	.691	.539	.481	.505

Recommended Job Design Mixture 500 Slurry Mix

Cement: 150
Fine Agg: 2600
Coarse Agg:
Water: 25
Admix 1: 5
W/C Ratio .481
Slump: 4