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

Columbia Mills Site 2009 Annual Groundwater Monitoring Report

NYSDEC Site Number 7-38-012

November 2009

Report Prepared By:

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1. Introduction

The New York State Department of Environmental Conservation (NYSDEC) has issued a Work Assignment (# D004443-7) to Malcolm Pirnie, Inc. (Malcolm Pirnie) for Operation, Maintenance, and Monitoring at the Columbia Mills Site (NYSDEC Site Number 7-38-012) in New York State. Malcolm Pirnie has prepared this Quarterly Report in accordance with the NYSDEC-approved Work Plan to summarize site activities, including second quarter 2009 groundwater sampling results.

2. Site Description

The Columbia Mills site is located on Route 48, Minetto, Oswego County, New York (Figure 2-1), across Route 48 from the western bank of the Oswego Canal. A capped, closed landfill is located in the western portion of the site.

3. Operation and Maintenance

Operation and Maintenance (O&M) activities were conducted between June 17 and 19, 2009 in accordance with the Work Plan. In addition, a site reconnaissance was conducted to provide additional information on the leachate collection system.

3.1. O&M Observations

The following observations were noted during the June 2009 inspection:

- The landfill cover appeared to be mowed just prior to the June 2009 site inspection. The cover is currently mowed by NYSDEC Division of Operations.
- No woody vegetation was observed on the cover system.
- One cleanout pipe for the leachate collection system was damaged, apparently by mowing.
- No problems were noted with the condition of the perimeter fence or with the security of the landfill.

3.2. Leachate Collection System Evaluation and Observations

Malcolm Pirnie and NYSDEC representatives conducted site reconnaissance and dye tracer testing to provide additional details regarding the leachate collection system. Figure 3-1 provides a schematic with details compiled from historical construction documents and site observations. A photograph log is presented in Appendix A. Appendix B contains documentation of field observations provided by the NYSDEC for June 18 and 19, 2009 site activities (Welling, 2009).

A concrete leachate discharge structure was located near the inlet to the amphibian breeding pond (ABP) (Photo 1). Flow was observed in the pipe discharging to the ABP. The combination sampling sump was located between the discharge structure and the leachate collection tank (Photo 2). Three inlets pipes and one discharge were noted in the structure. The ends of two of the inlet pipes were fitted with ball valves. Water was observed flowing into the structure from each inlet pipe. The combined flow was estimated at less than one gallon per minute (gpm). The level of water in the discharge structure was sufficient to allow flow into the structure discharge pipe, which was apparently discharging to the ABP.

On June 18, 2009, fluorescent dye was added to the leachate collection tank to provide a visual indicator of flow in the leachate collection system (Photo 3); however, no dye was

observed in the inlets to the combination sampling sump or the discharge to the Town of Minetto sewer.

On June 19, 2009, covers were removed from cleanouts for the leachate collection pipes and pore-pressure relief system (PPRS). The bottom sides of the covers were identified as either "Leachate" or "Groundwater". Water with fluorescent dye was poured into respective cleanout pipes to evaluate flow through the system. When dye-trace water was added to a "Groundwater" cleanout, flow increased and dye was observed in one of the three pipes (designated North PPRS) flowing into the combination sampling sump. Water with fluorescent dye was then added to a "Groundwater" cleanout pipe located on the southern perimeter of the landfill and an increase in flow and the presence of tracer dye were observed in a second pipe (designated South PPRS) flowing into the combination sampling sump. Finally, water with fluorescent dye was added to a "Leachate" cleanout pipe and increased flow and tracer dye was observed in the remaining inlet to the combination sampling sump. The combined discharge to the ABP from the combination sampling sump was also confirmed by the presence of fluorescent dye. Flow was then diverted to the Town sewer via the flow control valves; tracer dye was subsequently observed discharging to the Town sewer.

As shown on Figure 3-1, the leachate collection tank has two manway openings. One manway opening provides access to the collection tank (tank access manway); the second opening provides access to the inlet pipe where it enters the top of the collection tank (inlet pipe manway). At the start of the evaluation, the level of water in each manway was approximately 12 feet higher than the elevation of the top of the tank and approximately one foot below the manway rims.

During the dye-trace testing discussed above, water was pumped from the manway opening that contains the tank connection to the inlet pipe (inlet pipe manway). As the water level in this manway opening dropped, the level in the second manway opening (tank access manway) also dropped. At the direction of NYSDEC, water from the tank access manway was pumped to the ground surface until the water level was approximately one inch below the top of the tank. Consequently, the water level in the opposing inlet pipe manway dropped, but only to approximately 2 inches above the bulkhead of the tank. The resulting water level in the inlet pipe manway corresponded to a PVC pipe fitting in the leachate inlet pipe. Based on this observation, a leak is expected in the leachate inlet pipe, providing a hydraulic connection between the tank access and inlet pipe access manway openings. With the water level in the inlet pipe manway reduced, a tank inlet control valve was observed in the manway (Photo 4). The valve did not have an operating handle so the position of the valve (open or closed) could not be confirmed.

As mentioned above, the initial head difference between the water level in the tank manways and tank inlet pipe was measured at approximately 12 feet. Based on the configuration of the collection system (an "open", gravity-flow system) and the observations recorded during the evaluation, it is presumed that leachate was being captured in the collection tank and the valves to the Town sewer and ABP were closed. The tank filled and the leachate level apparently rose into the tank access manway. The leachate would have backed up the collection lines with the level in the manways and leachate lines in equilibrium. Since a leak is present in the leachate line within the inlet pipe manway, this access structure would have filled concurrently with the tank access manway. Therefore, the level of leachate in the collection tank and manway openings during the 2009 site inspection could be representative of the head in the leachate collection line (presumably near the upper portion of the landfill) when the valve was finally closed. With the tank inlet valve closed, the level in the collection tank and manways would remain elevated even when the valve to the ABP were opened and the leachate flow resumed a steady state.

A second alternative to explain the elevation in the tank is that the collection tank was filled to capacity and the inlet valve was closed and leachate flow was diverted to the ABP. Therefore, leachate could not "backflow" into the collection system. If a portion of precipitation was able to enter the manway openings, then the level in the collection tank would rise above the top of the collection tank as was observed. This scenario may be plausible as the level in the manway openings in 2009 were higher than what was observed in 2008 (Photos 6 and 7).

3.3. Leachate Collection System Operation Overview

Figure 3-2 provides a process flow diagram of the leachate collection system based on the 2008 and 2009 site visits and observations and review of site documents and construction plans. As shown in Figure 3-2, a combination PPRS/leachate collection system is located along the perimeter of the landfill cell. The system directs leachate by gravity to a 10,000 gallon sub-surface leachate collection tank, the Town sanitary sewer, or the ABP (via the combination sampling sump). A valve located at the inlet to the collection tank controls flow into the tank. Valves located upgradient of the leachate collection tank can direct flow to the Town sewer or ABP.

Groundwater from separate PPRSs (north and south of the landfill cell, respectively) discharges into a pre-cast concrete combination sampling sump located on the west side of the landfill. Valves within the sampling sump control groundwater flow into the sump and through the PPRSs. The valves can be closed if sampling indicates the presence of contamination in groundwater from the PPRS collection lines.

3.4. Leachate Collection System Sampling

Leachate and PPRS samples were collected from the combination sampling sump to evaluate the potential presence of PCBs being discharged to the ABP. One surface water sample was also collected from the ABP to assess whether the discharge from the combination sampling sump was affecting surface water quality. Sampling locations shown on Figure 3-3

3.4.1. Sampling Procedures

Aqueous samples were collected from each inlet pipe to the combination sampling sump structure (leachate, north PPRS, and south PPRS) (Figure 3-3) using a peristaltic pump with dedicated tubing. Water collected from each pipe was purged directly into the appropriate sampling container for analysis of PCBs by USEPA Method 8082.

Surface water samples were collected by slowly submerging a pre-cleaned dedicated sampling container beneath the surface of the ABP. Water was allowed to slowly fill the container until the appropriate sample volume was obtained.

3.4.2. Sampling Results

Combination sampling sump and ABP samples were submitted to Test America in Shelton, Connecticut for analysis of PCBs by USEPA Method 8082. The results of the analyses are presented in Table 3-1. Analytical reporting forms are provided in Appendix C. As shown in Table 3-1, PCBs were not detected in any of the samples collected from the combination sampling sump or the ABP.

4. Groundwater Monitoring Program

4.1. Groundwater Monitoring

Groundwater monitoring wells were sampled on June 18 and 19, 2009 to provide information on groundwater quality, monitor contaminant migration in the groundwater at the site, and assess hydrogeologic site conditions, including groundwater flow. Figure 4-1 shows the location of the groundwater monitoring wells.

4.1.1. Well Inspection

Existing on-site groundwater monitoring wells and piezometers were evaluated for integrity and suitability for groundwater monitoring and water levels. The condition of each well and piezometer was recorded on a well inspection form, provided in Appendix D. As shown on the well inspection forms, landfill piezometers LFP-2 and LFP-7 had damaged riser pipes. These piezometers will be repaired during the next site visit. The integrity of the remaining groundwater monitoring wells and piezometer was generally acceptable and no repair or maintenance is required at this time.

4.1.2. Water Level Survey

Prior to collecting samples, water levels were measured to the nearest hundredth of a foot and recorded on a groundwater level data form (Appendix E). Table 4-1 summarizes the groundwater levels and elevations from the site. As shown in Table 4-1, groundwater elevations in shallow overburden and bedrock wells ranged from approximately 310 feet above mean sea level (amsl) to approximately 324 feet amsl; groundwater elevations in deep bedrock wells ranged from approximately 293-feet amsl to approximately 324 feet amsl. Shallow and deep potentiometric surfaces map are provided on Figure 4-2 and Figure 4-3, respectfully. As shown on Figure 4-2 and Figure 4-3, the direction of groundwater flow in the vicinity of the site is generally to the northeast toward the ABP and the Oswego Canal.

4.2. Groundwater Sampling

Groundwater samples from monitoring wells MW-1S, MW-1D, MW-2S, MW-2D, MW-3S, MW-3D, MW-4S, and MW-4D were collected using low-flow groundwater purging and sampling procedures in accordance with the Work Plan. Prior to collecting groundwater samples, pH, conductivity, turbidity, dissolved oxygen (DO), temperature, salinity, total dissolved solids (TDS), and oxidation-reduction potential (REDOX) were measured using a Horiba U-22 water quality meter and recorded on groundwater sampling purge logs. Groundwater sampling purge logs are presented in Appendix F.

Groundwater samples collected during the groundwater monitoring program are analyzed for PCBs by USEPA Method 8082. However, based on the sampling requirements presented in the ROD, and as recommended in the Draft Periodic Review Report (Malcolm Pirnie, 2009), and in consultation with NYSDEC, groundwater samples collected in 2009 were also analyzed for metals by USEPA Method ILM05.3. Analytical reporting forms from the 2009 sampling event are provided in Appendix C. Groundwater sampling results are summarized in Table 4-2 (PCBs), and Table 4-3 (Metals).

4.2.1. Groundwater Sampling Results - PCBs

Table 4-2 shows that no PCBs were detected in any of the samples collected during the 2009 sampling event. As shown in Table 4-2, only one groundwater sample collected in 2007 contained a total PCB concentration greater than the respective NYSDEC Class GA Standard of 0.09 ug/L.

4.2.2. Groundwater Sampling Results – Metals

Table 4-3 shows that iron was detected in samples from groundwater monitoring wells MW-1S (499 ug/L), MW-1D (407 ug/L), and MW-4S (1,820 ug/L) at concentrations greater than the corresponding NYSDEC Class GA Standard of 300 ug/L. As shown in Table 4-3, the sample collected from groundwater monitoring well MW-2S in 2008 (365 ug/L) was greater than the corresponding NYSDEC Class GA Standard. The sample collected from MW-2S in 2009 contained total and dissolved iron concentrations (136 ug/L and non-detect, respectively) less than the respective NYSDEC Class GA Standard of 300 ug/L. The concentrations of sodium in the samples from MW-1D, MW-4S, and MW-4D were 28,800 ug/L, 23,100 ug/L, and 77,500 ug/L, respectively. These results are greater than the corresponding NYSDEC Class GA Standard of 20,000 ug/L but are consistent with the 2008 sample results from these wells. Table 4-3 shows that only one sample (MW-4S) contained a concentration of manganese (941 ug/L) greater than the NYSDEC Class GA Standard of 300 ug/L. This result is greater than the 2008 manganese concentration (740 ug/L) reported in the sample from this well. Metals were not analyzed from MW-3S and MW-3D due to limited groundwater recovery from these wells. Metals analysis was not performed on groundwater samples collected during the 2007 sampling event.

4.3. Surface Water Sampling

Surface water samples were collected to evaluate background concentrations of metals in surface water in the vicinity of the site. As shown on Figure 3-3, one sample (Stream) was collected where the ephemeral stream flows onto the site and one sample (Pond) was collected from the ABP. Surface water samples were collected by submersing the sampling container and slowly allowing the container to fill. Surface water samples were analyzed for metals by USEPA Method ILM05.3. Analytical reporting forms are provided in Appendix C. As discussed in Section 3.4, the sample collected from the ABP was also analyzed for PCBs.

4.3.1. Surface Water Sampling Results - Metals

Analytical results are presented in Table 4-4. As shown in Table 4-4, the sample collected from the stream (Stream) contained iron (448 ug/L) and manganese (610 ug/L) at concentrations that exceed the applicable NYSDEC Class GA and AA Standards of 300 ug/L. The sample from the ABP (Pond) did not contain any metals at concentrations greater than the applicable NYSDEC Class GA or AA Standards.

5. Recommendations

5.1. Leachate Collection System

Based on the leachate collection system evaluation and observation discussed in Section 3.2, the following recommendations should be considered to confirm the operation of and restore the integrity of the leachate collection system, and maintain the appropriate level of protection for human health and the environment:

- Evacuate and properly dispose the contents of the leachate collection tank to provide storage for leachate should future sampling indicate that discharging to the ABP or Town sewer is unacceptable.
- Since a significant difference in head was observed in the collection tank manway compared to the collection tank inlet and the inlet control valve operation could not be verified during the 2009 site visit, it is recommended that the operation and function of the valve be confirmed during the next site visit.
- A leak was observed in the leachate inlet pipe within the manway opening. Therefore, it is recommended that the inlet pipe be inspected, tested, and repaired.
- Collect and analyze leachate and PPRS samples on an annual basis. Samples should be analyzed for TCL VOCs, total metals, and PCBs.
- Repair leachate collection system cleanout riser.

5.2. Groundwater Monitoring

As discussed in Section 4.2 and 4.3 groundwater samples contained concentrations of iron, sodium, and/or manganese at concentrations greater than the applicable NYSDEC Class GA Standards. Iron and manganese exceedances were also reported in a surface water sample collected upstream of the site. In addition, the sodium exceedances in groundwater are likely related to the annual application of road de-icing agents. Therefore, these analytes are not considered to be contaminants of concern. Based on this information, continued monitoring of metals in groundwater and surface water is not necessary as an annual requirement. Annual analysis for PCBs in groundwater should be continued as described in the Work Plan.

6. Summary

Operation and Maintenance activities conducted in June 2009 indicated no significant problems with the condition or security of the landfill. Based on a review of historical site documents, information obtained during the 2008 and 2009 site activities, and in consultation with NYSDEC, additional site activities were conducted to evaluate the landfill and leachate collection system. Dye tracer testing confirmed the flow of groundwater and leachate to the combination sampling sump and then to the ABP. Dye tracer testing also confirmed that leachate can be directed to the Town of Minetto sewer. Leachate, PPRS, and ABP samples did not contain detectable concentrations of PCBs.

Groundwater monitoring wells and piezometers are generally in acceptable condition. Based on the water level survey, groundwater flow across the site is generally toward the northeast. As suggested in the Draft Periodic Review Report and in consultation with NYSDEC, groundwater samples were analyzed for PCBs and metals. PCBs were not detected in any of the groundwater samples collected during the 2009 monitoring event. Iron and sodium were detected in several groundwater monitoring locations at concentrations greater than the corresponding NYSDEC Class GA Standards. One groundwater sample contained a concentration of manganese greater than the applicable NYSDEC Class GA Standard.

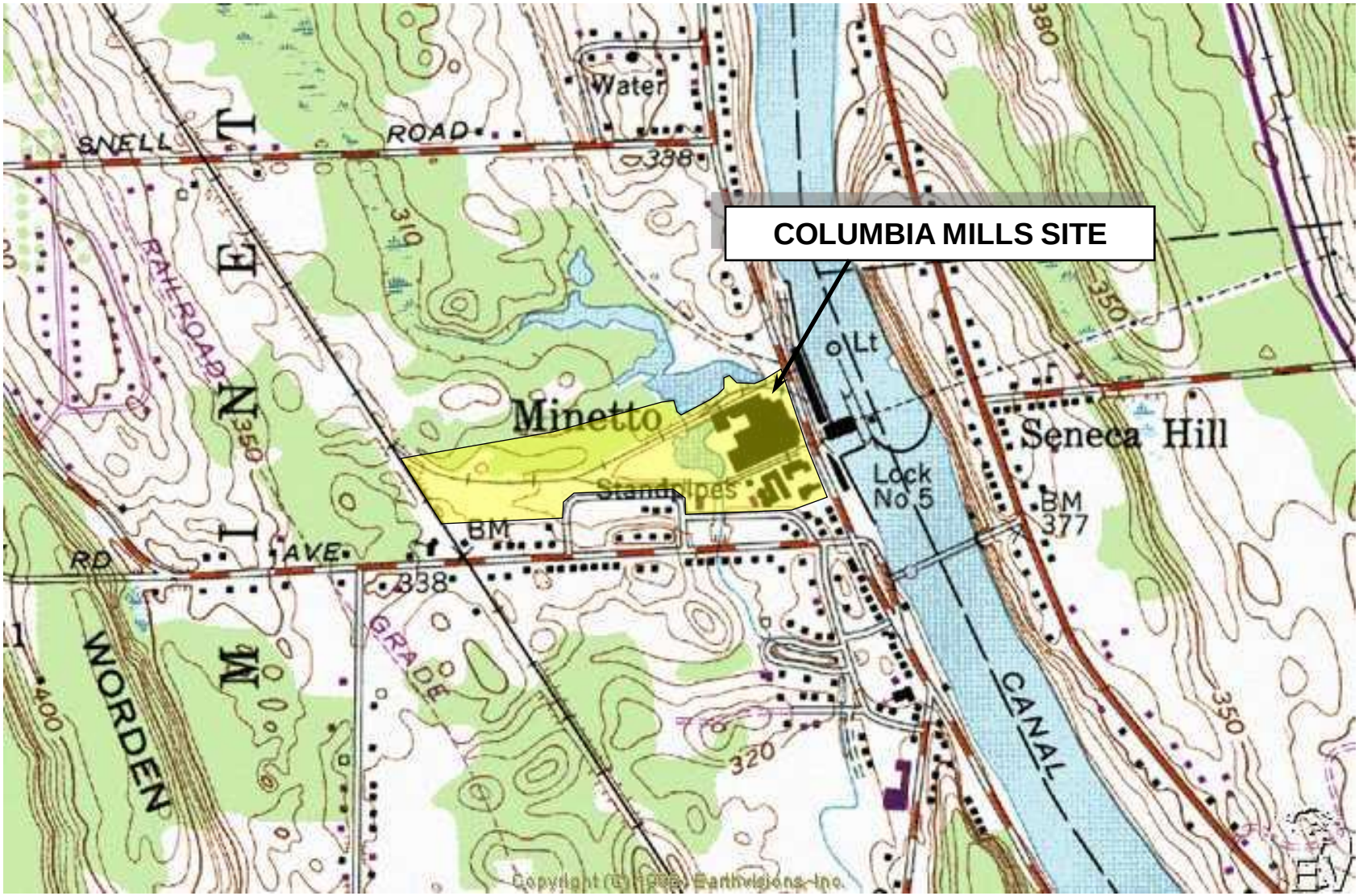
Surface water samples were collected from the ephemeral stream and ABP to evaluate background concentrations of metals. The sample from the stream contained iron and manganese at concentrations greater than the corresponding NYSDEC Class GA and AA Standards. The sample from the ABP did not contain any metals at concentrations greater than the applicable NYSDEC Class GA or AA Standards. Therefore, this indicates that the potential presence of these metals in groundwater is likely and they should not be considered contaminants of concern at the site.

Future recommendations for the site include evacuation and disposal of leachate in the collection tank, verifying the proper operation of the collection tank inlet valve, inspection and repair of the collection tank inlet line, annual leachate and PPRS sampling and analysis for VOCs, metals, and PCBs, and repairing the damaged leachate collection system cleanout riser.

The presence of elevated iron and manganese in surface water suggests that metals are not contaminants of concern in groundwater.

7. References

Welling, June 23, 2009, New York State Department of Environmental Conservation, DEC Site Management Photographic Report, Columbia Mills Dye Tests.



SOURCE: U.S.G.S 7.5 MIN. OSWEGO EAST QUAD, 1985

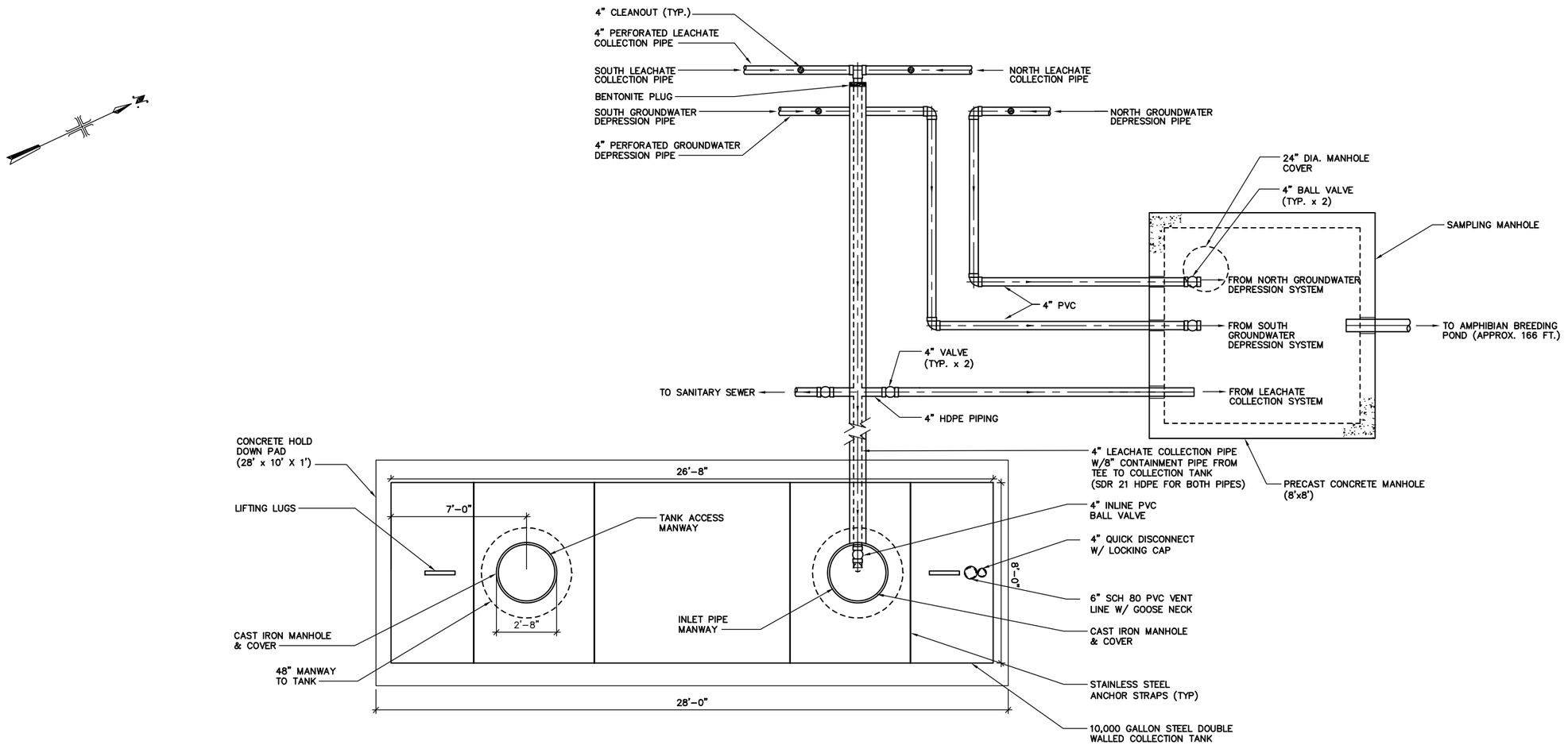
MALCOLM PIRNIE

NYSDEC STANDBY CONTRACT NO. D004443-7
NYSDEC SITE NO. 7-38-012
MINETTO, NEW YORK

COLUMBIA MILLS SITE LOCATION

FIGURE 2-1

F:\PROJECT\0266352\FILE\Work Plan\Figure 1-1 Vestal Site Location.ppt



LEACHATE COLLECTION TANK PIPING PLAN VIEW

SCALE: 3/16" = 1'-0"

SOURCE: MALCOLM PIRNIE REMEDIAL LANDFILL DESIGN DRAWINGS (MARCH 1995) AND 2009 MALCOM PIRNIE DYE TESTING AT THE SITE.

MALCOLM PIRNIE

NYSDEC STANDBY CONTRACT NO. D00443-7
NYSDEC SITE NO. 7-38-012
COLUMBIA MILLS SITE
MINETTO, NEW YORK

LEACHATE COLLECTION SYSTEM SCHEMATIC

SCALE AS SHOWN

MALCOLM PIRNIE, INC.
AUGUST 2009
FIGURE 3-1

N

DISCHARGE STRUCTURE

AMPHIBIAN BREEDING POND

COMBINED PPRS/LEACHATE SAMPLING SUMP

NORTH PORE PRESSURE RELEIF SYSTEM

PPRS FLOW CONTROLED BY SEPARATE VALVES

LANDFILL CELL

LEACHATE COLLECTION TANK

Barrett Dr

SOUTH PORE PRESSURE RELEIF SYSTEM

LEACHATE FLOW DIRECTED TO COLLECTON TANK, SAMPLING SUMP, OR SANITARY SEWER DEPENDING ON VALVE CONFIGURATION

TOWN OF MINETTO SANITARY SEWER

Chase Dr

Unnamed Street

County Route 24

LEGEND

- PROPERTY LINE
- PORE PRESSURE RELEIF SYSTEM NETWORK
- LEACHATE COLLECTION NETWORK
- COMBINED PPRS/LEACHATE
- FLOW DIRECTION
- FLOW CONTROL VALVE

MALCOLM PIRNIE

COLUMBIA MILLS SITE
MINETTO, NEW YORK
NYSDEC SITE NUMBER 7-38-012

PROCESS FLOW DIAGRAM
(NOT TO SCALE)

JANUARY 2009

FIGURE 3-2

N

AMPHIBIAN BREEDING POND

POND

NORTH PPRS

SOUTH PPRS

LEACHATE

STREAM

LANDFILL CELL

Barrett Dr

TOWN OF MINETTO SANITARY SEWER

Unnamed Street

Chase Dr

County Route 24

LEGEND

- SAMPLE LOCATION
- PROPERTY LINE
- PORE PRESSURE RELEIF SYSTEM NETWORK
- LEACHATE COLLECTION NETWORK
- COMBINED PPRS/LEACHATE
- FLOW DIRECTION
- FLOW CONTROL VALVE

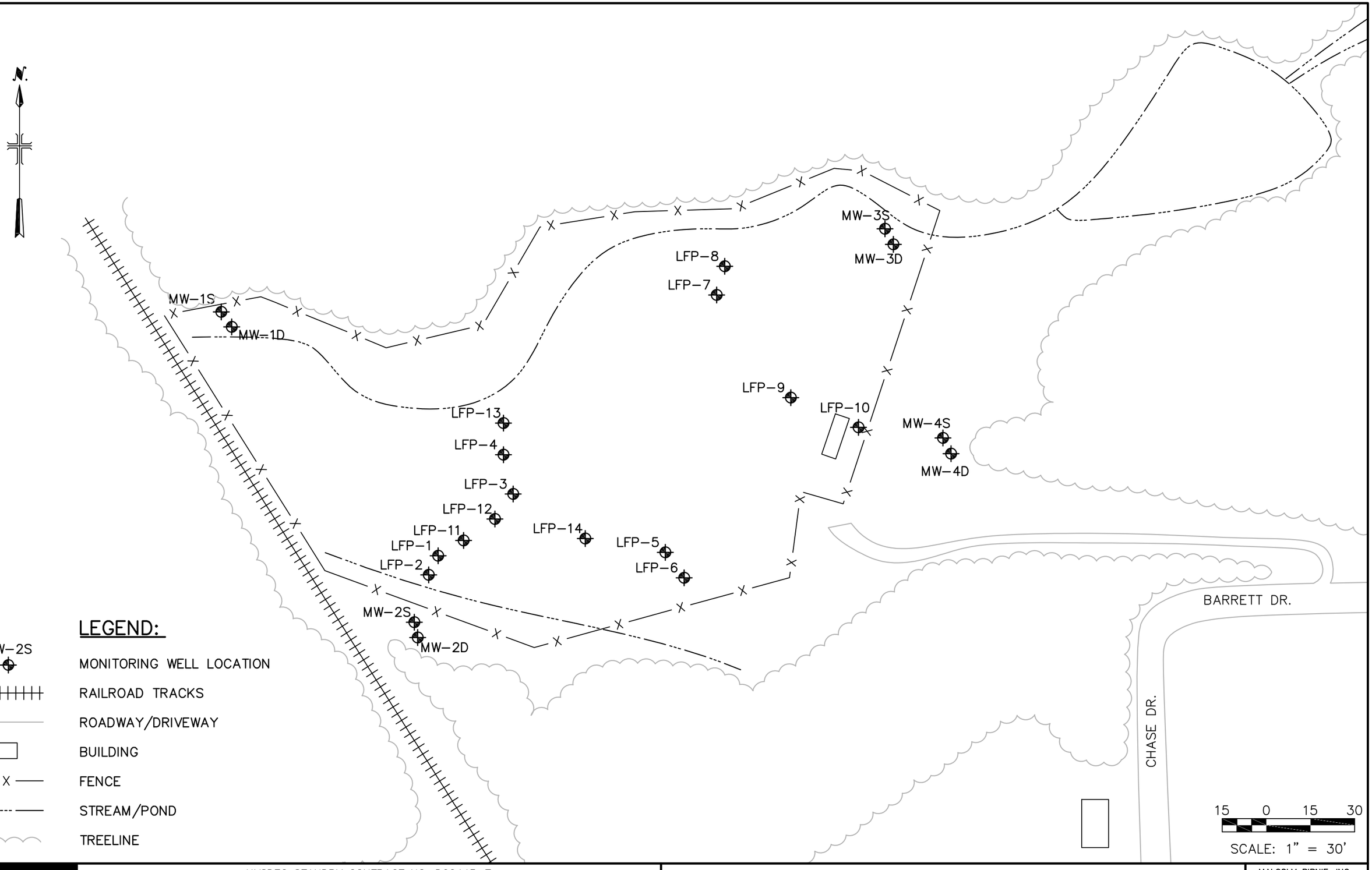
MALCOLM PIRNIE

COLUMBIA MILLS SITE
MINETTO, NEW YORK
NYSDEC SITE NUMBER 7-38-012

SAMPLING LOCATIONS
(NOT TO SCALE)

JANUARY 2009

FIGURE 3-3



LEGEND:

- MW-2S — MONITORING WELL LOCATION
- RAILROAD TRACKS
- ROADWAY/DRIVEWAY
- BUILDING
- FENCE
- STREAM/POND
- TREELINE

MALCOLM PIRNIE

NYSDEC STANDBY CONTRACT NO. D00443-7
NYSDEC SITE NO. 7-38-012
COLUMBIA MILLS SITE
MINETTO, NEW YORK

GROUNDWATER MONITORING WELL LOCATIONS

SCALE: 1" = 40'

MALCOLM PIRNIE, INC.
NOVEMBER 2009
FIGURE 4-1

N.

MW-1S
320.04
MW-1D
MW-2S
324.27
MW-2D
MW-3S
310.26
MW-3D
MW-4S
309.93
MW-4D

LFP-1
LFP-2
LFP-3
LFP-4
LFP-5
LFP-6
LFP-7
LFP-8
LFP-9
LFP-10
LFP-11
LFP-12
LFP-13
LFP-14

320
318
316
314
312
310
322
324

BARRETT DR.
CHASE DR.

LEGEND:

- MW-2S — MONITORING WELL LOCATION
- 310.26 — GROUNDWATER ELEVATION
- 314 — POTENTIOMETRIC CONTOUR
- RAILROAD TRACKS
- ROADWAY/DRIVEWAY
- BUILDING
- FENCE
- STREAM/POND
- TREELINE
- GROUNDWATER FLOW DIRECTION

50 0 50 100

SCALE: 1" = 100'

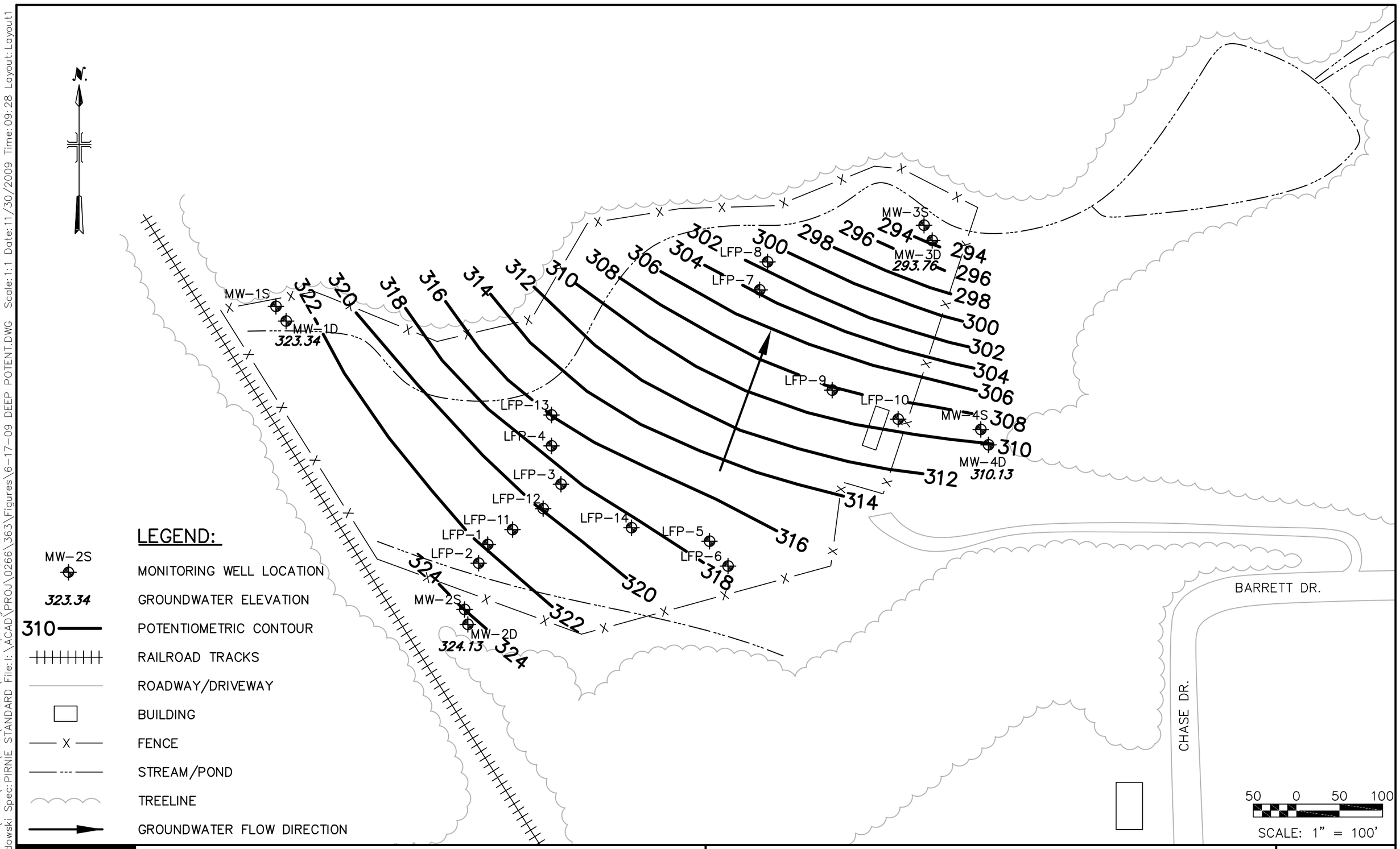
MALCOLM PIRNIE

NYSDEC STANDBY CONTRACT NO. D00443-7
NYSDEC SITE NO. 7-38-012
COLUMBIA MILLS SITE
MINETTO, NEW YORK

SHALLOW POTENTIOMETRIC SURFACE – 6/17/2009

SCALE: 1" = 100'

MALCOLM PIRNIE, INC.
NOVEMBER 2009
FIGURE 4-2



LEGEND:

- MW-2S — MONITORING WELL LOCATION
- 323.34 — GROUNDWATER ELEVATION
- 310 — POTENTIOMETRIC CONTOUR
- RAILROAD TRACKS
- ROADWAY/DRIVEWAY
- BUILDING
- FENCE
- STREAM/POND
- TREELINE
- GROUNDWATER FLOW DIRECTION

MALCOLM PIRNIE

NYSDEC STANDBY CONTRACT NO. D00443-7
NYSDEC SITE NO. 7-38-012
COLUMBIA MILLS SITE
MINETTO, NEW YORK

DEEP POTENTIOMETRIC SURFACE – 6/17/2009

SCALE: 1" = 100'

MALCOLM PIRNIE, INC.

NOVEMBER 2009

FIGURE 4-3

Table 3-1
Summary of Leachate Collection System Sampling Results - PCBs
Columbia Mills
Minetto, New York
NYSDEC Site No. 7-38-012

Sample Date Units	NYSDEC Class GA Standards	LEACHATE 6/19/2009 ug/L	PPRS-NORTH 6/19/2009 ug/L	PPRS-SOUTH 6/19/2009 ug/L	POND 6/19/2009 ug/L
Analyte					
PCB-1016	-	0.53 U	0.5 U	0.5 U	0.52 U
PCB-1221	-	0.53 U	0.5 U	0.5 U	0.52 U
PCB-1232	-	0.53 U	0.5 U	0.5 U	0.52 U
PCB-1242	-	0.53 U	0.5 U	0.5 U	0.52 U
PCB-1248	-	0.53 U	0.5 U	0.5 U	0.52 U
PCB-1254	-	0.53 U	0.5 U	0.5 U	0.52 U
PCB-1260	-	0.53 U	0.5 U	0.5 U	0.52 U
Total PCBs	0.09	-	-	-	

Notes:
U - Analyte not detected

Table 4-1
Summary of Groundwater Elevations
Columbia Mills
Minetto, New York
NYSDEC Site No. 7-38-012

Well	Measuring Point Elevation [(1)] (feet)	8/6/2007		10/1/2008		6/17/2009	
		DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)
MW-1S	324.85	6.94	317.91	4.91	319.94	4.81	320.04
MW-1D	325.14	3.70	321.44	1.96	323.18	1.80	323.34
MW-2S	335.93	13.90	322.03	13.22	322.71	11.66	324.27
MW-2D	335.90	13.95	321.95	13.39	322.51	11.77	324.13
MW-3S	316.02	6.42	309.60	5.71	310.31	5.76	310.26
MW-3D	315.79	8.23	307.56	16.52	299.27	22.03	293.76
MW-4S	321.63	12.20	309.43	12.21	309.42	11.70	309.93
MW-4D	321.26	11.44	309.82	11.29	309.97	11.13	310.13
LFP-1	NA	19.15	-	18.74	-	18.36	-
LFP-2	NA	16.40	-	16.45	-	NM	-
LFP-3	NA	14.75	-	14.20	-	14.18	-
LFP-4	NA	13.57	-	13.40	-	13.24	-
LFP-5	NA	17.30	-	17.32	-	17.26	-
LFP-6	NA	14.50	-	14.19	-	13.44	-
LFP-7	NA	NM	-	Dry	-	NM	-
LFP-8	NA	13.92	-	13.54	-	13.21	-
LFP-9	NA	18.20	-	18.00	-	17.93	-
LFP-10	NA	15.18	-	14.90	-	14.90	-
LFP-11	NA	23.77	-	23.18	-	22.89	-
LFP-12	NA	NM	-	Dry	-	Dry	-
LFP-13	NA	Dry	-	6.33	-	6.50	-
LFP-14	NA	26.37	-	26.00	-	25.83	-

Notes
(1) - Source: Malcolm Pirnie Inc. Project Number 0266319
Table 2-2, Monitoring Well and Piezometer Construction Summary
NA - Not Available
NM - Not Measured

Table 4-2
Summary of Groundwater Sampling Results - PCBs
Columbia Mills
Minetto, New York
NYSDEC Site No. 7-38-012

Sample Date Units	NYSDEC Class GA Standards	MW-1S 8/7/2007 ug/L	MW-1S 10/1/2008 ug/L	MW-1S 6/18/2009 ug/L	MW-X (1) 10/1/2008 ug/L	MW-X (1) 6/18/2009 ug/L	MW-1D 8/7/2007 ug/L	MW-1D 10/1/2008 ug/L
Analyte								
PCB-1016	-	0.54 U	0.53 U	0.52 U	0.53 U	0.5 U	0.54 U	0.52 U
PCB-1221	-	1.1 U	1.1 U	0.52 U	1.1 U	0.5 U	1.1 U	1.0 U
PCB-1232	-	0.54 U	0.53 U	0.52 U	0.53 U	0.5 U	0.54 U	0.52 U
PCB-1242	-	0.54 U	0.53 U	0.52 U	0.53 U	0.5 U	0.54 U	0.52 U
PCB-1248	-	0.54 U	0.53 U	0.52 U	0.53 U	0.5 U	0.54 U	0.52 U
PCB-1254	-	0.54 U	0.53 U	0.52 U	0.53 U	0.5 U	0.54 U	0.52 U
PCB-1260	-	0.54 U	0.53 U	0.52 U	0.53 U	0.5 U	0.54 U	0.52 U
Total PCBs	0.09	-	-	-	-	-	-	-

Notes:

- Concentration exceeds corresponding NYSDEC Class GA Standard

U - Analyte not detected

J - Estimated value

M - Manual integrated compound

B - Analyte was detected in Method Blank.

(1) - MW-X is a duplicate collected at MW-1S

Table 4-2
Summary of Groundwater Sampling Results - PCBs
Columbia Mills
Minetto, New York
NYSDEC Site No. 7-38-012

Sample Date Units	NYSDEC Class GA Standards	MW-1D 6/18/2009 ug/L	MW-2S 8/7/2007 ug/L	MW-2S 10/2/2008 ug/L	MW-2S 6/18/2009 ug/L	MW-2D 8/7/2007 ug/L	MW-2D 10/1/2008 ug/L	MW-2D 6/18/2009 ug/L
Analyte								
PCB-1016	-	0.5 U	0.56 U	0.54 U	0.5 U	0.56 U	0.55 U	0.5 U
PCB-1221	-	0.5 U	1.1 U	1.1 U	0.5 U	1.1 U	1.1 U	0.5 U
PCB-1232	-	0.5 U	0.56 U	0.54 U	0.5 U	0.56 U	0.55 U	0.5 U
PCB-1242	-	0.5 U	0.56 U	0.54 U	0.5 U	0.56 U	0.55 U	0.5 U
PCB-1248	-	0.5 U	0.56 U	0.54 U	0.5 U	0.56 U	0.55 U	0.5 U
PCB-1254	-	0.5 U	0.56 U	0.54 U	0.5 U	0.56 U	0.55 U	0.5 U
PCB-1260	-	0.5 U	0.56 U	0.54 U	0.5 U	0.56 U	0.55 U	0.5 U
Total PCBs	0.09	-	-	-	-	-	-	-

Notes:

- Concentration exceeds corresponding NYSDEC Class GA Standard

U - Analyte not detected

J - Estimated value

M - Manual integrated compound

B - Analyte was detected in Method Blank.

(1) - MW-X is a duplicate collected at MW-1S

Table 4-2
Summary of Groundwater Sampling Results - PCBs
Columbia Mills
Minetto, New York
NYSDEC Site No. 7-38-012

Sample Date Units	NYSDEC Class GA Standards	MW-3S 8/8/2007 ug/L	MW-3S 10/2/2008 ug/L	MW-3S 6/19/2009 ug/L	MW-3D 8/8/2007 ug/L	MW-3D 10/2/2008 ug/L	MW-3D 6/19/2009 ug/L	MW-4S 8/7/2007 ug/L
Analyte								
PCB-1016	-	0.50 U	0.53 U	0.5 U	0.50 U	0.93 U	0.54 U	0.56 U
PCB-1221	-	1.0 U	1.1 U	0.5 U	1.0 U	1.9 U	0.54 U	1.1 U
PCB-1232	-	0.50 U	0.53 U	0.5 U	0.50 U	0.93 U	0.54 U	0.56 U
PCB-1242	-	0.50 U	0.53 U	0.5 U	0.50 U	0.93 U	0.54 U	0.56 U
PCB-1248	-	0.40 J M	0.53 U	0.5 U	0.50 U	0.93 U	0.54 U	0.56 U
PCB-1254	-	0.50 U	0.53 U	0.5 U	0.50 U	0.93 U	0.54 U	0.56 U
PCB-1260	-	0.19 JMB	0.53 U	0.5 U	0.50 U	0.93 U	0.54 U	0.56 U
Total PCBs	0.09	**0.59**	-	-	-	-	-	-

Notes:

- Concentration exceeds corresponding NYSDEC Class GA Standard

U - Analyte not detected

J - Estimated value

M - Manual integrated compound

B - Analyte was detected in Method Blank.

(1) - MW-X is a duplicate collected at MW-1S

Table 4-2
Summary of Groundwater Sampling Results - PCBs
Columbia Mills
Minetto, New York
NYSDEC Site No. 7-38-012

Sample Date Units	NYSDEC Class GA Standards	MW-4S 10/1/2008 ug/L	MW-4S 6/18/2009 ug/L	MW-4D 8/7/2007 ug/L	MW-4D 10/1/2008 ug/L	MW-4D 6/18/2009 ug/L	TANK 10/2/2008 ug/L
Analyte							
PCB-1016	-	0.54 U	0.5 U	0.61 U	0.52 U	0.5 U	0.53 U
PCB-1221	-	1.1 U	0.5 U	1.2 U	1.0 U	0.5 U	1.1 U
PCB-1232	-	0.54 U	0.5 U	0.61 U	0.52 U	0.5 U	0.53 U
PCB-1242	-	0.54 U	0.5 U	0.61 U	0.52 U	0.5 U	0.53 U
PCB-1248	-	0.54 U	0.5 U	0.61 U	0.52 U	0.5 U	0.53 U
PCB-1254	-	0.54 U	0.5 U	0.61 U	0.52 U	0.5 U	0.53 U
PCB-1260	-	0.54 U	0.5 U	0.61 U	0.52 U	0.5 U	0.53 U
Total PCBs	0.09	-	-	-	-	-	

Notes:

- Concentration exceeds corresponding NYSDEC Class GA Standard

U - Analyte not detected

J - Estimated value

M - Manual integrated compound

B - Analyte was detected in Method Blank.

(1) - MW-X is a duplicate collected at MW-1S

Table 4-3
Summary of Groundwater Sampling Results - Metals
Columbia Mills
Minetto, New York
NYSDEC Site No. 7-38-012

Sample Date Units	NYSDEC Class GA Standards	MW-1S 10/1/2008 ug/L	MW-1S (D) 6/18/2009 ug/L	MW-X (1) 10/1/2008 ug/L	MW-X (D) (1) 6/18/2009 ug/L	MW-1D 10/1/2008 ug/L	MW-1D (D) 6/18/2009 ug/L
Metals							
Aluminum		200 U	91.3 J	200 U	18.8 JB	200 U	21.9 JB
Antimony	3	60.0 U	3.0 U	60.0 U	3.0 U	60.0 U	3 U
Arsenic	25	10.0 U	2.0 U	10.0 U	2.0 U	10.0 U	3.7 J
Barium	1000	487	486	480	506.0	962	1030
Beryllium	3	5.0 U	0.2 U	5.0 U	0.2 U	5.0 U	0.2 U
Cadmium	5	0.89 J	0.3 J	5.0 U	0.4 J	5.0 U	0.3 U
Calcium		50800	51500	50100	53600 B	29200	31700 B
Chromium	50	0.55 J	0.3 J	2.3 J	0.3 U	10.0 U	0.3 U
Cobalt		0.56 J	0.8 J	50.0 U	0.7	50.0 U	0.5 U
Copper	200	25.0 U	1.3 U	25.0 U	1.3 U	25.0 U	1.3 U
Cyanide		10 U	U	10 U		10 U	
Iron	300	**509**	**499**	**539**	**546 B**	**433**	**407 B**
Lead	25	10.0 U	1.0 U	10.0 U	1.0 U	10.0 U	1 U
Magnesium	35,000*	11600	11700	11300	12100 B	7970	8730 B
Manganese	300	116	103.0	119	109	91.5	104
Mercury	1	0.20 U	0.1 U	0.20 U	0.1 U	0.20 U	0.1 U
Nickel	100	40.0 U	1.0 U	3.4 J	1.0 J	40.0 U	1 U
Potassium		1590 J	1270 J	2820 J	1330.0	3590 J	3420
Selenium	10	35.0 U	6.1 U	35.0 U	6.1 U	35.0 U	6.1 U
Silver	50	10.0 U	0.8 U	10.0 U	0.8 U	10.0 U	0.8 U
Sodium	20000	14500	13800	14200	14300.0	**27200**	**28800**
Thallium	0.5*	25.0 U	5.9 U	25.0 U	5.9 U	25.0 U	5.9 U
Vanadium		50.0 U	0.5 U	0.69 J	0.7 J	50.0 U	0.5 U
Zinc	2,000*	1.3 J	1.0 U	6.3 J	1.3 J	1.6 J	1 J

Notes:

- Concentration exceeds corresponding NYSDEC Class GA Standard

U - Analyte not detected

* - NYSDEC Class GA Guidance Value

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

D - Sample was Dissolved

B - Detected in Sample and Method Blank

Table 4-3
Summary of Groundwater Sampling Results - Metals
Columbia Mills
Minetto, New York
NYSDEC Site No. 7-38-012

Sample Date Units	NYSDEC Class GA Standards	MW-2S 10/2/2008 ug/L	MW-2S 6/19/2009 ug/L	MW-2S (D) 6/19/2009 ug/L	MW-2D 10/1/2008 ug/L	MW-2D 6/18/2009 ug/L	MW-2D (D) 6/18/2009 ug/L
Metals							
Aluminum		284	246	11.0 U	207	204	75.7 JB
Antimony	3	60.0 U	3 U	3.0 U	60.0 U	3.0 U	3.0 U
Arsenic	25	10.0 U	2 U	2.6 J	10.0 U	2.0 U	2.0 U
Barium	1000	319	239	236	288	239	234
Beryllium	3	5.0 U	0.2 U	0.2 U	5.0 U	0.2 U	0.2 U
Cadmium	5	5.0 U	0.3 U	0.3 U	5.0 U	0.3 U	0.3 U
Calcium		87800	71800	74300 B	69500	65000	66300 B
Chromium	50	0.91 J	0.5 J	0.6	0.63 J	0.3 U	0.3 U
Cobalt		50.0 U	0.5 U	0.5 U	50.0 U	0.5 U	0.6 JB
Copper	200	3.1 J	1.3 J	1.3 U	25.0 U	1.3 U	1.3 U
Cyanide		3.9 J			10 U		
Iron	300	**365**	136	19.3 U	216	132	19.3 U
Lead	25	2.2 J	1 J	1.0 U	10.0 U	1.0 U	1.0 U
Magnesium	35,000*	12300	9760 B	10200 B	16400	15800 B	16100 B
Manganese	300	16.5	4.3 J	0.2 J	53.7	134	185
Mercury	1	0.20 U	0.1 U	0.1 U	0.20 U	0.1 U	0.1 U
Nickel	100	40.0 U	1 J	1.3	40.0 U	1.1 J	1.0 U
Potassium		1480 J	1190 J	1210	1370 J	1090 J	1100
Selenium	10	35.0 U	6.1 U	6.1 U	35.0 U	6.1 U	6.1 U
Silver	50	10.0 U	0.8 U	0.8 U	10.0 U	0.8 U	0.8 U
Sodium	20000	6690	5070	5230	7560	6280	6660
Thallium	0.5*	25.0 U	5.9 U	5.9 U	25.0 U	5.9 U	5.9 U
Vanadium		50.0 U	0.6 J	0.5 U	50.0 U	0.5 U	0.5 U
Zinc	2,000*	1.9 J	1.9 J	2.0 J	1.9 J	2.8 J	2.8 J

Notes:

- Concentration exceeds corresponding NYSDEC Class GA Standard

U - Analyte not detected

* - NYSDEC Class GA Guidance Value

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

D - Sample was Dissolved

B - Detected in Sample and Method Blank

Table 4-3
Summary of Groundwater Sampling Results - Metals
Columbia Mills
Minetto, New York
NYSDEC Site No. 7-38-012

Sample Date Units	NYSDEC Class GA Standards	MW-4S 10/1/2008 ug/L	MW-4S 6/18/2009 ug/L	MW-4S (D) 6/18/2009 ug/L	MW-4D 10/1/2008 ug/L	MW-4D 6/18/2009 ug/L	MW-4D (D) 6/18/2009 ug/L	TANK 10/2/2008 ug/L
Metals								
Aluminum		200 U	170 J	201 B	200 U	76.5 J	11 U	200 U
Antimony	3	60.0 U	3.0 U	3.0 U	60.0 U	3.0 U	3 U	60.0 U
Arsenic	25	10.0 U	2.3 J	2.0 U	10.0 U	2.0 U	2 U	10.0 U
Barium	1000	363	380	377	277	348	384	64.4 J
Beryllium	3	5.0 U	0.2 U	0.2 U	5.0 U	0.2 U	0.2 U	5.0 U
Cadmium	5	5.0 U	0.3 U	0.3 U	5.0 U	0.3 U	0.3 J	5.0 U
Calcium		60300	68700	69100 B	28000	36700	40700 B	25300
Chromium	50	10.0 U	0.3 U	0.3 U	10.0 U	0.3 U	0.3 U	0.60 J
Cobalt		50.0 U	0.5 U	0.7 JB	50.0 U	0.5 U	0.6 JB	50.0 U
Copper	200	25.0 U	1.3 U	1.3 U	25.0 U	1.3 U	1.3 U	25.0 U
Cyanide		6.2 J			10 U			10 U
Iron	300	**1680**	**1830**	**1820 B**	146	184	203 B	98.1 J
Lead	25	10.0 U	1.0 U	1.0 U	2.2 J	1.0 U	1 U	2.0 J
Magnesium	35,000*	13900	15100 B	15200 B	8020	10200 B	11200 B	4740 J
Manganese	300	**740**	**941**	**927**	148	265	288	4.6 J
Mercury	1	0.20 U	0.1 U	0.1 U	0.20 U	0.1 U	0.1 U	0.20 U
Nickel	100	40.0 U	1.6 J	1.0 J	40.0 U	1.0 U	1 U	40.0 U
Potassium		4620 J	4220 J	4270	4020 J	3880 J	4430	4340 J
Selenium	10	35.0 U	6.1 U	6.1 U	35.0 U	6.1 U	6.1 U	35.0 U
Silver	50	10.0 U	0.8 U	0.8 U	10.0 U	0.8 U	0.8 U	10.0 U
Sodium	20000	**34900**	**23000**	**23100**	**108000**	**68600**	**77500**	**26300**
Thallium	0.5*	25.0 U	5.9 U	5.9 U	25.0 U	5.9 U	5.9 U	25.0 U
Vanadium		50.0 U	0.5 U	0.6 J	0.67 J	0.5 U	0.7 J	50.0 U
Zinc	2,000*	1.6 J	2.2 J	1.5 J	1.4 J	1.3 J	1 U	3.9 J

Notes:

- Concentration exceeds corresponding NYSDEC Class GA Standard

U - Analyte not detected

* - NYSDEC Class GA Guidance Value

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

D - Sample was Dissolved

B - Detected in Sample and Method Blank

Table 4-4
Summary of Surface Water Sampling Results - Metals
Columbia Mills
Minetto, New York
NYSDEC Site No. 7-38-012

Sample Date Units	NYSDEC Class GA Standards	NYSDEC Class AA Standards	POND 6/18/2009 ug/L	STREAM 6/18/2009 ug/L
Dissolved Metals				
Aluminum		100	19.9 JB	139 JB
Antimony	3	3	3.0 U	3.0 U
Arsenic	25	50	2.0 U	2.0 U
Barium	1000	1000	60.3	64.3
Beryllium	3	3	0.2 U	0.2 U
Cadmium	5	5	0.3 U	0.3 U
Calcium			35800 B	36700 B
Chromium	50	50	0.3 J	0.4 J
Cobalt		5	0.8 JB	0.8 JB
Copper	200	200	1.3 U	1.3 U
Cyanide	200	200		
Iron	300	300	173 B	**448 B**
Lead	25	50	1 J	1.0 U
Magnesium	35,000*	35000	8090 B	8080 B
Manganese	300	300	73.9 J	**610**
Mercury	0.7	0.7	0.1 U	0.1 U
Nickel	100	100	1.0 U	1.5 J
Potassium			1080	1200
Selenium	10	10	6.1 U	6.1 U
Silver	50	50	0.8 U	0.8 U
Sodium	20000		15000	17300
Thallium	0.5*	0.5*	5.9 U	5.9 U
Vanadium		14	0.5 J	0.9 J
Zinc	2,000*	2,000*	1.0 U	7.5 J

Notes:

- Concentration exceeds corresponding NYSDEC Standard

U - Analyte not detected

* - NYSDEC Class GA Guidance Value

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

D - Sample was Dissolved

B - Detected in Sample and Method Blank

New York State Department of Environmental Conservation
Columbia Mills Site 2009 Annual Groundwater Monitoring Report

Appendix A

Photograph Log

MALCOLM PIRNIE

Photo 1: Discharge structure to Amphibian Breeding Pond.

Photo 2: Combination Sampling Sump

Photo 3: Fluorescent dye in leachate collection tank.

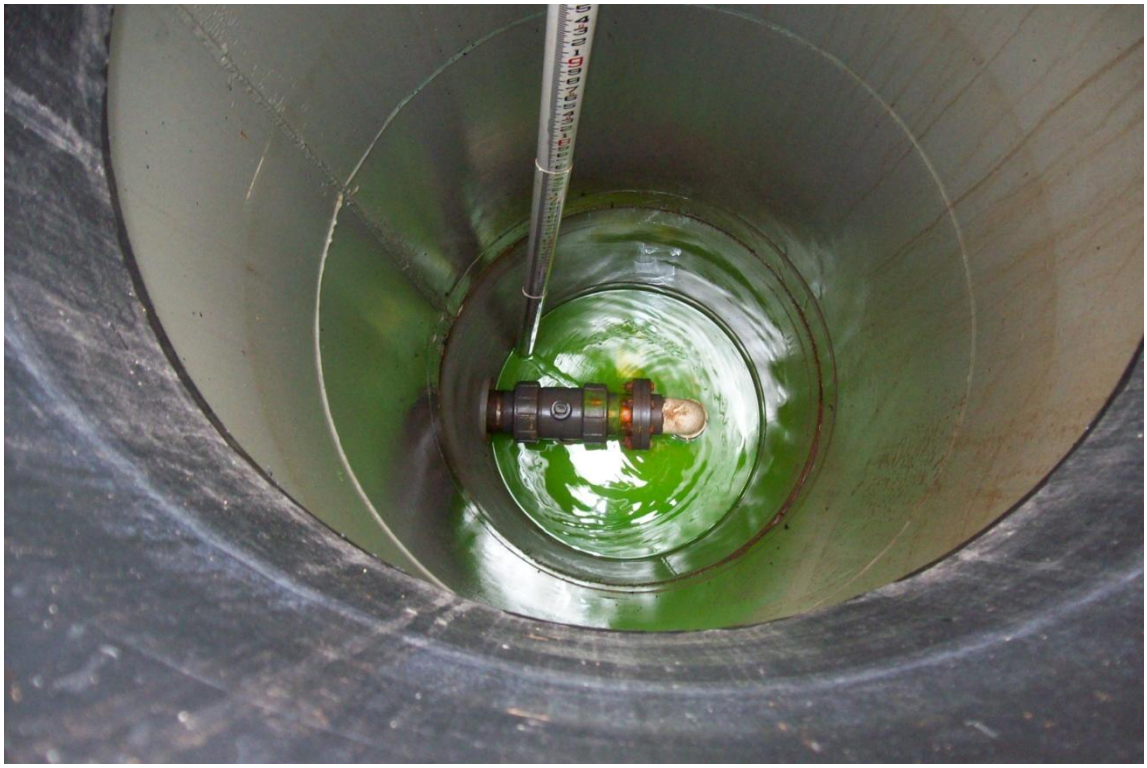


Photo 4: Inlet pipe manway and control valve.

Photo 5: 2008 collection tank level.

Photo 6: 2009 collection tank level.

New York State Department of Environmental Conservation
Columbia Mills Site 2009 Annual Groundwater Monitoring Report

Appendix B

DEC Site Management Photographic Report

0266363 / ALB

MALCOLM PIRNIE

Columbia Mills Dye Tests

Monitoring Well Inventory, 6/18-19/09

Photos with Notes

Photo	Description
	Payson Long (left) and I (small inset photo) arrived at approximately 2:30PM. Jeremy Wycoff (middle) and Jeff Redfield (right), both of Malcolm Pirnie were at work sampling groundwater.
	View back along the "spine" of the landfill towards the leachate tank.

Report by Will Welling

Google Map view

Continuing a sweep to the right.

Continuing a sweep to the right.

Jeremy, left; Payson, right

Gated access to the landfill. Jeremy and Payson are opening the manhole covers in the leachate tank area.

Jeremy and Payson are opening the manhole covers in the leachate tank area.

Manhole open, tank end.

Manway riser, cover off. Water levels in both the tank and the manway riser were the same. Eventually we figured out that the influent line's collar connection to the leachate tank in the manway riser was leaky. When the leachate tank filled up, the leak allowed water to fill the manway riser and equalize to the same level as the full tank.

At 3:15PM we opened the sewer manhole cover approximately 1000 feet away. This manhole has a central sewer flow and two pipes which enter obliquely. One pipe, presumably a sewer pipe, was a 6” green pipe plastic pipe and another which was 4” white plastic (see the next photo).

Better shot of the initial conditions inside the sewer manway. The green pipe (top) is a residential sewer connection, the white pipe is our leachate line into the sewer.

Weather: Temperature in the low 60s. Misting, no wind or breeze, overcast. At 3:00 it began to rain with actual drops rather than fine mist. It was raining rather hard. Payson and I donned rain gear.

Payson talking to Jeremy.

Location: standing a the edge of the trees at the sewer looking back towards the landfill. Two old brick and stone apartment buildings are in the rear. One looks abandoned, the one closest to the landfill is occupied.

At 3:18 PM we saw slightly increased central sewer flow. Jeremy had opened the valve in the leachate manway. This valve had been in the closed position. At 8 minutes (3:18) we saw flow increase in the green pipe. Toilet flush?

3:28PM. Payson and I were in touch by cell phone and he called me to say that Jeremy dropped in the dye tablets. The tablets are orange but they make the water green like antifreeze.

3:35 Jeremy says the tank looks like antifreeze.

3:45PM The green sewer pipe has just about stopped. There has been no color change to the flow from this big pipe.

3:45:30 There is now flow from the white pipe. Not much, but some flow. It's clear aside from some pieces of organic matter like dirt. Leaf pieces and “chunks” are coming out with the water. Maybe this pipe hasn't had water flowing in it for a while and this little bit of flow is flushing it out.

3:57 No changes yet.

4:01 Greywater flows out of the green pipe. Makes suds. No color change at the white pipe.

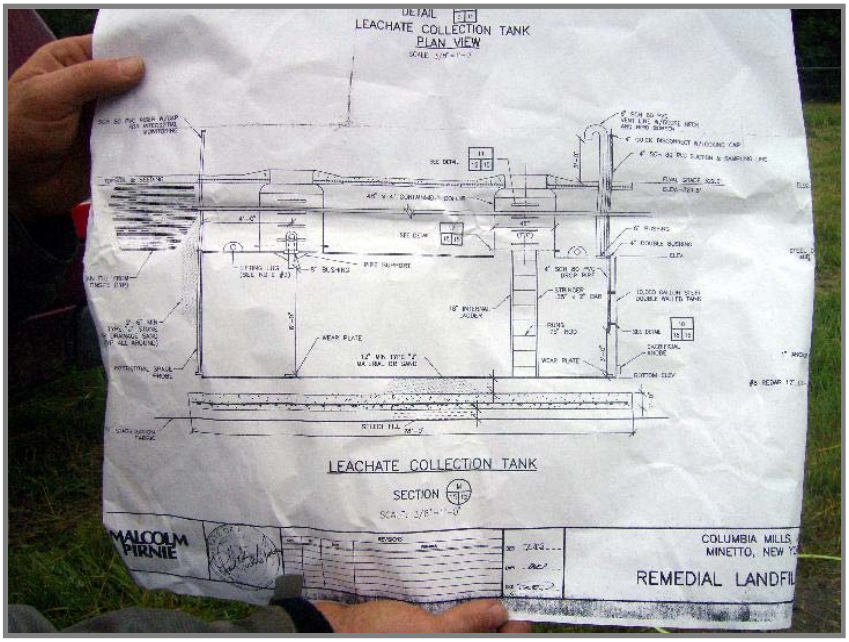
4:06 The big pipe (flow) down the center seems to have increased. The rain has now stopped. Perhaps th big pipe was picking up some of the rain runoff. Flow has doubled.

4:23 Another slug of greywater from the green pipe. Smells like laundry detergent. Somebody is washing clothes, We are seeing the cycle of the washing machine.

4:50 No change. There has been a light mist since the previous rain seemed to have ended but now I think the more steady rain has resumed.

4:50 Another greywater flow. For the rest of the day we saw water flow from the leachate pipe in the sewer but we saw no dye.

5:05 I suspended my watch. I go to find Payson. He's been watching the pond. Photos of the mixed dye.



Jeremy produced the drawing of the tank.

Dye

Manway riser and peristaltic pump

Some measurements at the tank: One side (manway riser) has a depth of 16.6 feet and the other side has a depth of 21.7 feet. Why doesn't the shallower one have an inlet/outlet that we can feel with the stadia rod?

Stadia rod the in manway riser. We pumped some of the water out using a peristaltic pump connected to a hose weighted down so it was on the bottom.

Peristaltic sampling pump drawing from the tank.

Shot of both openings and the activity at the time.

6:00PM Back at the sewer. No change in color coming from the white pipe or the big pipe down the middle. Leachate pipe still flowing clear.

6:15 Jeremy dipped three samples one each from three pipes inside “the vault.” Photos. In the photos, three fingers means the third pipe, the middle finger (“the bird”) means the middle pipe and the index finger means first pipe. All dipped water samples are clear. This is a disappointment. We've dyed 10,000 gallons of water and the water coming ut of the pipes is completely clear!

We'll return tomorrow to see if the concentration of color has changed in the tank and/or in the sewer and vault monitoring locations.

Water currently flowing from the middle pipe. Here "the bird" is being used to symbolize the middle tank.

First pipe also clear. All three in the vault are running clear

6/19/2009, Friday. 8:30AM return to the site. Jeremy has been at the site since 6:45 AM. Jeremy is sampling at the vault. Camera was held down inside the vault for this photo.

Kids have been 4-wheeling and making ruts in the grass and stream which drains the perimeter of the landfill. I'm glad the landfill proper is fenced! If not it would be cut up pretty bad.

Camera was held down inside the vault for this photo.

Outlet pipe which leads to the discharge point into the amphibian breeding pond.

Amphibian pond from the edge of the woods, upon the knoll.

View just out from the woods looking back towards the vault. The amphibian pond is to the right , out of view.

Amphibian pond closest to the vault.

The cap was recently mowed. The mower had clipped an ant hill which at first I thought was a mound from a groundhog. No groundhog but I did see two holes dug by a groundhog. Photos will be later in the sequence.

Photo from the cap looking back towards the railroad tracks.

Swinging around slightly to the right with reference to the previous shot.

Photo of a fox on the slope up from the amphibian pond. The fox took off when Jeremy returned to the site with his truck. The noise spooked the fox and he ran to the woods to the rear.

Friday we obtained a diaphram pump. We pumped water here and there testing various theories. We drained the manway riser and discovered a leaky collar joint.

1:30 PM We've done a lot of work this morning and I haven't written much down. We've had success with the dye-tracing. The rain ended at about 11 (it had been lightly raining and misting) and so now I am able to put down the pencil and write my notes in ballpoint pen.

Summarizing the flows we traced: landfill "groundwater" is collected and piped to the vault in two pipes, each with a valve on the end of the pipe in the vault. One leachate system pipe discharges to the vault. It has no valve in the vault. This is the pipe we called "3" and the middle one was (the bird) and the other one was pipe #1. Leachate flows in two pipes to the tank. There is a valve at the entry to the tank (down in the man-way riser) and we believe this connection is leaky. When this valve is off (or when

the tank is full) water backs up and if valves are open to sewer and/or the vault are open, water flows there. We saw that the valve into the tanks was open. Up hill a few feet, until we opened the leachate valve to the sewer (one of the two small manholes) no water was flowing into the sewer (the white pipe). The second small manhole had a valve on the leachate line (before the tank) which controlled bypass overflow water flow to the vault. This was open when we popped the cover. We determined that since the tank was full, water was bypassing

and discharging to the amphibian pond. None of the water in the tank came out to the discharge points. We bailed and pumped it to the leachate system collection pipes and to the groundwater collection system to trace where those pipes went. They all bypassed the collection tank. We eventually got green water out of the white pipe in the sewer manhole.

We think the man-way riser should have been dry. The valve was on the bottom down 13 feet and would have to be turned with a reach rod. If the chamber were full of water, that would be unworkable. Examining carefully we saw that when we pumped the leachate tank to a few inches below the bulkhead the water stabilized at just below the collar in the other manway riser. The water level showed us where the hydraulic connection to the tank is!

Re-arrangement

First pipe inside the vault, looking for green water. No green water.

Pipes "middle" and third (most distant). The third pipe is from the groundwater collection system.

Success! We now have green dye in the first pipe inside the vault. This is a leachate pipe.

The vault slowly filled with enough dyed water so that the dye made its way into the discharge pipe. Standing at the point of discharge to the pond, water can be seen entering the amphibian pond.

Visual sample from the vault. This was just before dye reached the vault.

Visual sample from the vault

Green finally in the sewer. We had pumped some leachate into one of the leachate clean-out stickups behind the tank and the valve access manholes. About 1/2 hour later we saw the green dye.

Close-up

From the surface. Even standing over the manhole the green dye can be seen.

Another positive

Pumping down the manway riser

In pumping mode. We were draining the manway riser.

Discharge end

Tank manhole cover

Looking into the manway riser almost pumped down makes for a surreal image.

Ditto

Now the plumbing is visible. The leachate fill pipe makes a 90-degree bend just beyond the valve. In this plumbing a connection must be leaking because the water height rises to the same height as that of the tank.

Water level paused at the leaky connection.

Now drained.

Photo taken above the ground surface.

Groundwater and leachate cleanout stickups behind the tank.

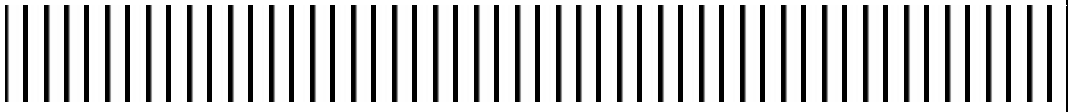
Swinging a bit to the right to give proximity.

Google map

New York State Department of Environmental Conservation
Columbia Mills Site 2009 Annual Groundwater Monitoring Report

Appendix C

Analytical Reporting Forms



0266363 / ALB

MALCOLM PIRNIE

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Analytical Report

SDG Number: 220-9422

Project Description(s)
Work Order RSF0953 - NYSDEC Standby - Columbia Mills

For:

Johanna Dubauskas
TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484

Sally Hoffman
Project Manager
Sally.Hoffman@testamericainc.com

Tuesday, July 7, 2009

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484

SDG Number: 220-9422

Project: NYSDEC Standby - Columbia Mills
Project Number: 220-9422

Received: 06/24/09
Reported: 07/07/09 16:19

TestAmerica Buffalo
Current Certifications

As of 1/27/2009

STATE	Program	Cert # / Lab ID
Arkansas	CWA, RCRA, SOIL	88-0686
California*	NELAP CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida*	NELAP CWA, RCRA	E87672
Georgia*	SDWA,NELAP CWA, RCRA	956
Illinois*	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas*	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana*	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	NY0044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA,CWA, RCRA	036-999-337
New Hampshire*	NELAP SDWA, CWA	233701
New Jersey*	NELAP,SDWA, CWA, RCRA,	NY455
New York*	NELAP, AIR, SDWA, CWA, RCRA,CLP	10026
Oklahoma	CWA, RCRA	9421
Pennsylvania*	NELAP CWA,RCRA	68-00281
Tennessee	SDWA	02970
Texas*	NELAP CWA, RCRA	T104704412-08-TX
USDA	FOREIGN SOIL PERMIT	S-41579
USDOE	Department of Energy	DOECAP-STB
Virginia	SDWA	278
Washington*	NELAP CWA,RCRA	C1677
Wisconsin	CWA, RCRA	998310390
West Virginia	CWA,RCRA	252

*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.

SAMPLE DATA SUMMARY PACKAGE

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484

SDG Number: 220-9422

Project: NYSDEC Standby - Columbia Mills
Project Number: 220-9422

Received: 06/24/09
Reported: 07/07/09 16:19

Sample Summary

Sample Identification	Lab Number	Client Matrix	Date/Time Sampled	Date/Time Received	Sample Qualifiers
4-D	RSF0953-04	Water	06/18/09 12:00	06/24/09 09:10	
4-S	RSF0953-01	Water	06/18/09 08:15	06/24/09 09:10	
MW-1D	RSF0953-05	Water	06/18/09 12:30	06/24/09 09:10	
MW-1S	RSF0953-02	Water	06/18/09 11:25	06/24/09 09:10	
MW-2D	RSF0953-07	Water	06/18/09 14:20	06/24/09 09:10	
MW-2S	RSF0953-08	Water	06/19/09 06:55	06/24/09 09:10	
MW-X	RSF0953-03	Water	06/18/09 11:30	06/24/09 09:10	
POND	RSF0953-09	Water	06/18/09 14:50	06/24/09 09:10	
STREAM	RSF0953-06	Water	06/18/09 12:45	06/24/09 09:10	

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484

SDG Number: 220-9422

Project: NYSDEC Standby - Columbia Mills
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DATA QUALIFIERS AND DEFINITIONS

B	Analyte was detected in the associated Method Blank.
J	Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.
M1	The MS and/or MSD were outside the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
R2	The RPD exceeded the acceptance limit.
NR	Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484

SDG Number: 220-9422

Project: NYSDEC Standby - Columbia Mills
Project Number: 220-9422

Received: 06/24/09
Reported: 07/07/09 16:19

Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: 4-D (RSF0953-04 - Water)							**Sampled: 06/18/09 12:00**		**Recvd: 06/24/09 09:10**	
CLP Metals										
Barium, Dissolved	**384**		2.0	0.1	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Cadmium, Dissolved	**0.3**	J	1.0	0.3	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Calcium, Dissolved	**40700**	B	500	100	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Cobalt, Dissolved	**0.6**	J, B	4.0	0.5	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Iron, Dissolved	**203**	B	50.0	19.3	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Magnesium, Dissolved	**11200**	B	200	6.0	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Manganese, Dissolved	**288**		3.0	0.1	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Potassium, Dissolved	**4430**		500	28.0	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Sodium, Dissolved	**77500**		1000	180	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Vanadium, Dissolved	**0.7**	J	5.0	0.5	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Aluminum	**76.5**	J	200	11.0	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Barium	**348**		200	0.1	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Calcium	**36700**		5000	100	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Iron	**184**		100	19.3	ug/L	1.00	06/27/09 02:47	LMH	9F25007	CLP-M
Magnesium	**10200**	B	5000	6.0	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Manganese	**265**		15.0	0.1	ug/L	1.00	06/27/09 02:47	LMH	9F25007	CLP-M
Potassium	**3880**	J	5000	28.0	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Sodium	**68600**		5000	180	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Zinc	**1.3**	J	60.0	1.0	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Client ID: 4-S (RSF0953-01 - Water)							**Sampled: 06/18/09 08:15**		**Recvd: 06/24/09 09:10**	
CLP Metals										
Aluminum, Dissolved	**201**	B	200	11.0	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Barium, Dissolved	**377**		2.0	0.1	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Calcium, Dissolved	**69100**	B	500	100	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Cobalt, Dissolved	**0.7**	J, B	4.0	0.5	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Iron, Dissolved	**1820**	B	50.0	19.3	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Magnesium, Dissolved	**15200**	B	200	6.0	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Manganese, Dissolved	**927**		3.0	0.1	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Potassium, Dissolved	**4270**		500	28.0	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Sodium, Dissolved	**23100**		1000	180	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Vanadium, Dissolved	**0.6**	J	5.0	0.5	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Zinc, Dissolved	**1.5**	J	10.0	1.0	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Aluminum	**170**	J	200	11.0	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Arsenic	**2.3**	J	10.0	2.0	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Barium	**380**		200	0.1	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Calcium	**68700**		5000	100	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Iron	**1830**		100	19.3	ug/L	1.00	06/27/09 02:42	LMH	9F25007	CLP-M
Magnesium	**15100**	B	5000	6.0	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Manganese	**941**		15.0	0.1	ug/L	1.00	06/27/09 02:42	LMH	9F25007	CLP-M
Nickel	**1.6**	J	40.0	1.0	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Potassium	**4220**	J	5000	28.0	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Sodium	**23000**		5000	180	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Zinc	**2.2**	J	60.0	1.0	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484

SDG Number: 220-9422

Project: NYSDEC Standby - Columbia Mills
Project Number: 220-9422

Received: 06/24/09
Reported: 07/07/09 16:19

Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: MW-1D (RSF0953-05 - Water)							**Sampled: 06/18/09 12:30**		**Recvd: 06/24/09 09:10**	
CLP Metals										
Aluminum, Dissolved	**21.9**	J, B	200	11.0	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Arsenic, Dissolved	**3.7**	J	10.0	2.0	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Barium, Dissolved	**1030**		2.0	0.1	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Calcium, Dissolved	**31700**	B	500	100	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Iron, Dissolved	**407**	B	50.0	19.3	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Magnesium, Dissolved	**8730**	B	200	6.0	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Manganese, Dissolved	**104**		3.0	0.1	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Potassium, Dissolved	**3420**		500	28.0	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Sodium, Dissolved	**28800**		1000	180	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Zinc, Dissolved	**1.0**	J	10.0	1.0	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Client ID: MW-1S (RSF0953-02 - Water)							**Sampled: 06/18/09 11:25**		**Recvd: 06/24/09 09:10**	
CLP Metals										
Aluminum, Dissolved	**91.3**	J, B	200	11.0	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Barium, Dissolved	**486**		2.0	0.1	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Calcium, Dissolved	**51500**	B	500	100	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Cobalt, Dissolved	**0.8**	J, B	4.0	0.5	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Iron, Dissolved	**499**	B	50.0	19.3	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Magnesium, Dissolved	**11700**	B	200	6.0	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Manganese, Dissolved	**103**		3.0	0.1	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Potassium, Dissolved	**1270**		500	28.0	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Sodium, Dissolved	**13800**		1000	180	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Client ID: MW-2D (RSF0953-07 - Water)							**Sampled: 06/18/09 14:20**		**Recvd: 06/24/09 09:10**	
CLP Metals										
Aluminum, Dissolved	**75.7**	J, B	200	11.0	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Barium, Dissolved	**234**		2.0	0.1	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Calcium, Dissolved	**66300**	B	500	100	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Cobalt, Dissolved	**0.6**	J, B	4.0	0.5	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Magnesium, Dissolved	**16100**	B	200	6.0	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Manganese, Dissolved	**185**		3.0	0.1	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Potassium, Dissolved	**1100**		500	28.0	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Sodium, Dissolved	**6660**		1000	180	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Zinc, Dissolved	**2.8**	J	10.0	1.0	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Aluminum	**204**		200	11.0	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Barium	**239**		200	0.1	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Calcium	**65000**		5000	100	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Iron	**132**		100	19.3	ug/L	1.00	06/27/09 03:12	LMH	9F25007	CLP-M
Magnesium	**15800**	B	5000	6.0	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Manganese	**134**		15.0	0.1	ug/L	1.00	06/27/09 03:12	LMH	9F25007	CLP-M
Nickel	**1.1**	J	40.0	1.0	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Potassium	**1090**	J	5000	28.0	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Sodium	**6280**		5000	180	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Zinc	**2.8**	J	60.0	1.0	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484

SDG Number: 220-9422

Project: NYSDEC Standby - Columbia Mills
Project Number: 220-9422

Received: 06/24/09
Reported: 07/07/09 16:19

Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: MW-2S (RSF0953-08 - Water)							**Sampled: 06/19/09 06:55**		**Recvd: 06/24/09 09:10**	
CLP Metals										
Arsenic, Dissolved	**2.6**	J	10.0	2.0	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Barium, Dissolved	**236**		2.0	0.1	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Calcium, Dissolved	**74300**	B	500	100	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Chromium, Dissolved	**0.6**	J	4.0	0.3	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Magnesium, Dissolved	**10200**	B	200	6.0	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Manganese, Dissolved	**0.2**	J	3.0	0.1	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Nickel, Dissolved	**1.3**	J	10.0	1.0	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Potassium, Dissolved	**1210**		500	28.0	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Sodium, Dissolved	**5230**		1000	180	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Zinc, Dissolved	**2.0**	J	10.0	1.0	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Aluminum	**246**		200	11.0	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Barium	**239**		200	0.1	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Calcium	**71800**		5000	100	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Chromium	**0.5**	J	10.0	0.3	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Iron	**136**		100	19.3	ug/L	1.00	06/27/09 03:17	LMH	9F25007	CLP-M
Magnesium	**9760**	B	5000	6.0	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Manganese	**4.3**	J	15.0	0.1	ug/L	1.00	06/27/09 03:17	LMH	9F25007	CLP-M
Nickel	**1.0**	J	40.0	1.0	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Potassium	**1190**	J	5000	28.0	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Sodium	**5070**		5000	180	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Vanadium	**0.6**	J	50.0	0.5	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Zinc	**1.9**	J	60.0	1.0	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Client ID: MW-X (RSF0953-03 - Water)							**Sampled: 06/18/09 11:30**		**Recvd: 06/24/09 09:10**	
CLP Metals										
Aluminum, Dissolved	**18.8**	J, B	200	11.0	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Barium, Dissolved	**506**		2.0	0.1	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Cadmium, Dissolved	**0.4**	J	1.0	0.3	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Calcium, Dissolved	**53600**	B	500	100	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Cobalt, Dissolved	**0.7**	J, B	4.0	0.5	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Iron, Dissolved	**546**	B	50.0	19.3	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Magnesium, Dissolved	**12100**	B	200	6.0	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Manganese, Dissolved	**109**		3.0	0.1	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Potassium, Dissolved	**1330**		500	28.0	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Sodium, Dissolved	**14300**		1000	180	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Vanadium, Dissolved	**0.7**	J	5.0	0.5	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Zinc, Dissolved	**1.3**	J	10.0	1.0	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484

SDG Number: 220-9422

Project: NYSDEC Standby - Columbia Mills
Project Number: 220-9422

Received: 06/24/09
Reported: 07/07/09 16:19

Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: POND (RSF0953-09 - Water)							**Sampled: 06/18/09 14:50**		**Recvd: 06/24/09 09:10**	
CLP Metals										
Aluminum, Dissolved	**19.9**	J, B	200	11.0	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Barium, Dissolved	**60.3**		2.0	0.1	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Calcium, Dissolved	**35800**	B	500	100	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Cobalt, Dissolved	**0.8**	J, B	4.0	0.5	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Iron, Dissolved	**173**	B	50.0	19.3	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Magnesium, Dissolved	**8090**	B	200	6.0	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Manganese, Dissolved	**73.9**		3.0	0.1	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Potassium, Dissolved	**1080**		500	28.0	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Sodium, Dissolved	**15000**		1000	180	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Vanadium, Dissolved	**0.5**	J	5.0	0.5	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Client ID: STREAM (RSF0953-06 - Water)							**Sampled: 06/18/09 12:45**		**Recvd: 06/24/09 09:10**	
CLP Metals										
Aluminum, Dissolved	**139**	J, B	200	11.0	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Barium, Dissolved	**64.3**		2.0	0.1	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Calcium, Dissolved	**36700**	B	500	100	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Chromium, Dissolved	**0.4**	J	4.0	0.3	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Cobalt, Dissolved	**0.8**	J, B	4.0	0.5	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Iron, Dissolved	**448**	B	50.0	19.3	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Magnesium, Dissolved	**8080**	B	200	6.0	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Manganese, Dissolved	**610**		3.0	0.1	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Nickel, Dissolved	**1.5**	J	10.0	1.0	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Potassium, Dissolved	**1200**		500	28.0	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Sodium, Dissolved	**17300**		1000	180	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Vanadium, Dissolved	**0.9**	J	5.0	0.5	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Zinc, Dissolved	**7.5**	J	10.0	1.0	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484

SDG Number: 220-9422

Project: NYSDEC Standby - Columbia Mills
Project Number: 220-9422

Received: 06/24/09
Reported: 07/07/09 16:19

Analytical Report

Client ID: 4-D (RSF0953-04 - Water) **Sampled: 06/18/09 12:00** **Recvd: 06/24/09 09:10**

CLP Metals

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Aluminum, Dissolved	ND		200	11.0	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Antimony, Dissolved	ND		20.0	3.0	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Arsenic, Dissolved	ND		10.0	2.0	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Barium, Dissolved	**384**		2.0	0.1	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Beryllium, Dissolved	ND		2.0	0.2	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Cadmium, Dissolved	**0.3**	J	1.0	0.3	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Calcium, Dissolved	**40700**	B	500	100	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Chromium, Dissolved	ND		4.0	0.3	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Cobalt, Dissolved	**0.6**	J, B	4.0	0.5	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Copper, Dissolved	ND		10.0	1.3	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Iron, Dissolved	**203**	B	50.0	19.3	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Lead, Dissolved	ND		5.0	1.0	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Magnesium, Dissolved	**11200**	B	200	6.0	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Manganese, Dissolved	**288**		3.0	0.1	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Mercury, Dissolved	ND		0.2	0.1	ug/L	1.00	07/02/09 14:35	MM	9G02014	CLP-M
Nickel, Dissolved	ND		10.0	1.0	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Potassium, Dissolved	**4430**		500	28.0	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Selenium, Dissolved	ND		15.0	6.1	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Silver, Dissolved	ND		3.0	0.8	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Sodium, Dissolved	**77500**		1000	180	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Thallium, Dissolved	ND		20.0	5.9	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Vanadium, Dissolved	**0.7**	J	5.0	0.5	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Zinc, Dissolved	ND		10.0	1.0	ug/L	1.00	06/29/09 20:45	LMH	9F24077	CLP-M
Aluminum	**76.5**	J	200	11.0	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Antimony	ND		60.0	3.0	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Arsenic	ND		10.0	2.0	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Barium	**348**		200	0.1	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Beryllium	ND		5.0	0.2	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Cadmium	ND		5.0	0.3	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Calcium	**36700**		5000	100	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Chromium	ND		10.0	0.3	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Cobalt	ND		50.0	0.5	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Copper	ND		25.0	1.3	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Iron	**184**		100	19.3	ug/L	1.00	06/27/09 02:47	LMH	9F25007	CLP-M
Lead	ND		10.0	1.0	ug/L	1.00	06/29/09 22:16	LMH	9F25007	CLP-M
Magnesium	**10200**	B	5000	6.0	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Manganese	**265**		15.0	0.1	ug/L	1.00	06/27/09 02:47	LMH	9F25007	CLP-M
Mercury	ND		0.2	0.1	ug/L	1.00	07/02/09 14:07	MM	9G02013	CLP-M
Nickel	ND		40.0	1.0	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Potassium	**3880**	J	5000	28.0	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Selenium	ND		35.0	6.1	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Silver	ND		10.0	0.8	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Sodium	**68600**		5000	180	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Thallium	ND		25.0	5.9	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Vanadium	ND		50.0	0.5	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M
Zinc	**1.3**	J	60.0	1.0	ug/L	1.00	06/26/09 01:31	LMH	9F25007	CLP-M

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484

SDG Number: 220-9422

Project: NYSDEC Standby - Columbia Mills
Project Number: 220-9422

Received: 06/24/09
Reported: 07/07/09 16:19

Analytical Report

Client ID: 4-S (RSF0953-01 - Water) **Sampled: 06/18/09 08:15 Recvd: 06/24/09 09:10**

CLP Metals

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Aluminum, Dissolved	**201**	B	200	11.0	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Antimony, Dissolved	ND		20.0	3.0	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Arsenic, Dissolved	ND		10.0	2.0	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Barium, Dissolved	**377**		2.0	0.1	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Beryllium, Dissolved	ND		2.0	0.2	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Cadmium, Dissolved	ND		1.0	0.3	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Calcium, Dissolved	**69100**	B	500	100	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Chromium, Dissolved	ND		4.0	0.3	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Cobalt, Dissolved	**0.7**	J, B	4.0	0.5	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Copper, Dissolved	ND		10.0	1.3	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Iron, Dissolved	**1820**	B	50.0	19.3	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Lead, Dissolved	ND		5.0	1.0	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Magnesium, Dissolved	**15200**	B	200	6.0	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Manganese, Dissolved	**927**		3.0	0.1	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Mercury, Dissolved	ND		0.2	0.1	ug/L	1.00	07/02/09 14:30	MM	9G02014	CLP-M
Nickel, Dissolved	ND		10.0	1.0	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Potassium, Dissolved	**4270**		500	28.0	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Selenium, Dissolved	ND		15.0	6.1	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Silver, Dissolved	ND		3.0	0.8	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Sodium, Dissolved	**23100**		1000	180	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Thallium, Dissolved	ND		20.0	5.9	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Vanadium, Dissolved	**0.6**	J	5.0	0.5	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Zinc, Dissolved	**1.5**	J	10.0	1.0	ug/L	1.00	06/29/09 20:10	LMH	9F24077	CLP-M
Aluminum	**170**	J	200	11.0	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Antimony	ND		60.0	3.0	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Arsenic	**2.3**	J	10.0	2.0	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Barium	**380**		200	0.1	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Beryllium	ND		5.0	0.2	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Cadmium	ND		5.0	0.3	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Calcium	**68700**		5000	100	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Chromium	ND		10.0	0.3	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Cobalt	ND		50.0	0.5	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Copper	ND		25.0	1.3	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Iron	**1830**		100	19.3	ug/L	1.00	06/27/09 02:42	LMH	9F25007	CLP-M
Lead	ND		10.0	1.0	ug/L	1.00	06/29/09 22:11	LMH	9F25007	CLP-M
Magnesium	**15100**	B	5000	6.0	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Manganese	**941**		15.0	0.1	ug/L	1.00	06/27/09 02:42	LMH	9F25007	CLP-M
Mercury	ND		0.2	0.1	ug/L	1.00	07/02/09 14:01	MM	9G02013	CLP-M
Nickel	**1.6**	J	40.0	1.0	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Potassium	**4220**	J	5000	28.0	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Selenium	ND		35.0	6.1	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Silver	ND		10.0	0.8	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Sodium	**23000**		5000	180	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Thallium	ND		25.0	5.9	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Vanadium	ND		50.0	0.5	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M
Zinc	**2.2**	J	60.0	1.0	ug/L	1.00	06/26/09 01:26	LMH	9F25007	CLP-M

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484

SDG Number: 220-9422

Project: NYSDEC Standby - Columbia Mills
Project Number: 220-9422

Received: 06/24/09
Reported: 07/07/09 16:19

Analytical Report

Client ID: MW-1D (RSF0953-05 - Water) **Sampled: 06/18/09 12:30** **Recvd: 06/24/09 09:10**

CLP Metals

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Aluminum, Dissolved	**21.9**	J, B	200	11.0	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Antimony, Dissolved	ND		20.0	3.0	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Arsenic, Dissolved	**3.7**	J	10.0	2.0	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Barium, Dissolved	**1030**		2.0	0.1	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Beryllium, Dissolved	ND		2.0	0.2	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Cadmium, Dissolved	ND		1.0	0.3	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Calcium, Dissolved	**31700**	B	500	100	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Chromium, Dissolved	ND		4.0	0.3	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Cobalt, Dissolved	ND		4.0	0.5	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Copper, Dissolved	ND		10.0	1.3	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Iron, Dissolved	**407**	B	50.0	19.3	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Lead, Dissolved	ND		5.0	1.0	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Magnesium, Dissolved	**8730**	B	200	6.0	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Manganese, Dissolved	**104**		3.0	0.1	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Mercury, Dissolved	ND		0.2	0.1	ug/L	1.00	07/02/09 14:36	MM	9G02014	CLP-M
Nickel, Dissolved	ND		10.0	1.0	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Potassium, Dissolved	**3420**		500	28.0	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Selenium, Dissolved	ND		15.0	6.1	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Silver, Dissolved	ND		3.0	0.8	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Sodium, Dissolved	**28800**		1000	180	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Thallium, Dissolved	ND		20.0	5.9	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Vanadium, Dissolved	ND		5.0	0.5	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M
Zinc, Dissolved	**1.0**	J	10.0	1.0	ug/L	1.00	06/29/09 21:03	LMH	9F24077	CLP-M

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484

SDG Number: 220-9422

Project: NYSDEC Standby - Columbia Mills
Project Number: 220-9422

Received: 06/24/09
Reported: 07/07/09 16:19

Analytical Report

Client ID: MW-1S (RSF0953-02 - Water) **Sampled: 06/18/09 11:25** **Recvd: 06/24/09 09:10**

CLP Metals

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Aluminum, Dissolved	**91.3**	J, B	200	11.0	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Antimony, Dissolved	ND		20.0	3.0	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Arsenic, Dissolved	ND		10.0	2.0	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Barium, Dissolved	**486**		2.0	0.1	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Beryllium, Dissolved	ND		2.0	0.2	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Cadmium, Dissolved	ND		1.0	0.3	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Calcium, Dissolved	**51500**	B	500	100	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Chromium, Dissolved	ND		4.0	0.3	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Cobalt, Dissolved	**0.8**	J, B	4.0	0.5	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Copper, Dissolved	ND		10.0	1.3	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Iron, Dissolved	**499**	B	50.0	19.3	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Lead, Dissolved	ND		5.0	1.0	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Magnesium, Dissolved	**11700**	B	200	6.0	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Manganese, Dissolved	**103**		3.0	0.1	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Mercury, Dissolved	ND		0.2	0.1	ug/L	1.00	07/02/09 14:32	MM	9G02014	CLP-M
Nickel, Dissolved	ND		10.0	1.0	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Potassium, Dissolved	**1270**		500	28.0	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Selenium, Dissolved	ND		15.0	6.1	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Silver, Dissolved	ND		3.0	0.8	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Sodium, Dissolved	**13800**		1000	180	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Thallium, Dissolved	ND		20.0	5.9	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Vanadium, Dissolved	ND		5.0	0.5	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M
Zinc, Dissolved	ND		10.0	1.0	ug/L	1.00	06/29/09 20:15	LMH	9F24077	CLP-M

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484

SDG Number: 220-9422

Project: NYSDEC Standby - Columbia Mills
Project Number: 220-9422

Received: 06/24/09
Reported: 07/07/09 16:19

Analytical Report

Client ID: MW-2D (RSF0953-07 - Water) **Sampled: 06/18/09 14:20** **Recvd: 06/24/09 09:10**

CLP Metals

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Aluminum, Dissolved	**75.7**	J, B	200	11.0	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Antimony, Dissolved	ND		20.0	3.0	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Arsenic, Dissolved	ND		10.0	2.0	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Barium, Dissolved	**234**		2.0	0.1	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Beryllium, Dissolved	ND		2.0	0.2	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Cadmium, Dissolved	ND		1.0	0.3	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Calcium, Dissolved	**66300**	B	500	100	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Chromium, Dissolved	ND		4.0	0.3	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Cobalt, Dissolved	**0.6**	J, B	4.0	0.5	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Copper, Dissolved	ND		10.0	1.3	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Iron, Dissolved	ND		50.0	19.3	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Lead, Dissolved	ND		5.0	1.0	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Magnesium, Dissolved	**16100**	B	200	6.0	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Manganese, Dissolved	**185**		3.0	0.1	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Mercury, Dissolved	ND		0.2	0.1	ug/L	1.00	07/02/09 14:39	MM	9G02014	CLP-M
Nickel, Dissolved	ND		10.0	1.0	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Potassium, Dissolved	**1100**		500	28.0	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Selenium, Dissolved	ND		15.0	6.1	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Silver, Dissolved	ND		3.0	0.8	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Sodium, Dissolved	**6660**		1000	180	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Thallium, Dissolved	ND		20.0	5.9	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Vanadium, Dissolved	ND		5.0	0.5	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Zinc, Dissolved	**2.8**	J	10.0	1.0	ug/L	1.00	06/29/09 21:12	LMH	9F24077	CLP-M
Aluminum	**204**		200	11.0	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Antimony	ND		60.0	3.0	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Arsenic	ND		10.0	2.0	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Barium	**239**		200	0.1	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Beryllium	ND		5.0	0.2	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Cadmium	ND		5.0	0.3	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Calcium	**65000**		5000	100	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Chromium	ND		10.0	0.3	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Cobalt	ND		50.0	0.5	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Copper	ND		25.0	1.3	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Iron	**132**		100	19.3	ug/L	1.00	06/27/09 03:12	LMH	9F25007	CLP-M
Lead	ND		10.0	1.0	ug/L	1.00	06/29/09 22:41	LMH	9F25007	CLP-M
Magnesium	**15800**	B	5000	6.0	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Manganese	**134**		15.0	0.1	ug/L	1.00	06/27/09 03:12	LMH	9F25007	CLP-M
Mercury	ND		0.2	0.1	ug/L	1.00	07/02/09 14:09	MM	9G02013	CLP-M
Nickel	**1.1**	J	40.0	1.0	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Potassium	**1090**	J	5000	28.0	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Selenium	ND		35.0	6.1	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Silver	ND		10.0	0.8	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Sodium	**6280**		5000	180	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Thallium	ND		25.0	5.9	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Vanadium	ND		50.0	0.5	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M
Zinc	**2.8**	J	60.0	1.0	ug/L	1.00	06/26/09 01:56	LMH	9F25007	CLP-M

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484

SDG Number: 220-9422

Project: NYSDEC Standby - Columbia Mills
Project Number: 220-9422

Received: 06/24/09
Reported: 07/07/09 16:19

Analytical Report

Client ID: MW-2S (RSF0953-08 - Water) **Sampled: 06/19/09 06:55** **Recvd: 06/24/09 09:10**

CLP Metals

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Aluminum, Dissolved	ND		200	11.0	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Antimony, Dissolved	ND		20.0	3.0	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Arsenic, Dissolved	**2.6**	J	10.0	2.0	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Barium, Dissolved	**236**		2.0	0.1	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Beryllium, Dissolved	ND		2.0	0.2	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Cadmium, Dissolved	ND		1.0	0.3	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Calcium, Dissolved	**74300**	B	500	100	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Chromium, Dissolved	**0.6**	J	4.0	0.3	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Cobalt, Dissolved	ND		4.0	0.5	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Copper, Dissolved	ND		10.0	1.3	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Iron, Dissolved	ND		50.0	19.3	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Lead, Dissolved	ND		5.0	1.0	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Magnesium, Dissolved	**10200**	B	200	6.0	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Manganese, Dissolved	**0.2**	J	3.0	0.1	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Mercury, Dissolved	ND		0.2	0.1	ug/L	1.00	07/02/09 14:41	MM	9G02014	CLP-M
Nickel, Dissolved	**1.3**	J	10.0	1.0	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Potassium, Dissolved	**1210**		500	28.0	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Selenium, Dissolved	ND		15.0	6.1	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Silver, Dissolved	ND		3.0	0.8	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Sodium, Dissolved	**5230**		1000	180	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Thallium, Dissolved	ND		20.0	5.9	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Vanadium, Dissolved	ND		5.0	0.5	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Zinc, Dissolved	**2.0**	J	10.0	1.0	ug/L	1.00	06/29/09 21:17	LMH	9F24077	CLP-M
Aluminum	**246**		200	11.0	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Antimony	ND		60.0	3.0	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Arsenic	ND		10.0	2.0	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Barium	**239**		200	0.1	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Beryllium	ND		5.0	0.2	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Cadmium	ND		5.0	0.3	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Calcium	**71800**		5000	100	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Chromium	**0.5**	J	10.0	0.3	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Cobalt	ND		50.0	0.5	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Copper	ND		25.0	1.3	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Iron	**136**		100	19.3	ug/L	1.00	06/27/09 03:17	LMH	9F25007	CLP-M
Lead	ND		10.0	1.0	ug/L	1.00	06/29/09 22:46	LMH	9F25007	CLP-M
Magnesium	**9760**	B	5000	6.0	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Manganese	**4.3**	J	15.0	0.1	ug/L	1.00	06/27/09 03:17	LMH	9F25007	CLP-M
Mercury	ND		0.2	0.1	ug/L	1.00	07/02/09 14:11	MM	9G02013	CLP-M
Nickel	**1.0**	J	40.0	1.0	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Potassium	**1190**	J	5000	28.0	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Selenium	ND		35.0	6.1	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Silver	ND		10.0	0.8	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Sodium	**5070**		5000	180	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Thallium	ND		25.0	5.9	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Vanadium	**0.6**	J	50.0	0.5	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M
Zinc	**1.9**	J	60.0	1.0	ug/L	1.00	06/26/09 02:01	LMH	9F25007	CLP-M

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484

SDG Number: 220-9422

Project: NYSDEC Standby - Columbia Mills
Project Number: 220-9422

Received: 06/24/09
Reported: 07/07/09 16:19

Analytical Report

Client ID: MW-X (RSF0953-03 - Water) **Sampled: 06/18/09 11:30** **Recvd: 06/24/09 09:10**

CLP Metals

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Aluminum, Dissolved	**18.8**	J, B	200	11.0	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Antimony, Dissolved	ND		20.0	3.0	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Arsenic, Dissolved	ND		10.0	2.0	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Barium, Dissolved	**506**		2.0	0.1	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Beryllium, Dissolved	ND		2.0	0.2	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Cadmium, Dissolved	**0.4**	J	1.0	0.3	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Calcium, Dissolved	**53600**	B	500	100	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Chromium, Dissolved	ND		4.0	0.3	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Cobalt, Dissolved	**0.7**	J, B	4.0	0.5	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Copper, Dissolved	ND		10.0	1.3	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Iron, Dissolved	**546**	B	50.0	19.3	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Lead, Dissolved	ND		5.0	1.0	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Magnesium, Dissolved	**12100**	B	200	6.0	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Manganese, Dissolved	**109**		3.0	0.1	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Mercury, Dissolved	ND		0.2	0.1	ug/L	1.00	07/02/09 14:33	MM	9G02014	CLP-M
Nickel, Dissolved	ND		10.0	1.0	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Potassium, Dissolved	**1330**		500	28.0	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Selenium, Dissolved	ND		15.0	6.1	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Silver, Dissolved	ND		3.0	0.8	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Sodium, Dissolved	**14300**		1000	180	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Thallium, Dissolved	ND		20.0	5.9	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Vanadium, Dissolved	**0.7**	J	5.0	0.5	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M
Zinc, Dissolved	**1.3**	J	10.0	1.0	ug/L	1.00	06/29/09 20:20	LMH	9F24077	CLP-M

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484

SDG Number: 220-9422

Project: NYSDEC Standby - Columbia Mills
Project Number: 220-9422

Received: 06/24/09
Reported: 07/07/09 16:19

Analytical Report

Client ID: POND (RSF0953-09 - Water) **Sampled: 06/18/09 14:50 Recvd: 06/24/09 09:10**

CLP Metals

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Aluminum, Dissolved	**19.9**	J, B	200	11.0	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Antimony, Dissolved	ND		20.0	3.0	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Arsenic, Dissolved	ND		10.0	2.0	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Barium, Dissolved	**60.3**		2.0	0.1	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Beryllium, Dissolved	ND		2.0	0.2	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Cadmium, Dissolved	ND		1.0	0.3	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Calcium, Dissolved	**35800**	B	500	100	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Chromium, Dissolved	ND		4.0	0.3	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Cobalt, Dissolved	**0.8**	J, B	4.0	0.5	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Copper, Dissolved	ND		10.0	1.3	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Iron, Dissolved	**173**	B	50.0	19.3	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Lead, Dissolved	ND		5.0	1.0	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Magnesium, Dissolved	**8090**	B	200	6.0	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Manganese, Dissolved	**73.9**		3.0	0.1	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Mercury, Dissolved	ND		0.2	0.1	ug/L	1.00	07/02/09 14:43	MM	9G02014	CLP-M
Nickel, Dissolved	ND		10.0	1.0	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Potassium, Dissolved	**1080**		500	28.0	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Selenium, Dissolved	ND		15.0	6.1	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Silver, Dissolved	ND		3.0	0.8	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Sodium, Dissolved	**15000**		1000	180	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Thallium, Dissolved	ND		20.0	5.9	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Vanadium, Dissolved	**0.5**	J	5.0	0.5	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M
Zinc, Dissolved	ND		10.0	1.0	ug/L	1.00	06/29/09 21:22	LMH	9F24077	CLP-M

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484

SDG Number: 220-9422

Project: NYSDEC Standby - Columbia Mills
Project Number: 220-9422

Received: 06/24/09
Reported: 07/07/09 16:19

Analytical Report

Client ID: STREAM (RSF0953-06 - Water) **Sampled: 06/18/09 12:45** **Recvd: 06/24/09 09:10**

CLP Metals

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Aluminum, Dissolved	**139**	J, B	200	11.0	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Antimony, Dissolved	ND		20.0	3.0	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Arsenic, Dissolved	ND		10.0	2.0	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Barium, Dissolved	**64.3**		2.0	0.1	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Beryllium, Dissolved	ND		2.0	0.2	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Cadmium, Dissolved	ND		1.0	0.3	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Calcium, Dissolved	**36700**	B	500	100	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Chromium, Dissolved	**0.4**	J	4.0	0.3	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Cobalt, Dissolved	**0.8**	J, B	4.0	0.5	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Copper, Dissolved	ND		10.0	1.3	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Iron, Dissolved	**448**	B	50.0	19.3	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Lead, Dissolved	ND		5.0	1.0	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Magnesium, Dissolved	**8080**	B	200	6.0	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Manganese, Dissolved	**610**		3.0	0.1	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Mercury, Dissolved	ND		0.2	0.1	ug/L	1.00	07/02/09 14:38	MM	9G02014	CLP-M
Nickel, Dissolved	**1.5**	J	10.0	1.0	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Potassium, Dissolved	**1200**		500	28.0	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Selenium, Dissolved	ND		15.0	6.1	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Silver, Dissolved	ND		3.0	0.8	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Sodium, Dissolved	**17300**		1000	180	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Thallium, Dissolved	ND		20.0	5.9	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Vanadium, Dissolved	**0.9**	J	5.0	0.5	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M
Zinc, Dissolved	**7.5**	J	10.0	1.0	ug/L	1.00	06/29/09 21:08	LMH	9F24077	CLP-M

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484

SDG Number: 220-9422

Project: NYSDEC Standby - Columbia Mills
Project Number: 220-9422

Received: 06/24/09
Reported: 07/07/09 16:19

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracte	Units	Extract Volume	Units	Date Prepared	Lab Tech	Extraction Method
CLP Metals									
CLP-M	9F24077	RSF0953-01	50.00	mL	50.00	mL	06/25/09 08:30	MLD	CLP Metals Prep (Water)
CLP-M	9F25007	RSF0953-01	50.00	mL	50.00	mL	06/25/09 08:30	MLD	CLP Metals Prep (Water)
CLP-M	9F24077	RSF0953-02	50.00	mL	50.00	mL	06/25/09 08:30	MLD	CLP Metals Prep (Water)
CLP-M	9F24077	RSF0953-03	50.00	mL	50.00	mL	06/25/09 08:30	MLD	CLP Metals Prep (Water)
CLP-M	9F24077	RSF0953-04	50.00	mL	50.00	mL	06/25/09 08:30	MLD	CLP Metals Prep (Water)
CLP-M	9F25007	RSF0953-04	50.00	mL	50.00	mL	06/25/09 08:30	MLD	CLP Metals Prep (Water)
CLP-M	9F24077	RSF0953-05	50.00	mL	50.00	mL	06/25/09 08:30	MLD	CLP Metals Prep (Water)
CLP-M	9F24077	RSF0953-06	50.00	mL	50.00	mL	06/25/09 08:30	MLD	CLP Metals Prep (Water)
CLP-M	9F24077	RSF0953-07	50.00	mL	50.00	mL	06/25/09 08:30	MLD	CLP Metals Prep (Water)
CLP-M	9F25007	RSF0953-07	50.00	mL	50.00	mL	06/25/09 08:30	MLD	CLP Metals Prep (Water)
CLP-M	9F24077	RSF0953-08	50.00	mL	50.00	mL	06/25/09 08:30	MLD	CLP Metals Prep (Water)
CLP-M	9F25007	RSF0953-08	50.00	mL	50.00	mL	06/25/09 08:30	MLD	CLP Metals Prep (Water)
CLP-M	9F24077	RSF0953-09	50.00	mL	50.00	mL	06/25/09 08:30	MLD	CLP Metals Prep (Water)
CLP-M	9G02013	RSF0953-01	30.00	mL	50.00	mL	07/02/09 10:00	MM	CLP Metals Prep (Water)
CLP-M	9G02014	RSF0953-01	30.00	mL	50.00	mL	07/02/09 10:00	MM	CLP Metals Prep (Water)
CLP-M	9G02014	RSF0953-02	30.00	mL	50.00	mL	07/02/09 10:00	MM	CLP Metals Prep (Water)
CLP-M	9G02014	RSF0953-03	30.00	mL	50.00	mL	07/02/09 10:00	MM	CLP Metals Prep (Water)
CLP-M	9G02013	RSF0953-04	30.00	mL	50.00	mL	07/02/09 10:00	MM	CLP Metals Prep (Water)
CLP-M	9G02014	RSF0953-04	30.00	mL	50.00	mL	07/02/09 10:00	MM	CLP Metals Prep (Water)
CLP-M	9G02014	RSF0953-05	30.00	mL	50.00	mL	07/02/09 10:00	MM	CLP Metals Prep (Water)
CLP-M	9G02014	RSF0953-06	30.00	mL	50.00	mL	07/02/09 10:00	MM	CLP Metals Prep (Water)
CLP-M	9G02013	RSF0953-07	30.00	mL	50.00	mL	07/02/09 10:00	MM	CLP Metals Prep (Water)
CLP-M	9G02014	RSF0953-07	30.00	mL	50.00	mL	07/02/09 10:00	MM	CLP Metals Prep (Water)
CLP-M	9G02013	RSF0953-08	30.00	mL	50.00	mL	07/02/09 10:00	MM	CLP Metals Prep (Water)
CLP-M	9G02014	RSF0953-08	30.00	mL	50.00	mL	07/02/09 10:00	MM	CLP Metals Prep (Water)
CLP-M	9G02014	RSF0953-09	30.00	mL	50.00	mL	07/02/09 10:00	MM	CLP Metals Prep (Water)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484

SDG Number: 220-9422

Project: NYSDEC Standby - Columbia Mills
Project Number: 220-9422

Received: 06/24/09
Reported: 07/07/09 16:29

Case Narrative

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. field-pH), they were not analyzed immediately, but as soon as possible after laboratory receipt.

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 deliverables has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Sally Hoffman
Project Manager

Tuesday, July 7, 2009

TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our Laboratory.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 220-9422-1

SDG Number: 220-9422

Job Description: NYSDEC Standby - Columbia Mills

For:
Malcolm Pirnie, Inc.
855 Route 146
Suite 210
Clifton Park, NY 12065

Attention: Mr. Jeremy Wyckoff

Approved for release.
Cheryl Cascella
7/20/2009 4:05 PM

Designee for
Johanna Dubauskas
Project Manager I
johanna.dubauskas@testamericainc.com
07/20/2009

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

TestAmerica Laboratories, Inc.
TestAmerica Connecticut 128 Long Hill Cross Road, Shelton, CT 06484
Tel (203) 929-8140 Fax (203) 929-8142 www.testamericainc.com

ACCREDITED IN ACCORDANCE WITH nelac

Job Narrative
220-J9422-1

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC Semi VOA
No analytical or quality issues were noted.

Organic Prep
Method(s) 3510C: Due to the matrix, the following sample(s) could not be concentrated to the final method required volume. The samples were brought to a final volume of 5mL for PCB extraction due to insufficientinitial volume: MW-3D (220-9422-9), MW-3S (220-9422-10). The reporting limits (RLs) are elevated proportionately.

No other analytical or quality issues were noted.

Case Narrative for Job: 220-9422

Client: MPI
Date: July 20, 2009

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

Lawrence Decker
Laboratory Director

July 20, 2009
Date

FORMULAS FOR NYSDEC SAMPLE CALCULATIONS

Volatiles

(Ax)(IS)(DF)
(AIS)(RRF)(V)(% solids) = C

(AX)(IS)(VT)(1000)(DF)
(AIS)(RRF)(VA)(V)(% solids) = C (for medium level soils)

SemiVolatiles

(AX)(IS)(VE)(DF)(GPC factor is 2 if needed)
(AIS)(RRF)(volume injected)(V)(% solids) = C

Pesticides

(AX)(VE)(DF)
(RRF)(V)(% solids)(volume injected) = C

PCBs for compound/retention time

(AX)(VE)(DF)
(RRF of compound at the stated retention time)(V)(% solids)(volume injected) = C

DRO/CTETPH

(AX)(VE)(DF)
(RRF)(V)(% solids)(volume injected) = C

AX = area of the target Ion
AIS = Area of Internal standard
C = concentration as ug/L or ug/Kg
DF = dilution
IS = Internal standard concentration (ng)
RRF = average RF (from initial cal except CLP methods from continuing cal)
V = sample volume for liquids in mls or sample weight for solids in grams
VA = volume of aliquot for medium level soils
VE = volume of concentrated extract
VT = volume of methanol for volatile medium level soils

SAMPLE SUMMARY

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
Sdg Number: 220-9422

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-9422-1	4-S	Water	06/18/2009 0815	06/20/2009 1046
220-9422-2	MW-1S	Water	06/18/2009 1125	06/20/2009 1046
220-9422-3	MW-X	Water	06/18/2009 1130	06/20/2009 1046
220-9422-4	4D	Water	06/18/2009 1200	06/20/2009 1046
220-9422-5	MW-1D	Water	06/18/2009 1230	06/20/2009 1046
220-9422-6	STREAM	Water	06/18/2009 1245	06/20/2009 1046
220-9422-7	MW-2D	Water	06/18/2009 1420	06/20/2009 1046
220-9422-8	MW-2S	Water	06/19/2009 0655	06/20/2009 1046
220-9422-9	MW-3D	Water	06/19/2009 0730	06/20/2009 1046
220-9422-10	MW-3S	Water	06/19/2009 0735	06/20/2009 1046
220-9422-11	STRUCTURE-PPRS-SOUTH	Water	06/19/2009 0905	06/20/2009 1046
220-9422-12	STRUCTURE-PPRS-NORTH	Water	06/19/2009 0925	06/20/2009 1046
220-9422-13	STRUCTURE-LEACHATE	Water	06/19/2009 0845	06/20/2009 1046
220-9422-14	POND	Water	06/19/2009 1450	06/20/2009 1046

EXECUTIVE SUMMARY - Detections

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
Sdg Number: 220-9422

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method

No Detections

METHOD SUMMARY

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
Sdg Number: 220-9422

Description	Lab Location	Method	Preparation Method
Matrix Water			
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL CT	SW846 8082	
Liquid-Liquid Extraction (Separatory Funnel)	TAL CT		SW846 3510C
ILM05.3 Metals	TAL BUF	ILM05.3 ILM05.3	

Lab References:

TAL BUF = TestAmerica Buffalo

TAL CT = TestAmerica Connecticut

Method References:

ILM05.3 = U.S. Environmental Protection Agency

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

METHOD / ANALYST SUMMARY

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
Sdg Number: 220-9422

Method	Analyst	Analyst ID
SW846 8082	Smith, Karli	KS

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
Sdg Number: 220-9422

Client Sample ID: 4-S

Lab Sample ID: 220-9422-1
Client Matrix: Water

Date Sampled: 06/18/2009 0815
Date Received: 06/20/2009 1046

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-28679	Instrument ID: GC9
Preparation:	3510C	Prep Batch: 220-28361	Initial Weight/Volume: 1000 mL
Dilution:	1.0		Final Weight/Volume: 10 mL
Date Analyzed:	06/30/2009 2148		Injection Volume: 1.0 uL
Date Prepared:	06/22/2009 2157		Result Type: PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.50	U	0.050	0.50
PCB-1221	0.50	U	0.050	0.50
PCB-1232	0.50	U	0.050	0.50
PCB-1242	0.50	U	0.050	0.50
PCB-1248	0.50	U	0.050	0.50
PCB-1254	0.50	U	0.082	0.50
PCB-1260	0.50	U	0.082	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	83		22 - 145
DCB Decachlorobiphenyl	56		29 - 135

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
Sdg Number: 220-9422

Client Sample ID: MW-1S

Lab Sample ID: 220-9422-2
Client Matrix: Water

Date Sampled: 06/18/2009 1125
Date Received: 06/20/2009 1046

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-28679		Instrument ID:	GC9
Preparation:	3510C	Prep Batch: 220-28361		Initial Weight/Volume:	960 mL
Dilution:	1.0			Final Weight/Volume:	10 mL
Date Analyzed:	06/30/2009 2207			Injection Volume:	1.0 uL
Date Prepared:	06/22/2009 2157			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.52	U	0.052	0.52
PCB-1221	0.52	U	0.052	0.52
PCB-1232	0.52	U	0.052	0.52
PCB-1242	0.52	U	0.052	0.52
PCB-1248	0.52	U	0.052	0.52
PCB-1254	0.52	U	0.085	0.52
PCB-1260	0.52	U	0.085	0.52

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	73		22 - 145
DCB Decachlorobiphenyl	45		29 - 135

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
Sdg Number: 220-9422

Client Sample ID: **MW-X**

Lab Sample ID: 220-9422-3
Client Matrix: Water

Date Sampled: 06/18/2009 1130
Date Received: 06/20/2009 1046

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-28679	Instrument ID: GC9
Preparation:	3510C	Prep Batch: 220-28361	Initial Weight/Volume: 1000 mL
Dilution:	1.0		Final Weight/Volume: 10 mL
Date Analyzed:	06/30/2009 2226		Injection Volume: 1.0 uL
Date Prepared:	06/22/2009 2157		Result Type: PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.50	U	0.050	0.50
PCB-1221	0.50	U	0.050	0.50
PCB-1232	0.50	U	0.050	0.50
PCB-1242	0.50	U	0.050	0.50
PCB-1248	0.50	U	0.050	0.50
PCB-1254	0.50	U	0.082	0.50
PCB-1260	0.50	U	0.082	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	75		22 - 145
DCB Decachlorobiphenyl	53		29 - 135

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
Sdg Number: 220-9422

Client Sample ID: 4D

Lab Sample ID: 220-9422-4
Client Matrix: Water

Date Sampled: 06/18/2009 1200
Date Received: 06/20/2009 1046

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-28679		Instrument ID:	GC9
Preparation:	3510C	Prep Batch: 220-28361		Initial Weight/Volume:	1000 mL
Dilution:	1.0			Final Weight/Volume:	10 mL
Date Analyzed:	06/30/2009 2245			Injection Volume:	1.0 uL
Date Prepared:	06/22/2009 2157			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.50	U	0.050	0.50
PCB-1221	0.50	U	0.050	0.50
PCB-1232	0.50	U	0.050	0.50
PCB-1242	0.50	U	0.050	0.50
PCB-1248	0.50	U	0.050	0.50
PCB-1254	0.50	U	0.082	0.50
PCB-1260	0.50	U	0.082	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	78		22 - 145
DCB Decachlorobiphenyl	46		29 - 135

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
Sdg Number: 220-9422

Client Sample ID: MW-1D

Lab Sample ID: 220-9422-5
Client Matrix: Water

Date Sampled: 06/18/2009 1230
Date Received: 06/20/2009 1046

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-28679	Instrument ID: GC9
Preparation:	3510C	Prep Batch: 220-28361	Initial Weight/Volume: 1000 mL
Dilution:	1.0		Final Weight/Volume: 10 mL
Date Analyzed:	06/30/2009 2304		Injection Volume: 1.0 uL
Date Prepared:	06/22/2009 2157		Result Type: PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.50	U	0.050	0.50
PCB-1221	0.50	U	0.050	0.50
PCB-1232	0.50	U	0.050	0.50
PCB-1242	0.50	U	0.050	0.50
PCB-1248	0.50	U	0.050	0.50
PCB-1254	0.50	U	0.082	0.50
PCB-1260	0.50	U	0.082	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	101		22 - 145
DCB Decachlorobiphenyl	82		29 - 135

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
Sdg Number: 220-9422

Client Sample ID: MW-2D

Lab Sample ID: 220-9422-7
Client Matrix: Water

Date Sampled: 06/18/2009 1420
Date Received: 06/20/2009 1046

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-28679		Instrument ID:	GC9
Preparation:	3510C	Prep Batch: 220-28361		Initial Weight/Volume:	1000 mL
Dilution:	1.0			Final Weight/Volume:	10 mL
Date Analyzed:	06/30/2009 2323			Injection Volume:	1.0 uL
Date Prepared:	06/22/2009 2157			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.50	U	0.050	0.50
PCB-1221	0.50	U	0.050	0.50
PCB-1232	0.50	U	0.050	0.50
PCB-1242	0.50	U	0.050	0.50
PCB-1248	0.50	U	0.050	0.50
PCB-1254	0.50	U	0.082	0.50
PCB-1260	0.50	U	0.082	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	100		22 - 145
DCB Decachlorobiphenyl	67		29 - 135

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
Sdg Number: 220-9422

Client Sample ID: MW-2S

Lab Sample ID: 220-9422-8
Client Matrix: Water

Date Sampled: 06/19/2009 0655
Date Received: 06/20/2009 1046

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-28679		Instrument ID:	GC9
Preparation:	3510C	Prep Batch: 220-28361		Initial Weight/Volume:	1000 mL
Dilution:	1.0			Final Weight/Volume:	10 mL
Date Analyzed:	06/30/2009 2342			Injection Volume:	1.0 uL
Date Prepared:	06/22/2009 2157			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.50	U	0.050	0.50
PCB-1221	0.50	U	0.050	0.50
PCB-1232	0.50	U	0.050	0.50
PCB-1242	0.50	U	0.050	0.50
PCB-1248	0.50	U	0.050	0.50
PCB-1254	0.50	U	0.082	0.50
PCB-1260	0.50	U	0.082	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	98		22 - 145
DCB Decachlorobiphenyl	74		29 - 135

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
Sdg Number: 220-9422

Client Sample ID: MW-3D

Lab Sample ID: 220-9422-9
Client Matrix: Water

Date Sampled: 06/19/2009 0730
Date Received: 06/20/2009 1046

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-28679		Instrument ID:	GC9
Preparation:	3510C	Prep Batch: 220-28361		Initial Weight/Volume:	460 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	07/01/2009 0001			Injection Volume:	1.0 uL
Date Prepared:	06/22/2009 2157			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.54	U	0.054	0.54
PCB-1221	0.54	U	0.054	0.54
PCB-1232	0.54	U	0.054	0.54
PCB-1242	0.54	U	0.054	0.54
PCB-1248	0.54	U	0.054	0.54
PCB-1254	0.54	U	0.089	0.54
PCB-1260	0.54	U	0.089	0.54

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	100		22 - 145
DCB Decachlorobiphenyl	79		29 - 135

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
Sdg Number: 220-9422

Client Sample ID: MW-3S

Lab Sample ID: 220-9422-10
Client Matrix: Water

Date Sampled: 06/19/2009 0735
Date Received: 06/20/2009 1046

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-28679		Instrument ID:	GC9
Preparation:	3510C	Prep Batch: 220-28361		Initial Weight/Volume:	500 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	07/01/2009 0020			Injection Volume:	1.0 uL
Date Prepared:	06/22/2009 2157			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.50	U	0.050	0.50
PCB-1221	0.50	U	0.050	0.50
PCB-1232	0.50	U	0.050	0.50
PCB-1242	0.50	U	0.050	0.50
PCB-1248	0.50	U	0.050	0.50
PCB-1254	0.50	U	0.082	0.50
PCB-1260	0.50	U	0.082	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	98		22 - 145
DCB Decachlorobiphenyl	75		29 - 135

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
Sdg Number: 220-9422

Client Sample ID: **STRUCTURE-PPRS-SOUTH**

Lab Sample ID: 220-9422-11
Client Matrix: Water

Date Sampled: 06/19/2009 0905
Date Received: 06/20/2009 1046

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-28679	Instrument ID: GC9
Preparation:	3510C	Prep Batch: 220-28361	Initial Weight/Volume: 1000 mL
Dilution:	1.0		Final Weight/Volume: 10 mL
Date Analyzed:	07/01/2009 0039		Injection Volume: 1.0 uL
Date Prepared:	06/22/2009 2157		Result Type: PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.50	U	0.050	0.50
PCB-1221	0.50	U	0.050	0.50
PCB-1232	0.50	U	0.050	0.50
PCB-1242	0.50	U	0.050	0.50
PCB-1248	0.50	U	0.050	0.50
PCB-1254	0.50	U	0.082	0.50
PCB-1260	0.50	U	0.082	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	101		22 - 145
DCB Decachlorobiphenyl	86		29 - 135

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
Sdg Number: 220-9422

Client Sample ID: **STRUCTURE-PPRS-NORTH**

Lab Sample ID: 220-9422-12
Client Matrix: Water

Date Sampled: 06/19/2009 0925
Date Received: 06/20/2009 1046

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-28679	Instrument ID: GC9
Preparation:	3510C	Prep Batch: 220-28361	Initial Weight/Volume: 1000 mL
Dilution:	1.0		Final Weight/Volume: 10 mL
Date Analyzed:	07/01/2009 0058		Injection Volume: 1.0 uL
Date Prepared:	06/22/2009 2157		Result Type: PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.50	U	0.050	0.50
PCB-1221	0.50	U	0.050	0.50
PCB-1232	0.50	U	0.050	0.50
PCB-1242	0.50	U	0.050	0.50
PCB-1248	0.50	U	0.050	0.50
PCB-1254	0.50	U	0.082	0.50
PCB-1260	0.50	U	0.082	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	98		22 - 145
DCB Decachlorobiphenyl	78		29 - 135

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
Sdg Number: 220-9422

Client Sample ID: **STRUCTURE-LEACHATE**

Lab Sample ID: 220-9422-13
Client Matrix: Water

Date Sampled: 06/19/2009 0845
Date Received: 06/20/2009 1046

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-28679		Instrument ID:	GC9
Preparation:	3510C	Prep Batch: 220-28361		Initial Weight/Volume:	950 mL
Dilution:	1.0			Final Weight/Volume:	10 mL
Date Analyzed:	07/01/2009 0117			Injection Volume:	1.0 uL
Date Prepared:	06/22/2009 2157			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.53	U	0.053	0.53
PCB-1221	0.53	U	0.053	0.53
PCB-1232	0.53	U	0.053	0.53
PCB-1242	0.53	U	0.053	0.53
PCB-1248	0.53	U	0.053	0.53
PCB-1254	0.53	U	0.086	0.53
PCB-1260	0.53	U	0.086	0.53

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	94		22 - 145
DCB Decachlorobiphenyl	83		29 - 135

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
Sdg Number: 220-9422

Client Sample ID: POND

Lab Sample ID: 220-9422-14
Client Matrix: Water

Date Sampled: 06/19/2009 1450
Date Received: 06/20/2009 1046

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-28679		Instrument ID:	GC9
Preparation:	3510C	Prep Batch: 220-28361		Initial Weight/Volume:	960 mL
Dilution:	1.0			Final Weight/Volume:	10 mL
Date Analyzed:	07/01/2009 0136			Injection Volume:	1.0 uL
Date Prepared:	06/22/2009 2157			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.52	U	0.052	0.52
PCB-1221	0.52	U	0.052	0.52
PCB-1232	0.52	U	0.052	0.52
PCB-1242	0.52	U	0.052	0.52
PCB-1248	0.52	U	0.052	0.52
PCB-1254	0.52	U	0.085	0.52
PCB-1260	0.52	U	0.085	0.52

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	104		22 - 145
DCB Decachlorobiphenyl	79		29 - 135

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
Sdg Number: 220-9422

Surrogate Recovery Report

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Matrix: Water

Lab Sample ID	Client Sample ID	TCX2 %Rec	DCB2 %Rec
220-9422-1	4-S	83	56
220-9422-2	MW-1S	73	45
220-9422-3	MW-X	75	53
220-9422-4	4D	78	46
220-9422-5	MW-1D	101	82
220-9422-7	MW-2D	100	67
220-9422-8	MW-2S	98	74
220-9422-9	MW-3D	100	79
220-9422-10	MW-3S	98	75
220-9422-11	STRUCTURE-PPRS-SOUTH	101	86
220-9422-12	STRUCTURE-PPRS-NORTH	98	78
220-9422-13	STRUCTURE-LEACHATE	94	83
220-9422-14	POND	104	79
MB 220-28361/1-A		81	54
LCS 220-28361/3-A		75	42

Surrogate	Acceptance Limits
TCX = Tetrachloro-m-xylene	22-145
DCB = DCB Decachlorobiphenyl	29-135

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
Sdg Number: 220-9422

Method Blank - Batch: 220-28361

Method: 8082
Preparation: 3510C

Lab Sample ID: MB 220-28361/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 06/30/2009 2110
Date Prepared: 06/22/2009 2157

Analysis Batch: 220-28679
Prep Batch: 220-28361
Units: ug/L

Instrument ID: HP 6890 dual ECD
Lab File ID: D90431204.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 10 mL
Injection Volume: 1.0 uL
Column ID: PRIMARY

Analyte	Result	Qual	MDL	RL
PCB-1016	0.50	U	0.050	0.50
PCB-1221	0.50	U	0.050	0.50
PCB-1232	0.50	U	0.050	0.50
PCB-1242	0.50	U	0.050	0.50
PCB-1248	0.50	U	0.050	0.50
PCB-1254	0.50	U	0.082	0.50
PCB-1260	0.50	U	0.082	0.50

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	81	22 - 145
DCB Decachlorobiphenyl	54	29 - 135

Lab Control Sample - Batch: 220-28361

Method: 8082
Preparation: 3510C

Lab Sample ID: LCS 220-28361/3-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 06/30/2009 2129
Date Prepared: 06/22/2009 2157

Analysis Batch: 220-28679
Prep Batch: 220-28361
Units: ug/L

Instrument ID: HP 6890 dual ECD
Lab File ID: D90431205.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 10 mL
Injection Volume: 1.0 uL
Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
PCB-1016	5.00	3.85	77	47 - 120	
PCB-1260	5.00	3.53	71	38 - 120	

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	75	22 - 145
DCB Decachlorobiphenyl	42	29 - 135

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

DATA REPORTING QUALIFIERS

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
Sdg Number: 220-9422

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

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
Sdg Number: 220-9422

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 220-28361					
LCS 220-28361/3-A	Lab Control Sample	T	Water	3510C	
MB 220-28361/1-A	Method Blank	T	Water	3510C	
220-9422-1	4-S	T	Water	3510C	
220-9422-2	MW-1S	T	Water	3510C	
220-9422-3	MW-X	T	Water	3510C	
220-9422-4	4D	T	Water	3510C	
220-9422-5	MW-1D	T	Water	3510C	
220-9422-7	MW-2D	T	Water	3510C	
220-9422-8	MW-2S	T	Water	3510C	
220-9422-9	MW-3D	T	Water	3510C	
220-9422-10	MW-3S	T	Water	3510C	
220-9422-11	STRUCTURE-PPRS-SOUTH	T	Water	3510C	
220-9422-12	STRUCTURE-PPRS-NORTH	T	Water	3510C	
220-9422-13	STRUCTURE-LEACHATE	T	Water	3510C	
220-9422-14	POND	T	Water	3510C	
Analysis Batch:220-28679					
LCS 220-28361/3-A	Lab Control Sample	T	Water	8082	220-28361
MB 220-28361/1-A	Method Blank	T	Water	8082	220-28361
220-9422-1	4-S	T	Water	8082	220-28361
220-9422-2	MW-1S	T	Water	8082	220-28361
220-9422-3	MW-X	T	Water	8082	220-28361
220-9422-4	4D	T	Water	8082	220-28361
220-9422-5	MW-1D	T	Water	8082	220-28361
220-9422-7	MW-2D	T	Water	8082	220-28361
220-9422-8	MW-2S	T	Water	8082	220-28361
220-9422-9	MW-3D	T	Water	8082	220-28361
220-9422-10	MW-3S	T	Water	8082	220-28361
220-9422-11	STRUCTURE-PPRS-SOUTH	T	Water	8082	220-28361
220-9422-12	STRUCTURE-PPRS-NORTH	T	Water	8082	220-28361
220-9422-13	STRUCTURE-LEACHATE	T	Water	8082	220-28361
220-9422-14	POND	T	Water	8082	220-28361

Report Basis
T = Total

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
SDG: 220-9422

Laboratory Chronicle

Lab ID: 220-9422-1 **Client ID: 4-S**

Sample Date/Time: 06/18/2009 08:15 Received Date/Time: 06/20/2009 10:46

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3510C	220-9422-B-1-A		220-28679	220-28361	06/22/2009 21:57	1	TAL CT	EL
A:8082	220-9422-B-1-A		220-28679	220-28361	06/30/2009 21:48	1	TAL CT	KS

Lab ID: 220-9422-2 **Client ID: MW-1S**

Sample Date/Time: 06/18/2009 11:25 Received Date/Time: 06/20/2009 10:46

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3510C	220-9422-A-2-A		220-28679	220-28361	06/22/2009 21:57	1	TAL CT	EL
A:8082	220-9422-A-2-A		220-28679	220-28361	06/30/2009 22:07	1	TAL CT	KS

Lab ID: 220-9422-3 **Client ID: MW-X**

Sample Date/Time: 06/18/2009 11:30 Received Date/Time: 06/20/2009 10:46

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3510C	220-9422-A-3-A		220-28679	220-28361	06/22/2009 21:57	1	TAL CT	EL
A:8082	220-9422-A-3-A		220-28679	220-28361	06/30/2009 22:26	1	TAL CT	KS

Lab ID: 220-9422-4 **Client ID: 4D**

Sample Date/Time: 06/18/2009 12:00 Received Date/Time: 06/20/2009 10:46

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3510C	220-9422-B-4-A		220-28679	220-28361	06/22/2009 21:57	1	TAL CT	EL
A:8082	220-9422-B-4-A		220-28679	220-28361	06/30/2009 22:45	1	TAL CT	KS

Lab ID: 220-9422-5 **Client ID: MW-1D**

Sample Date/Time: 06/18/2009 12:30 Received Date/Time: 06/20/2009 10:46

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3510C	220-9422-B-5-A		220-28679	220-28361	06/22/2009 21:57	1	TAL CT	EL
A:8082	220-9422-B-5-A		220-28679	220-28361	06/30/2009 23:04	1	TAL CT	KS

Lab ID: 220-9422-7 **Client ID: MW-2D**

Sample Date/Time: 06/18/2009 14:20 Received Date/Time: 06/20/2009 10:46

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3510C	220-9422-A-7-A		220-28679	220-28361	06/22/2009 21:57	1	TAL CT	EL
A:8082	220-9422-A-7-A		220-28679	220-28361	06/30/2009 23:23	1	TAL CT	KS

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
SDG: 220-9422

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Lab ID: 220-9422-8 **Client ID: MW-2S**

Sample Date/Time: 06/19/2009 06:55 Received Date/Time: 06/20/2009 10:46

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3510C	220-9422-B-8-A		220-28679	220-28361	06/22/2009 21:57	1	TAL CT	EL
A:8082	220-9422-B-8-A		220-28679	220-28361	06/30/2009 23:42	1	TAL CT	KS

Lab ID: 220-9422-9 **Client ID: MW-3D**

Sample Date/Time: 06/19/2009 07:30 Received Date/Time: 06/20/2009 10:46

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3510C	220-9422-A-9-A		220-28679	220-28361	06/22/2009 21:57	1	TAL CT	EL
A:8082	220-9422-A-9-A		220-28679	220-28361	07/01/2009 00:01	1	TAL CT	KS

Lab ID: 220-9422-10 **Client ID: MW-3S**

Sample Date/Time: 06/19/2009 07:35 Received Date/Time: 06/20/2009 10:46

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3510C	220-9422-A-10-A		220-28679	220-28361	06/22/2009 21:57	1	TAL CT	EL
A:8082	220-9422-A-10-A		220-28679	220-28361	07/01/2009 00:20	1	TAL CT	KS

Lab ID: 220-9422-11 **Client ID: STRUCTURE-PPRS-SOUTH**

Sample Date/Time: 06/19/2009 09:05 Received Date/Time: 06/20/2009 10:46

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3510C	220-9422-B-11-A		220-28679	220-28361	06/22/2009 21:57	1	TAL CT	EL
A:8082	220-9422-B-11-A		220-28679	220-28361	07/01/2009 00:39	1	TAL CT	KS

Lab ID: 220-9422-12 **Client ID: STRUCTURE-PPRS-NORTH**

Sample Date/Time: 06/19/2009 09:25 Received Date/Time: 06/20/2009 10:46

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3510C	220-9422-A-12-A		220-28679	220-28361	06/22/2009 21:57	1	TAL CT	EL
A:8082	220-9422-A-12-A		220-28679	220-28361	07/01/2009 00:58	1	TAL CT	KS

Lab ID: 220-9422-13 **Client ID: STRUCTURE-LEACHATE**

Sample Date/Time: 06/19/2009 08:45 Received Date/Time: 06/20/2009 10:46

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3510C	220-9422-A-13-A		220-28679	220-28361	06/22/2009 21:57	1	TAL CT	EL
A:8082	220-9422-A-13-A		220-28679	220-28361	07/01/2009 01:17	1	TAL CT	KS

Client: Malcolm Pirnie, Inc.

Job Number: 220-9422-1
SDG: 220-9422

Laboratory Chronicle

Lab ID: 220-9422-14 **Client ID: POND**

Sample Date/Time: 06/19/2009 14:50 Received Date/Time: 06/20/2009 10:46

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3510C	220-9422-A-14-A		220-28679	220-28361	06/22/2009 21:57	1	TAL CT	EL
A:8082	220-9422-A-14-A		220-28679	220-28361	07/01/2009 01:36	1	TAL CT	KS

Lab ID: MB **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3510C	MB 220-28361/1-A		220-28679	220-28361	06/22/2009 21:57	1	TAL CT	EL
A:8082	MB 220-28361/1-A		220-28679	220-28361	06/30/2009 21:10	1	TAL CT	KS

Lab ID: LCS **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3510C	LCS 220-28361/3-A		220-28679	220-28361	06/22/2009 21:57	1	TAL CT	EL
A:8082	LCS 220-28361/3-A		220-28679	220-28361	06/30/2009 21:29	1	TAL CT	KS

Lab References:
TAL CT = TestAmerica Connecticut

New York State Department of Environmental Conservation
Columbia Mills Site 2009 Annual Groundwater Monitoring Report

Appendix D

Monitoring Well Inspection Forms

MALCOLM PIRNIE

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Columbia Mills PROJECT NUMBER: 0266363

DATE OF INSPECTION: 6/17/09 INSPECTOR: JRW, JR (MPI)

WELL DESIGNATION: MW 15

WELL LOCATION: _____

Outward Appearance

Flushmount Diameter: — inches N/A [ ]

Approximate Stickup Height: 3.5 feet N/A [ ]

Integrity of Protective Casing: Describe: OK

Protective Casing Material: Steel [X] Stainless Steel [ ] Other _____

Protective Casing Width or Dia.: 6 inches

Weep Hole in Protective Casing: Yes [ ] No [X]

Surface Seal/Apron Material: Cement [ ] Bentonite [ ] Not apparent [X] Other _____

Integrity of Surface Seal/Apron: Describe: —

Surface Drainage: Away from Wellhead [X] Toward Wellhead [ ]

Bollards Present? Yes [ ] No [X] Describe: _____

Well ID. Visible? Yes [X] No [ ] Describe: _____

Lock Present and Functional? Yes [X] No [ ] Describe: _____

Photograph Taken? Photo # Yes [ ] No [X] Describe: _____

Inner Appearance

Integrity of Well Casing: Describe: OK

Integrity of Cap Seal: Describe: OK

Surface Water in Casing? Yes [X] No [ ] Describe: @ ground surface

Well Casing Diameter: 2 inches

Well Casing Material: PVC [X] Steel [ ] Stainless Steel [ ]

Inner Cap: Threaded [ ] Slip [X] Expansion Plug [ ] None [ ]

Reference/Measuring Point: Groove [ ] Indelible Mark [X] None [ ]

Evidence of Double Casing? Yes [ ] No [X] Describe: _____

Downhole

Odor: Yes [ ] No [X] Describe: _____

PID Reading: 0.0 ppm

Depth to Water (to top of casing): 4.81 feet (nearest 0.01) Depth to LNAPL _____ feet (nearest 0.01) N/A [ ]

Total Well Depth (to top of casing): 16.70 feet (nearest 0.1)

Sediment (Hard/Soft Bottom): Describe: _____

Additional Comments:

_____

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MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Columbia Mills PROJECT NUMBER: 0266363

DATE OF INSPECTION: 6/11/09 INSPECTOR: JRW, JR (MPI)

WELL DESIGNATION: [redacted] ID

WELL LOCATION: _____

Outward Appearance

Flushmount Diameter	~ inches	N/A [ ]
Approximate Stickup Height	3.5 feet	N/A [ ]
Integrity of Protective Casing	Describe: ok	
Protective Casing Material	Steel [X]	Stainless Steel [ ] Other _____
Protective Casing Width or Dia.	6 inches	
Weep Hole in Protective Casing	Yes [ ]	No [X]
Surface Seal/Apron Material	Cement [ ]	Bentonite [ ] Not apparent [X] Other _____
Integrity of Surface Seal/Apron	Describe: -	
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]
Bollards Present?	Yes [ ]	No [X] Describe: _____
Well ID. Visible?	Yes [X]	No [ ] Describe: _____
Lock Present and Functional?	Yes [X]	No [ ] Describe: _____
Photograph Taken? Photo #	Yes [ ]	No [X] Describe: _____

Inner Appearance

Integrity of Well Casing	Describe: ok	
Integrity of Cap Seal	Describe: ok	
Surface Water in Casing?	Yes [ ]	No [X] Describe: _____
Well Casing Diameter	2 inches	
Well Casing Material	PVC [X]	Steel [ ] Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [X] Expansion Plug [ ] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [X] None [ ]
Evidence of Double Casing?	Yes [ ]	No [X] Describe: _____

Downhole

Odor	Yes [ ]	No [X] Describe: _____
PID Reading	0.0 ppm	
Depth to Water (to top of casing)	1.80 feet (nearest 0.01)	Depth to LNAPL _____ feet (nearest 0.01) N/A [ ]
Total Well Depth (to top of casing)	28.00 feet (nearest 0.1)	
Sediment (Hard/Soft Bottom)	Describe: _____	

Additional Comments:

_____

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MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Columbia Mills PROJECT NUMBER: 0266363

DATE OF INSPECTION: 6/17/2009 INSPECTOR: JRW, JR (MPI)

WELL DESIGNATION: 2 S

WELL LOCATION:

Outward Appearance

Flushmount Diameter: ~~6~~ NA inches N/A [ ]

Approximate Stickup Height: 3 feet N/A [ ]

Integrity of Protective Casing: Describe: good

Protective Casing Material: Steel [✓] Stainless Steel [ ] Other

Protective Casing Width or Dia.: 6 inches

Weep Hole in Protective Casing: Yes [ ] No [✓]

Surface Seal/Apron Material: Cement [ ] Bentonite [ ] Not apparent [✓] Other

Integrity of Surface Seal/Apron: Describe:

Surface Drainage: Away from Wellhead [✓] Toward Wellhead [ ]

Bollards Present? Yes [ ] No [✓] Describe:

Well ID. Visible? Yes [✓] No [ ] Describe:

Lock Present and Functional? Yes [✓] No [ ] Describe:

Photograph Taken? Photo # Yes [ ] No [✓] Describe:

Inner Appearance

Integrity of Well Casing: Describe: good

Integrity of Cap Seal: Describe: good

Surface Water in Casing? Yes [✓] No [ ] Describe:

Well Casing Diameter: 2 inches

Well Casing Material: PVC [✓] Steel [ ] Stainless Steel [ ]

Inner Cap: Threaded [ ] Slip [✓] Expansion Plug [ ] None [ ]

Reference/Measuring Point: Groove [ ] Indelible Mark [✓] None [ ]

Evidence of Double Casing? Yes [ ] No [✓] Describe:

Downhole

Odor: Yes [ ] No [X] Describe:

PID Reading: 0 ppm

Depth to Water (to top of casing): 11.66 feet (nearest 0.01) Depth to LNAPL ____ feet (nearest 0.01) N/A [ ]

Total Well Depth (to top of casing): 17.43 feet (nearest 0.1)

Sediment (Hard/Soft Bottom): Describe:

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Columbia Mills PROJECT NUMBER: 0266363

DATE OF INSPECTION: 6/17/2009 INSPECTOR: JRW, JR (MPI)

WELL DESIGNATION: 2D

WELL LOCATION:

Outward Appearance

Flushmount Diameter	~~4~~ N/A inches	N/A [ ]	
Approximate Stickup Height	3 feet	N/A [ ]	
Integrity of Protective Casing	Describe: good		
Protective Casing Material	Steel [✓]	Stainless Steel [ ]	Other
Protective Casing Width or Dia.	6 inches		
Weep Hole in Protective Casing	Yes [ ]	No [✓]	
Surface Seal/Apron Material	Cement [ ]	Bentonite [ ]	Not apparent [✓] Other
Integrity of Surface Seal/Apron	Describe:		
Surface Drainage	Away from Wellhead [✓]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [✓] Describe:	
Well ID. Visible?	Yes [✓]	No [ ] Describe:	
Lock Present and Functional?	Yes [✓]	No [ ] Describe:	
Photograph Taken? Photo #	Yes [ ]	No [✓] Describe:	

Inner Appearance

Integrity of Well Casing	Describe: good		
Integrity of Cap Seal	Describe: good		
Surface Water in Casing?	Yes [✓]	No [ ] Describe:	
Well Casing Diameter	2 inches		
Well Casing Material	PVC [✓]	Steel [ ]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [✓]	Expansion Plug [ ] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [✓]	None [ ]
Evidence of Double Casing?	Yes [ ]	No [✓] Describe:	

Downhole

Odor	Yes [ ]	No [✓] Describe:	
PID Reading	0 ppm		
Depth to Water (to top of casing)	11.77 feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [ ]
Total Well Depth (to top of casing)	27.27 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe:		

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Columbia Mills PROJECT NUMBER: 0266363

DATE OF INSPECTION: 6/17/09 INSPECTOR: JRW, JR (MPI)

WELL DESIGNATION: mw-3S

WELL LOCATION: _____

Outward Appearance

Flushmount Diameter	~ inches	N/A [ ]	
Approximate Stickup Height	2.5 feet	N/A [ ]	
Integrity of Protective Casing	Describe: ok		
Protective Casing Material	Steel [X]	Stainless Steel [ ]	Other _____
Protective Casing Width or Dia.	6 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [ ]	Bentonite [ ]	Not apparent [X] Other _____
Integrity of Surface Seal/Apron	Describe: _____		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X]	Describe: _____
Well ID. Visible?	Yes [X]	No [ ]	Describe: _____
Lock Present and Functional?	Yes [X]	No [ ]	Describe: _____
Photograph Taken? Photo #	Yes [ ]	No [X]	Describe: _____

Inner Appearance

Integrity of Well Casing	Describe: ok		
Integrity of Cap Seal	Describe: ok		
Surface Water in Casing?	Yes [ ]	No [X]	Describe: _____
Well Casing Diameter	2 inches		
Well Casing Material	PVC [X]	Steel [ ]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [X]	Expansion Plug [ ] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [X]	None [ ]
Evidence of Double Casing?	Yes [ ]	No [X]	Describe: _____

Downhole

Odor	Yes [ ]	No [ ]	Describe: _____
PID Reading	0.0 ppm		
Depth to Water (to top of casing)	5.76 feet (nearest 0.01)	Depth to LNAPL	_____ feet (nearest 0.01) N/A [ ]
Total Well Depth (to top of casing)	17.70 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: _____		

Additional Comments:

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MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Columbia Mills PROJECT NUMBER: 0266363

DATE OF INSPECTION: 6/17/09 INSPECTOR: JRW, JR (MPI)

WELL DESIGNATION: 3-D

WELL LOCATION:

Outward Appearance

Flushmount Diameter: — inches N/A [ ]

Approximate Stickup Height: 2.5 feet N/A [ ]

Integrity of Protective Casing: Describe: OK

Protective Casing Material: Steel [X] Stainless Steel [ ] Other

Protective Casing Width or Dia.: 6 inches

Weep Hole in Protective Casing: Yes [ ] No [X]

Surface Seal/Apron Material: Cement [ ] Bentonite [ ] Not apparent [X] Other

Integrity of Surface Seal/Apron: Describe: —

Surface Drainage: Away from Wellhead [X] Toward Wellhead [ ]

Bollards Present? Yes [ ] No [X] Describe:

Well ID. Visible? Yes [X] No [ ] Describe:

Lock Present and Functional? Yes [X] No [ ] Describe:

Photograph Taken? Photo # Yes [ ] No [X] Describe:

Inner Appearance

Integrity of Well Casing: Describe: OK

Integrity of Cap Seal: Describe: OK

Surface Water in Casing? Yes [X] No [ ] Describe:

Well Casing Diameter: 2 inches

Well Casing Material: PVC [X] Steel [ ] Stainless Steel [ ]

Inner Cap: Threaded [ ] Slip [ ] Expansion Plug [X] None [ ]

Reference/Measuring Point: Groove [ ] Indelible Mark [X] None [ ]

Evidence of Double Casing? Yes [ ] No [X] Describe:

Downhole

Odor: Yes [ ] No [X] Describe:

PID Reading: 470.0 ppm

Depth to Water (to top of casing): 22.03 feet (nearest 0.01) Depth to LNAPL: ____ feet (nearest 0.01) N/A [ ]

Total Well Depth (to top of casing): 26.60 feet (nearest 0.1)

Sediment (Hard/Soft Bottom) Describe:

Additional Comments:

press in well when remove cap/expansion plug.

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Columbia Mills PROJECT NUMBER: 0266363

DATE OF INSPECTION: 6/17/09 INSPECTOR: JRW, JR (MPI)

WELL DESIGNATION: 4S

WELL LOCATION:

Outward Appearance

Flushmount Diameter: 7 inches N/A [ ]

Approximate Stickup Height: 2.0 feet N/A [ ]

Integrity of Protective Casing: Describe: ok

Protective Casing Material: Steel [X] Stainless Steel [ ] Other

Protective Casing Width or Dia.: 6 inches

Weep Hole in Protective Casing: Yes [ ] No [X]

Surface Seal/Apron Material: Cement [ ] Bentonite [ ] Not apparent [X] Other

Integrity of Surface Seal/Apron: Describe:

Surface Drainage: Away from Wellhead [X] Toward Wellhead [ ]

Bollards Present? Yes [ ] No [X] Describe:

Well ID. Visible? Yes [X] No [ ] Describe:

Lock Present and Functional? Yes [X] No [ ] Describe:

Photograph Taken? Photo # Yes [ ] No [X] Describe:

Inner Appearance

Integrity of Well Casing: Describe: ok

Integrity of Cap Seal: Describe: ok

Surface Water in Casing? Yes [X] No [ ] Describe:

Well Casing Diameter: 2 inches

Well Casing Material: PVC [X] Steel [ ] Stainless Steel [ ]

Inner Cap: Threaded [ ] Slip [X] Expansion Plug [ ] None [ ]

Reference/Measuring Point: Groove [ ] Indelible Mark [X] None [ ]

Evidence of Double Casing? Yes [ ] No [X] Describe:

Downhole

Odor: Yes [ ] No [X] Describe:

PID Reading: 3.9 ppm

Depth to Water (to top of casing): 11.70 feet (nearest 0.01) Depth to LNAPL: ____ feet (nearest 0.01) N/A [ ]

Total Well Depth (to top of casing): 14.01 feet (nearest 0.1)

Sediment (Hard/Soft Bottom): Describe:

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Columbia Mills PROJECT NUMBER: 0266363

DATE OF INSPECTION: 6/17/09 INSPECTOR: JRW, JR (MPI)

WELL DESIGNATION: 4D

WELL LOCATION:

Outward Appearance

Flushmount Diameter	— inches	N/A [ ]	
Approximate Stickup Height	2.5 feet	N/A [ ]	
Integrity of Protective Casing	Describe: ok		
Protective Casing Material	Steel [X]	Stainless Steel [ ]	Other
Protective Casing Width or Dia.	6 inches		
Weep Hole in Protective Casing	Yes [ ]	No [X]	
Surface Seal/Apron Material	Cement [ ]	Bentonite [ ]	Not apparent [X] Other
Integrity of Surface Seal/Apron	Describe:		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X]	Describe:
Well ID. Visible?	Yes [X]	No [ ]	Describe:
Lock Present and Functional?	Yes [X]	No [ ]	Describe:
Photograph Taken? Photo #	Yes [ ]	No [X]	Describe:

Inner Appearance

Integrity of Well Casing	Describe: ok		
Integrity of Cap Seal	Describe: ok		
Surface Water in Casing?	Yes [ ]	No [X]	Describe:
Well Casing Diameter	2 inches		
Well Casing Material	PVC [X]	Steel [ ]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [X]	Expansion Plug [ ] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [X]	None [ ]
Evidence of Double Casing?	Yes [ ]	No [X]	Describe:

Downhole

Odor	Yes [ ]	No [X]	Describe:
PID Reading	2.4 ppm		
Depth to Water (to top of casing)	11.13 feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [ ]
Total Well Depth (to top of casing)	26.95 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe:		

Additional Comments: Used Bee Spray - Bees in Stickup.

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Columbia Mills PROJECT NUMBER: 0266363

DATE OF INSPECTION: 6/17/09 INSPECTOR: JRW, JR (MPI)

WELL DESIGNATION: LFP-01

WELL LOCATION:

Outward Appearance

Flushmount Diameter: — inches N/A [ ]

Approximate Stickup Height: — feet N/A [ ]

Integrity of Protective Casing: Describe: None

Protective Casing Material: Steel [ ] Stainless Steel [ ] Other

Protective Casing Width or Dia.: _____ inches

Weep Hole in Protective Casing: Yes [ ] No [ ]

Surface Seal/Apron Material: Cement [ ] Bentonite [ ] Not apparent [X] Other

Integrity of Surface Seal/Apron: Describe:

Surface Drainage: Away from Wellhead [X] Toward Wellhead [ ]

Bollards Present? Yes [ ] No [X] Describe:

Well ID. Visible? Yes [ ] No [X] Describe:

Lock Present and Functional? Yes [ ] No [X] Describe: NO LOCK

Photograph Taken? Photo # Yes [ ] No [X] Describe:

Inner Appearance

Integrity of Well Casing: Describe: OK

Integrity of Cap Seal: Describe: Good

Surface Water in Casing? Yes [ ] No [ ] Describe: NA

Well Casing Diameter: 2 inches

Well Casing Material: PVC [X] Steel [ ] Stainless Steel [ ]

Inner Cap: Threaded [ ] Slip [ ] Expansion Plug [X] None [ ]

Reference/Measuring Point: Groove [ ] Indelible Mark [X] None [ ]

Evidence of Double Casing? Yes [ ] No [X] Describe:

Downhole

Odor: Yes [ ] No [X] Describe:

PID Reading: 43 ppm

Depth to Water (to top of casing): 18.36 feet (nearest 0.01) Depth to LNAPL: _____ feet (nearest 0.01) N/A [ ]

Total Well Depth (to top of casing): _____ feet (nearest 0.1)

Sediment (Hard/Soft Bottom): Describe:

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Columbia Mills PROJECT NUMBER: 0266363

DATE OF INSPECTION: 6/17/09 INSPECTOR: JRW, JR (MPI)

WELL DESIGNATION: LFP-02

WELL LOCATION:

Outward Appearance

Flushmount Diameter ___ inches N/A [ ]

Approximate Stickup Height ___ feet N/A [ ]

Integrity of Protective Casing Describe: None

Protective Casing Material Steel [ ] Stainless Steel [ ] Other ___

Protective Casing Width or Dia. ___ inches

Weep Hole in Protective Casing Yes [ ] No [ ]

Surface Seal/Apron Material Cement [ ] Bentonite [ ] Not apparent [ ] Other ___

Integrity of Surface Seal/Apron Describe: ___

Surface Drainage Away from Wellhead [ ] Toward Wellhead [ ]

Bollards Present? Yes [ ] No [ ] Describe: ___

Well ID. Visible? Yes [ ] No [ ] Describe: ___

Lock Present and Functional? Yes [ ] No [ ] Describe: ___

Photograph Taken? Photo # Yes [ ] No [ ] Describe: ___

Inner Appearance

Integrity of Well Casing Describe: Damaged

Integrity of Cap Seal Describe: OK

Surface Water in Casing? Yes [ ] No [ ] Describe: ___

Well Casing Diameter 2 inches

Well Casing Material PVC [X] Steel [ ] Stainless Steel [ ]

Inner Cap Threaded [ ] Slip [ ] Expansion Plug [X] None [ ]

Reference/Measuring Point Groove [ ] Indelible Mark [X] None [ ]

Evidence of Double Casing? Yes [ ] No [X] Describe: ___

Downhole

Odor Yes [ ] No [X] Describe: ___

PID Reading NM ppm

Depth to Water (to top of casing) ___ feet (nearest 0.01) Depth to LNAPL ___ feet (nearest 0.01) N/A [ ]

Total Well Depth (to top of casing) ___ feet (nearest 0.1)

Sediment (Hard/Soft Bottom) Describe: ___

Additional Comments: DAMAGED, cannot measure. PIZO casing was tilted

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Columbia Mills PROJECT NUMBER: 0266363

DATE OF INSPECTION: 6/19/09 INSPECTOR: JRW, JR (MPI)

WELL DESIGNATION: LFP-03

WELL LOCATION: _____

Outward Appearance

Flushmount Diameter	NM" inches	N/A [ ]
Approximate Stickup Height	NM feet	N/A [ ]
Integrity of Protective Casing	Describe: _____	
Protective Casing Material	Steel [ ]	Stainless Steel [ ] Other _____
Protective Casing Width or Dia.	NGL inches	
Weep Hole in Protective Casing	Yes [ ]	No [ ]
Surface Seal/Apron Material	Cement [ ]	Bentonite [ ] Not apparent [ ] Other _____
Integrity of Surface Seal/Apron	Describe: _____	
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]
Bollards Present?	Yes [ ]	No [X] Describe: _____
Well ID. Visible?	Yes [ ]	No [X] Describe: _____
Lock Present and Functional?	Yes [X]	No [ ] Describe: _____
Photograph Taken? Photo #	Yes [ ]	No [X] Describe: _____

Inner Appearance

Integrity of Well Casing	Describe: OK but tilted	
Integrity of Cap Seal	Describe: OK	
Surface Water in Casing?	Yes [ ]	No [ ] Describe: NA
Well Casing Diameter	2 inches	
Well Casing Material	PVC [X]	Steel [ ] Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ] Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [X] None [ ]
Evidence of Double Casing?	Yes [ ]	No [X] Describe: _____

Downhole

Odor	Yes [ ]	No [X] Describe: _____
PID Reading	0.0 ppm	
Depth to Water (to top of casing)	14.18 feet (nearest 0.01)	Depth to LNAPL ____ feet (nearest 0.01) N/A [ ]
Total Well Depth (to top of casing)	NM feet (nearest 0.1)	
Sediment (Hard/Soft Bottom)	Describe: _____	

Additional Comments:

_____

_____

_____

_____

_____

_____

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Columbia Mills PROJECT NUMBER: 0266363

DATE OF INSPECTION: 6/17/09 INSPECTOR: JRW, JR (MPI)

WELL DESIGNATION: LFP-64

WELL LOCATION:

Outward Appearance

Flushmount Diameter: None inches N/A [ ]

Approximate Stickup Height: ____ feet N/A [ ]

Integrity of Protective Casing: Describe: ____

Protective Casing Material: Steel [ ] Stainless Steel [ ] Other ____

Protective Casing Width or Dia.: ____ inches

Weep Hole in Protective Casing: Yes [ ] No [ ]

Surface Seal/Apron Material: Cement [ ] Bentonite [ ] Not apparent [ ] Other ____

Integrity of Surface Seal/Apron: Describe: ____

Surface Drainage: Away from Wellhead [X] Toward Wellhead [ ]

Bollards Present? Yes [ ] No [X] Describe: ____

Well ID. Visible? Yes [ ] No [X] Describe: ____

Lock Present and Functional? Yes [ ] No [X] Describe: no lock

Photograph Taken? Photo # Yes [ ] No [X] Describe: ____

Inner Appearance

Integrity of Well Casing: Describe: DENTED

Integrity of Cap Seal: Describe: OK

Surface Water in Casing? Yes [ ] No [ ] Describe: NA

Well Casing Diameter: 2 inches

Well Casing Material: PVC [X] Steel [ ] Stainless Steel [ ]

Inner Cap: Threaded [ ] Slip [ ] Expansion Plug [X] None [ ]

Reference/Measuring Point: Groove [ ] Indelible Mark [X] None [ ]

Evidence of Double Casing? Yes [ ] No [ ] Describe: ____

Downhole

Odor: Yes [ ] No [ ] Describe: ____

PID Reading: 0.0 ppm

Depth to Water (to top of casing): 13.24 feet (nearest 0.01) Depth to LNAPL ____ feet (nearest 0.01) N/A [ ]

Total Well Depth (to top of casing): ____ feet (nearest 0.1)

Sediment (Hard/Soft Bottom): Describe: ____

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Columbia Mills PROJECT NUMBER: 0266363

DATE OF INSPECTION: 6/11/09 INSPECTOR: JRW, JR (MPI)

WELL DESIGNATION: LFP-05

WELL LOCATION: _____

Outward Appearance

Flushmount Diameter	_____ inches	N/A [ ]	
Approximate Stickup Height	_____ feet	N/A [ ]	
Integrity of Protective Casing	Describe: _____		
Protective Casing Material	Steel [ ]	Stainless Steel [ ]	Other _____
Protective Casing Width or Dia.	_____ inches		
Weep Hole in Protective Casing	Yes [ ]	No [ ]	
Surface Seal/Apron Material	Cement [ ]	Bentonite [ ]	Not apparent [ ] Other _____
Integrity of Surface Seal/Apron	Describe: _____		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X]	Describe: _____
Well ID. Visible?	Yes [ ]	No [X]	Describe: _____
Lock Present and Functional?	Yes [X]	No [ ]	Describe: _____
Photograph Taken? Photo #	Yes [ ]	No [X]	Describe: _____

Inner Appearance

Integrity of Well Casing	Describe: tilted		
Integrity of Cap Seal	Describe: ok		
Surface Water in Casing?	Yes [ ]	No [ ]	Describe: NA
Well Casing Diameter	2 inches		
Well Casing Material	PVC [X]	Steel [ ]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [X]	None [ ]
Evidence of Double Casing?	Yes [ ]	No [X]	Describe: _____

Downhole

Odor	Yes [ ]	No [X]	Describe: _____
PID Reading	0.0 ppm		
Depth to Water (to top of casing)	17.26 feet (nearest 0.01)	Depth to LNAPL	_____ feet (nearest 0.01) N/A [ ]
Total Well Depth (to top of casing)	_____ feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: _____		

Additional Comments:

_____

_____

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_____

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Columbia Mills PROJECT NUMBER: 0266363

DATE OF INSPECTION: 6/17/09 INSPECTOR: JRW, JR (MPI)

WELL DESIGNATION: LFR-6

WELL LOCATION:

Outward Appearance

Flushmount Diameter _____ inches N/A [ ]

Approximate Stickup Height _____ feet N/A [ ]

Integrity of Protective Casing Describe: ok

Protective Casing Material Steel [ ] Stainless Steel [ ] Other _____

Protective Casing Width or Dia. _____ inches

Weep Hole in Protective Casing Yes [ ] No [ ]

Surface Seal/Apron Material Cement [ ] Bentonite [ ] Not apparent [ ] Other _____

Integrity of Surface Seal/Apron Describe: ok

Surface Drainage Away from Wellhead [X] Toward Wellhead [ ]

Bollards Present? Yes [ ] No [X] Describe: _____

Well ID. Visible? Yes [ ] No [X] Describe: _____

Lock Present and Functional? Yes [X] No [ ] Describe: _____

Photograph Taken? Photo # Yes [ ] No [X] Describe: _____

Inner Appearance

Integrity of Well Casing Describe: tilted

Integrity of Cap Seal Describe: ok

Surface Water in Casing? Yes [ ] No [ ] Describe: NA

Well Casing Diameter 2 inches

Well Casing Material PVC [X] Steel [ ] Stainless Steel [ ]

Inner Cap Threaded [ ] Slip [ ] Expansion Plug [X] None [ ]

Reference/Measuring Point Groove [ ] Indelible Mark [X] None [ ]

Evidence of Double Casing? Yes [ ] No [X] Describe: _____

Downhole

Odor Yes [ ] No [X] Describe: _____

PID Reading 0.0 ppm

Depth to Water (to top of casing) 13.44 feet (nearest 0.01) Depth to LNAPL _____ feet (nearest 0.01) N/A [ ]

Total Well Depth (to top of casing) _____ feet (nearest 0.1)

Sediment (Hard/Soft Bottom) Describe: _____

Additional Comments:

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Columbia Mills PROJECT NUMBER: 0266363

DATE OF INSPECTION: 6/17/09 INSPECTOR: JRW, JR (MPI)

WELL DESIGNATION: LFP-7

WELL LOCATION: _____

Outward Appearance

Flushmount Diameter	_____ inches	N/A [ ]	
Approximate Stickup Height	_____ feet	N/A [ ]	
Integrity of Protective Casing	Describe: _____		
Protective Casing Material	Steel [ ]	Stainless Steel [ ]	Other _____
Protective Casing Width or Dia.	_____ inches		
Weep Hole in Protective Casing	Yes [ ]	No [ ]	
Surface Seal/Apron Material	Cement [ ]	Bentonite [ ]	Not apparent [ ] Other _____
Integrity of Surface Seal/Apron	Describe: _____		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X]	Describe: _____
Well ID. Visible?	Yes [ ]	No [X]	Describe: _____
Lock Present and Functional?	Yes [ ]	No [X]	Describe: _____
Photograph Taken? Photo #	Yes [ ]	No [X]	Describe: _____

Inner Appearance

Integrity of Well Casing	Describe: DAMAGED		
Integrity of Cap Seal	Describe: OK		
Surface Water in Casing?	Yes [ ]	No [ ]	Describe: NA
Well Casing Diameter	2 inches		
Well Casing Material	PVC [X]	Steel [ ]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [X]	None [ ]
Evidence of Double Casing?	Yes [ ]	No [X]	Describe: _____

Downhole

Odor	Yes [X]	No [ ]	Describe: _____
PID Reading	28.5 ppm		
Depth to Water (to top of casing)	____ feet (nearest 0.01)	Depth to LNAPL	____ feet (nearest 0.01) N/A [ ]
Total Well Depth (to top of casing)	_____ feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: _____		

Additional Comments:

COULD NOT MEASURE - WELL DAMAGED
- RISER TILTED

STRONG ODOR

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Columbia Mills PROJECT NUMBER: 0266363

DATE OF INSPECTION: 6/17/09 INSPECTOR: JRW, JR (MPI)

WELL DESIGNATION: LFP-8

WELL LOCATION: _____

Outward Appearance

Flushmount Diameter	_____ inches	N/A [ ]	
Approximate Stickup Height	_____ feet	N/A [ ]	
Integrity of Protective Casing	Describe: _____		
Protective Casing Material	Steel [ ]	Stainless Steel [ ]	Other _____
Protective Casing Width or Dia.	_____ inches		
Weep Hole in Protective Casing	Yes [ ]	No [ ]	
Surface Seal/Apron Material	Cement [ ]	Bentonite [ ]	Not apparent [ ] Other _____
Integrity of Surface Seal/Apron	Describe: _____		
Surface Drainage	Away from Wellhead [X]	Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No [X]	Describe: _____
Well ID. Visible?	Yes [ ]	No [X]	Describe: _____
Lock Present and Functional?	Yes [X]	No [ ]	Describe: _____
Photograph Taken? Photo #	Yes [ ]	No [X]	Describe: _____

Inner Appearance

Integrity of Well Casing	Describe: OK		
Integrity of Cap Seal	Describe: OK		
Surface Water in Casing?	Yes [ ]	No [ ]	Describe: NA
Well Casing Diameter	2 inches		
Well Casing Material	PVC [X]	Steel [ ]	Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]	Expansion Plug [X] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [X]	None [ ]
Evidence of Double Casing?	Yes [ ]	No [X]	Describe: _____

Downhole

Odor	Yes [ ]	No [X]	Describe: _____
PID Reading	1.0 ppm		
Depth to Water (to top of casing)	13.21 feet (nearest 0.01)	Depth to LNAPL	_____ feet (nearest 0.01) N/A [ ]
Total Well Depth (to top of casing)	_____ feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: _____		

Additional Comments:

_____

_____

_____

_____

_____

_____

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Columbia Mills PROJECT NUMBER: 0266363

DATE OF INSPECTION: 6/17/09 INSPECTOR: JRW, JR (MPI)

WELL DESIGNATION: LPP-09

WELL LOCATION: _____

Outward Appearance

Flushmount Diameter _____ inches N/A [ ]

Approximate Stickup Height _____ feet N/A [ ]

Integrity of Protective Casing Describe: _____

Protective Casing Material Steel [ ] Stainless Steel [ ] Other _____

Protective Casing Width or Dia. _____ inches

Weep Hole in Protective Casing Yes [ ] No [ ]

Surface Seal/Apron Material Cement [ ] Bentonite [ ] Not apparent [ ] Other _____

Integrity of Surface Seal/Apron Describe: _____

Surface Drainage Away from Wellhead [X] Toward Wellhead [ ]

Bollards Present? Yes [ ] No [X] Describe: _____

Well ID. Visible? Yes [ ] No [X] Describe: _____

Lock Present and Functional? Yes [ ] No [X] Describe: NO LOCK

Photograph Taken? Photo # Yes [ ] No [X] Describe: _____

Inner Appearance

Integrity of Well Casing Describe: OK

Integrity of Cap Seal Describe: OK

Surface Water in Casing? Yes [ ] No [ ] Describe: NA

Well Casing Diameter 2 inches

Well Casing Material PVC [X] Steel [ ] Stainless Steel [ ]

Inner Cap Threaded [ ] Slip [ ] Expansion Plug [X] None [ ]

Reference/Measuring Point Groove [ ] Indelible Mark [X] None [ ]

Evidence of Double Casing? Yes [ ] No [X] Describe: _____

Downhole

Odor Yes [ ] No [X] Describe: _____

PID Reading 0 ppm

Depth to Water (to top of casing) 17.93 feet (nearest 0.01) Depth to LNAPL _____ feet (nearest 0.01) N/A [ ]

Total Well Depth (to top of casing) _____ feet (nearest 0.1)

Sediment (Hard/Soft Bottom) Describe: _____

Additional Comments:

_____

_____

_____

_____

_____

_____

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Columbia Mills PROJECT NUMBER: 0266363

DATE OF INSPECTION: 6/17/07 INSPECTOR: JRW, JR (MPI)

WELL DESIGNATION: LFP - 10

WELL LOCATION: _____

Outward Appearance

Flushmount Diameter _____ inches N/A [ ]

Approximate Stickup Height _____ feet N/A [ ]

Integrity of Protective Casing Describe: _____

Protective Casing Material Steel [ ] Stainless Steel [ ] Other _____

Protective Casing Width or Dia. _____ inches

Weep Hole in Protective Casing Yes [ ] No [ ]

Surface Seal/Apron Material Cement [ ] Bentonite [ ] Not apparent [ ] Other _____

Integrity of Surface Seal/Apron Describe: _____

Surface Drainage Away from Wellhead [X] Toward Wellhead [ ]

Bollards Present? Yes [ ] No [X] Describe: _____

Well ID. Visible? Yes [ ] No [X] Describe: _____

Lock Present and Functional? Yes [X] No [ ] Describe: _____

Photograph Taken? Photo # Yes [ ] No [X] Describe: _____

Inner Appearance

Integrity of Well Casing Describe: OK

Integrity of Cap Seal Describe: OK

Surface Water in Casing? Yes [ ] No [ ] Describe: NA

Well Casing Diameter 2 inches

Well Casing Material PVC [X] Steel [ ] Stainless Steel [ ]

Inner Cap Threaded [ ] Slip [ ] Expansion Plug [X] None [ ]

Reference/Measuring Point Groove [ ] Indelible Mark [X] None [ ]

Evidence of Double Casing? Yes [ ] No [X] Describe: _____

Downhole

Odor Yes [ ] No [X] Describe: _____

PID Reading 0 ppm

Depth to Water (to top of casing) 14.90 feet (nearest 0.01) Depth to LNAPL _____ feet (nearest 0.01) N/A [ ]

Total Well Depth (to top of casing) _____ feet (nearest 0.1)

Sediment (Hard/Soft Bottom) Describe: _____

Additional Comments:

_____

_____

_____

_____

_____

_____

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Columbia Mills PROJECT NUMBER: 0266363

DATE OF INSPECTION: 6/17/09 INSPECTOR: JRW, JR (MPI)

WELL DESIGNATION: LGP-11

WELL LOCATION: _____

Outward Appearance

Flushmount Diameter: None inches N/A [ ]

Approximate Stickup Height: None feet N/A [ ]

Integrity of Protective Casing: Describe: —

Protective Casing Material: Steel [—] Stainless Steel [ ] Other _____

Protective Casing Width or Dia.: — inches

Weep Hole in Protective Casing: Yes [ ] No [ ]

Surface Seal/Apron Material: Cement [ ] Bentonite [ ] Not apparent [X] Other _____

Integrity of Surface Seal/Apron: Describe: _____

Surface Drainage: Away from Wellhead [X] Toward Wellhead [ ]

Bollards Present? Yes [ ] No [X] Describe: _____

Well ID. Visible? Yes [ ] No [ ] Describe: _____

Lock Present and Functional? Yes [ ] No [ ] Describe: _____

Photograph Taken? Photo # Yes [ ] No [ ] Describe: _____

Inner Appearance

Integrity of Well Casing: Describe: _____

Integrity of Cap Seal: Describe: _____

Surface Water in Casing? Yes [ ] No [ ] Describe: _____

Well Casing Diameter: _____ inches

Well Casing Material: PVC [ ] Steel [ ] Stainless Steel [ ]

Inner Cap: Threaded [ ] Slip [ ] Expansion Plug [ ] None [ ]

Reference/Measuring Point: Groove [ ] Indelible Mark [ ] None [ ]

Evidence of Double Casing? Yes [ ] No [ ] Describe: _____

Downhole

Odor: Yes [ ] No [ ] Describe: _____

PID Reading: 51.6 ppm

Depth to Water (to top of casing): 22.89 feet (nearest 0.01) Depth to LNAPL: _____ feet (nearest 0.01) N/A [ ]

Total Well Depth (to top of casing): _____ feet (nearest 0.1)

Sediment (Hard/Soft Bottom) Describe: _____

Additional Comments: Burrowing Rodent Hole near Piezo.

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Columbia Mills PROJECT NUMBER: 0266363

DATE OF INSPECTION: 6/17/09 INSPECTOR: JRW, JR (MPI)

WELL DESIGNATION: LFP-12

WELL LOCATION:

Outward Appearance

Flushmount Diameter — inches N/A [ ]

Approximate Stickup Height — feet N/A [ ]

Integrity of Protective Casing Describe: None

Protective Casing Material Steel [ ] Stainless Steel [ ] Other

Protective Casing Width or Dia. ____ inches

Weep Hole in Protective Casing Yes [ ] No [ ]

Surface Seal/Apron Material Cement [ ] Bentonite [ ] Not apparent [ ] Other

Integrity of Surface Seal/Apron Describe:

Surface Drainage Away from Wellhead [ ] Toward Wellhead [ ]

Bollards Present? Yes [ ] No [X] Describe:

Well ID. Visible? Yes [ ] No [X] Describe:

Lock Present and Functional? Yes [ ] No [X] Describe: NO LOCK

Photograph Taken? Photo # Yes [ ] No [X] Describe:

Inner Appearance

Integrity of Well Casing Describe: tilted

Integrity of Cap Seal Describe: Good

Surface Water in Casing? Yes [ ] No [ ] Describe: NA

Well Casing Diameter 2 inches

Well Casing Material PVC [X] Steel [ ] Stainless Steel [ ]

Inner Cap Threaded [ ] Slip [ ] Expansion Plug [X] None [ ]

Reference/Measuring Point Groove [ ] Indelible Mark [X] None [ ]

Evidence of Double Casing? Yes [ ] No [X] Describe:

Downhole

Odor Yes [ ] No [X] Describe:

PID Reading 13.9 ppm DRY

Depth to Water (to top of casing) [redacted] feet (nearest 0.01) Depth to LNAPL ____ feet (nearest 0.01) N/A [ ]

Total Well Depth (to top of casing) 22.28 feet (nearest 0.1)

Sediment (Hard/Soft Bottom) Describe:

Additional Comments: Rodent Hole near well/piezo.

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Columbia Mills PROJECT NUMBER: 0266363

DATE OF INSPECTION: 6/17/09 INSPECTOR: JRW, JR (MPI)

WELL DESIGNATION: LFP-13

WELL LOCATION: _____

Outward Appearance

Flushmount Diameter _____ inches N/A [ ]

Approximate Stickup Height _____ feet N/A [ ]

Integrity of Protective Casing Describe: None.

Protective Casing Material Steel [ ] Stainless Steel [ ] Other _____

Protective Casing Width or Dia. _____ inches

Weep Hole in Protective Casing Yes [ ] No [ ]

Surface Seal/Apron Material Cement [ ] Bentonite [ ] Not apparent [ ] Other _____

Integrity of Surface Seal/Apron Describe: _____

Surface Drainage Away from Wellhead [X] Toward Wellhead [ ]

Bollards Present? Yes [ ] No [X] Describe: _____

Well ID. Visible? Yes [ ] No [X] Describe: _____

Lock Present and Functional? Yes [X] No [ ] Describe: _____

Photograph Taken? Photo # Yes [ ] No [X] Describe: _____

Inner Appearance

Integrity of Well Casing Describe: OK

Integrity of Cap Seal Describe: OK

Surface Water in Casing? Yes [ ] No [ ] Describe: NA

Well Casing Diameter 2 inches

Well Casing Material PVC [X] Steel [ ] Stainless Steel [ ]

Inner Cap Threaded [ ] Slip [ ] Expansion Plug [X] None [ ]

Reference/Measuring Point Groove [ ] Indelible Mark [X] None [ ]

Evidence of Double Casing? Yes [ ] No [X] Describe: _____

Downhole

Odor Yes [ ] No [X] Describe: _____

PID Reading 0.0 ppm

Depth to Water (to top of casing) 6.50 feet (nearest 0.01) Depth to LNAPL _____ feet (nearest 0.01) N/A [ ]

Total Well Depth (to top of casing) _____ feet (nearest 0.1)

Sediment (Hard/Soft Bottom) Describe: _____

Additional Comments:

_____

_____

_____

_____

_____

_____

MALCOLM PIRNIE

GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Columbia Mills PROJECT NUMBER: 0266363

DATE OF INSPECTION: 6-17-09 INSPECTOR: JRW, JR (MPI)

WELL DESIGNATION: LFP-14

WELL LOCATION: _____

Outward Appearance

Flushmount Diameter _____ inches N/A [ ]

Approximate Stickup Height _____ feet N/A [ ]

Integrity of Protective Casing Describe: _____

Protective Casing Material Steel [ ] Stainless Steel [ ] Other _____

Protective Casing Width or Dia. _____ inches

Weep Hole in Protective Casing Yes [ ] No [ ]

Surface Seal/Apron Material Cement [ ] Bentonite [ ] Not apparent [ ] Other _____

Integrity of Surface Seal/Apron Describe: _____

Surface Drainage Away from Wellhead [X] Toward Wellhead [ ]

Bollards Present? Yes [ ] No [X] Describe: _____

Well ID. Visible? Yes [ ] No [X] Describe: _____

Lock Present and Functional? Yes [ ] No [X] Describe: NO LOCK

Photograph Taken? Photo # Yes [ ] No [X] Describe: _____

Inner Appearance

Integrity of Well Casing Describe: TILTED

Integrity of Cap Seal Describe: OK.

Surface Water in Casing? Yes [ ] No [ ] Describe: NA

Well Casing Diameter 2 inches

Well Casing Material PVC [X] Steel [ ] Stainless Steel [ ]

Inner Cap Threaded [ ] Slip [ ] Expansion Plug [X] None [ ]

Reference/Measuring Point Groove [ ] Indelible Mark [X] None [ ]

Evidence of Double Casing? Yes [ ] No [X] Describe: _____

Downhole

Odor Yes [ ] No [ ] Describe: _____

PID Reading 0.0 ppm

Depth to Water (to top of casing) 25.83 feet (nearest 0.01) Depth to LNAPL _____ feet (nearest 0.01) N/A [ ]

Total Well Depth (to top of casing) _____ feet (nearest 0.1)

Sediment (Hard/Soft Bottom) Describe: _____

Additional Comments:

_____

_____

_____

_____

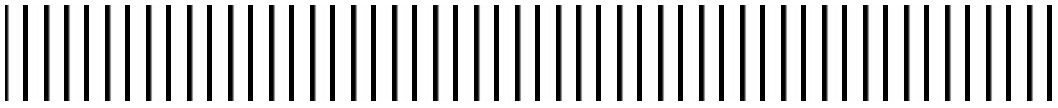
_____

_____

New York State Department of Environmental Conservation
Columbia Mills Site 2009 Annual Groundwater Monitoring Report

Appendix E

Groundwater Level Data Form



0266363 / ALB

MALCOLM PIRNIE

GROUNDWATER LEVEL DATA FORM

PROJECT NAME: Columbia Mills
PROJECT NUMBER: 0266363

DATE: 6/17/2009
PERSONNEL: J. Wyckoff
J. Redfield

WELL ID	Date	Time	Headspace VOC ppm	Depth to Water (feet)	Total Depth (feet)	Reference Point
MW-1S	6/17/2009	17:20	0.0	4.81	16.70	TOC
MW-1D	6/17/2009	17:20	0.0	1.80	28.00	TOC
MW-2S	6/17/2009	17:00	0.0	11.66	17.41	TOC
MW-2D	6/17/2009	17:00	0.0	11.77	27.38	TOC
MW-3S	6/17/2009	18:45	0.0	5.76	17.59	TOC
MW-3D	6/17/2009	18:45	0.0	22.03	26.49	TOC
MW-4S	6/17/2009	19:00	3.9	11.70	14.10	TOC
MW-4D	6/17/2009	19:00	2.4	11.13	27.05	TOC
LFP-1	6/17/2009	17:30	43.0	18.36	20.68	TOC
LFP-2	6/17/2009	17:25	NM	Damaged (NM)	NM	TOC
LFP-3	6/17/2009	17:40	0.0	14.18	17.05	TOC
LFP-4	6/17/2009	17:40	0.0	13.24	14.78	TOC
LFP-5	6/17/2009	18:05	0.0	17.26	22.53	TOC
LFP-6	6/17/2009	18:05	0.0	13.44	19.72	TOC
LFP-7	6/17/2009	18:30	NM	Damaged (NM)	NM	TOC
LFP-8	6/17/2009	18:35	1.0	13.21	14.92	TOC
LFP-9	6/17/2009	18:15	0.0	17.93	18.60	TOC
LFP-10	6/17/2009	18:20	0.0	14.90	15.65	TOC
LFP-11	6/17/2009	17:30	51.6	22.89	24.93	TOC
LFP-12	6/17/2009	17:35	13.9	Dry	18.10	TOC
LFP-13	6/17/2009	17:58	0.0	6.50	7.73	TOC
LFP-14	6/17/2009	18:00	0.0	25.83	30.98	TOC

Notes:

LFP-7 and LFP-2 damaged. Riser pipes broken at ground surface.

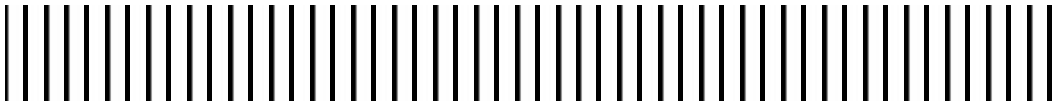
No LNAPL Reported

NM - not measured

New York State Department of Environmental Conservation
Columbia Mills Site 2009 Annual Groundwater Monitoring Report

Appendix F

Groundwater Sampling Purge Logs



0266363 / ALB

MALCOLM PIRNIE

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-15 DATE: 6/18/09

PROJECT NAME: Columbia Mills
PROJECT NUMBER: 0266363
SAMPLERS: JRW, JR

A: Total Casing and Screen Length: 16.70

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 4.24

D: Volume of Water in Casing: 2.1

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

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

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

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1045	1050	1105	1110	1115	1120	1125						
Gallons	0						5.0						
Depth to Water	4.65	4.82	4.95	4.97	4.98	4.99	5.01						
pH	7.79	7.40	7.22	7.19	7.18	7.18	7.18						
Conductivity (mohm/cm	0.372	.363	.362	.362	.361	.361	.361						
Turbidity (ntu)	222	92	28	12.3	14.5	13.4	13.6						
Disolved Oxygen (mg/l)	4.60	0.0	0.0	0.0	0.0	0.0	0.0						
Temperature (°C)	11.54	11.28	11.16	11.17	11.19	11.16	11.17						
Salinity	0	0	0	0	0	0	0						
TDS	.24	.24	.24	0.24	0.24	0.24	.24						
Redox (mV)	-66	-104	-134	-141	-144	-146	-148						

Notes: 1044 - Initiate purge.
1125 - Finish purge, collect sample
- purged = 5 gallons.
- Collect Dup MW-X (11:30)

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-1D DATE: 6/18/09

PROJECT NAME: Columbia Mills
PROJECT NUMBER: 0266363
SAMPLERS: JRW, JR

A: Total Casing and Screen Length: 28.00

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 1.65

D: Volume of Water in Casing: 4.5

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

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

$v = 0.0408 (\quad)^2 \times (\quad - \quad) =$ _____ gal.

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1152	1155	1200	1205	1210	1215	1220	1225	1230				
Gallons	0												
Depth to Water	2.30	2.47	2.61	2.68	2.75	2.79	2.82	2.85	2.87				
pH	7.40	7.42	7.45	7.36	7.24	7.21	7.17	7.14	7.12				
Conductivity (mohm/cm	.421	.417	.368	.324	.314	.308	.301	.308	.302				
Turbidity (ntu)	67.9	64.1	49.0	39.9	29.3	27.2	25.4	23.9	22.8				
Disolved Oxygen (mg/l)	1.77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Temperature (°C)	11.22	11.06	10.94	10.94	10.84	10.83	10.86	10.79	10.84				
Salinity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
TDS	.27	0.27	.24	.21	.20	.20	.20	.20	.19				
Redox (mV)	112	62	-143	-136	-132	-131	-131	-133	-132				

Notes: 1152 - Initiate purge.
1232 - Finish purge, collect samples.
- purged ≈ 5 gallons

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-25 DATE: 6/18/09

PROJECT NAME: Columbia Mills
PROJECT NUMBER: 0266363
SAMPLERS: JRW, JR

A: Total Casing and Screen Length: 17.43

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 11.68

D: Volume of Water in Casing: 1.0

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

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

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

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1308	1315	1320	1325	1330	1335	1340	1345	1350	1355	1400		
Gallons	0												
Depth to Water	12.38	13.18	14.00	14.35	14.65	15.01	15.20	15.45	15.85	16.12	16.30		
pH	7.20	6.82	6.62	6.60	6.60	6.65	6.68	6.72	6.77	6.79	6.81		
Conductivity (mohm/cm	.476	.357	.338	.337	.357	.386	.406	.419	.440	.444	.452		
Turbidity (ntu)	37.9	15.9	143	114	81.8	139	206	414	683	249	336		
Disolved Oxygen (mg/l)	9.58	4.54	4.66	4.36	4.09	3.87	3.71	3.68	3.55	3.32	3.70		
Temperature (°C)	11.43	10.65	10.77	10.50	10.44	10.38	10.34	10.38	10.32	10.26	10.21		
Salinity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TDS	.32	.23	.22	.22	.23	.25	.26	.27	.29	.29	.29		
Redox (mV)	143	152	161	165	168	171	172	175	179	180	181		

Notes: 1308 Initiate purge
1403 - Purged well dry / Purged = 40 gallons.
6/19/09 - Collected samples from well PCBs metals (filtered/unfiltered) 0655

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 2D DATE: 6/18/2009

PROJECT NAME: Columbia Mills
PROJECT NUMBER: 0266363
SAMPLERS: JRW, JR

A: Total Casing and Screen Length: 27.27

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 11.72

D: Volume of Water in Casing: 2.64

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

v = 0.0408 ( )^2 x (-) = 2.64 gal.

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

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1:15	1:20	1:25	1:30	1:35	1:40	1:45	1:50	1:55	2:00	2:05		
Gallons	0				2			2.5					
Depth to Water	11.72	14.89	16.56	17.80	18.34	18.78	19.01	19.20	19.42	19.61	19.86		
pH	7.70	7.64	7.62	7.63	7.64	7.66	7.66	7.67	7.68	7.69	7.69		
Conductivity (mohm/cm	0.42	.413	.411	.410	.411	.404	.416	.416	.418	.419	.431		
Turbidity (ntu)	68.0	55.8	55.2	49.8	43.6	48.2	72.7	73.8	81.1	87.4	84.5		
Disolved Oxygen (mg/l)	0.36	0	0	0	0.17	0.49	0.0	0	0	0	0		
Temperature (°C)	10.4	10.36	10.11	10.27	10.23	11.22	11.45	11.45	11.42	11.49	10.77		
Salinity	0	0	0	0	0	0	0	0	0	0	0		
TDS	0.27	0.27	0.27	0.27	0.27	0.26	0.27	0.27	0.27	0.27	0.28		
Redox (mV)	32	37	44	49	55	59	61	62	65	68	73		

Notes: Initiated purge at 1:15

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-35 DATE: 6/18/09

PROJECT NAME: Columbia Mills
PROJECT NUMBER: 0266363
SAMPLERS: JRW, JR

A: Total Casing and Screen Length: 17.70

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 5.76

D: Volume of Water in Casing: ~~[illegible]~~ 2.0

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

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

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

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	0830	0835	0840	0845	0850	0855	0900	0905					
Gallons													
Depth to Water		10.51	12.10	13.50	14.80	15.82	17.28						
pH	7.81	7.62	7.59	7.58	7.59	7.57	7.56						
Conductivity (mohm/cm	.644	.611	.608	.607	.605	.610	.605						
Turbidity (ntu)	77.9	36.3	24.4	50.8	60.6	88.6	118						
Disolved Oxygen (mg/l)	8.43	6.69	6.64	6.58	6.87	6.39	5.93						
Temperature (°C)	11.31	11.40	11.57	11.77	12.06	11.75	11.31						
Salinity	0	0	0	0	0	0	0						
TDS	0.42	.39	.39	.39	.39	.39	.39						
Redox (mV)	222	220	220	219	218	219	219						

Well Purged Dry

Notes: 0828 - Initiate Purge
0905 - well purged dry - purged ~ 2.5 gallons.
6/19/09 0735 - collect sample from well, purged ~ 150 ml, will attempt to collect again late today.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-3D DATE: 6/18/09

PROJECT NAME: Columbia Mills
PROJECT NUMBER: 0266363
SAMPLERS: JRW, JR

A: Total Casing and Screen Length: 26.60

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 12.97

D: Volume of Water in Casing: 2.5

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

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

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

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	0900	0925	0930	0935	0936									
Gallons	0													
Depth to Water	12.85	14.38	15.21	25.98										
pH 7.55	6.39	7.43	7.39	7.39										
Conductivity (mohm/cm	1.20	1.21	1.19	1.19										
Turbidity (ntu)	39.6	126	112	244										
Disolved Oxygen (mg/l)	4.21	0.91	0.26	0.43	DRY									
Temperature (°C)	10.32	10.21	10.19	10.46										
Salinity	0.1	0.1	0.1	0.1										
TDS	0.8	0.8	0.8	0.8	Well Purged									
Redox (mV)	228	228	224	194										

Notes: 0918 Initiate purge
0936 - Well purged Dry, Purged ~ 1.0 gallon,
6/19/09 0730 - Collect sample from well, purged ~ 200ml, will Attempt Again Later today.

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4-S DATE: 6/18/2009

PROJECT NAME: Columbia Mills
PROJECT NUMBER: 0266363
SAMPLERS: JRW, JR

A: Total Casing and Screen Length: 14.01

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 11.71

D: Volume of Water in Casing: .391

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

v = 0.0408 (~~0.7~~ 2)^2 x (~~2.3~~) = .391 gal.

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

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	7:50	7:55	8:00	8:05	8:10	8:15	8:20	8:25	8:30				
Gallons	0						3		4				
Depth to Water	12.60	12.71	13.19	13.35	13.45	13.52	13.58	13.63	13.66				
pH	7.36	6.87	6.78	6.79	6.83	6.87	6.92	6.96	6.99				
Conductivity (mohm/cm	.521	.526	.516	.503	.497	.494	.491	.489	.487				
Turbidity (ntu)	215	158	179	137	115	112	75.5	74.6	76.1				
Disolved Oxygen (mg/l)	.65	0	0	0	0	0	0	0	0				
Temperature (°C)	11.08	11.11	10.96	10.89	10.91	10.84	10.92	10.98	10.95				
Salinity	0	0	0	0	0	0	0	0	0				
TDS	.33	.34	.33	.32	.32	.32	.32	.32	.32				
Redox (mV)	-54	-64	-83	-91	-97	-102	-107	-111	-112				

Notes: 07:48 initated purge

MALCOLM PIRNIE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 4D DATE: 6/18/2009

PROJECT NAME: Columbia Mills
PROJECT NUMBER: 0266363
SAMPLERS: JRW, JR

A: Total Casing and Screen Length: 26.95

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 11.14

D: Volume of Water in Casing: 2.68

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

v = 0.0408 ( )^2 x (-) = 2.68 gal.

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

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	11:20	11:25	11:30	11:35	11:40	11:45	11:50	11:55					
Gallons	0				2.5			4					
Depth to Water	11.14	12.95	12.71	12.70	12.76	12.73	12.71	12.70					
pH	7.91	7.90	7.60	7.45	7.42	7.40	7.40	7.41					
Conductivity (mohm/cm	1.16	1.06	1.01	1.02	1.02	1.02	1.02	1.01					
Turbidity (ntu)	62.8	65.9	146	138	112	80.0	79.5	86.9					
Disolved Oxygen (mg/l)	0.98	0	0	0	0	0	0	0					
Temperature (°C)	10.49	10.22	10.26	10.21	10.17	10.30	10.65	10.70					
Salinity	0.1	0	0	0	0	0	0	0					
TDS	0.7	0.7	0.6	0.6	0.7	0.7	0.6	0.6					
Redox (mV)	65	-109	-113	-117	-119	-122	-123	-125					

Notes: initiated purge at 11:20