AECOM Environment

Prepared for:
Superfund Standby Program
New York State
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February 2015

Beaver Smelting Site
Fallsburg, NY

Three-Year Periodic Review Report

January 1, 2012 to December 31, 2014

NYSDEC Site Number: 3-53-005
Work Assignment Number D007626-30

Contents

List of Tables

List of Figures

List of Appendices

Engineering Certification

I certify that I am currently a NYS registered professional engineer and that this Periodic Review Report covering the period of January 1, 2012 to December 31, 2014 for the Beaver Smelting Site was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved scope of work and any DER-approved modifications.

Respectfully submitted,
AECOM

February 18, 2015

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Registered Professional Engineer
New York License No. 075332

Date

Executive Summary

The Beaver Smelting Site (site) is located in the Town of Fallsburg, Sullivan County, New York (Figure 1). The site (Site Number 3-53-005) is approximately 13 acres in size and is a former aluminum recycling facility that operated for 25 years, resulting in several large and small piles of ash at the facility. In response to a complaint filed in 1984 and the results of an extraction procedure (EP) toxicity test for lead on ash from these piles, a field investigation and feasibility studies were completed between 1986 and 1989 by the responsible party that showed lead, cadmium, and selenium at values above New York State Department of Environmental Conservation (NYSDEC) groundwater standards. In response, a 1989 Consent Order (CO) agreement with the Attorney General was issued that mandated remediation of the site that included consolidation and containment of the exposed ash piles. This remediation was completed in 1991.

Site management began in January 1992 as part of the CO, with the last round of sampling to be performed by the responsible party in October 1994. The NYSDEC then assumed responsibility to perform site management activities. In 2005, the NYSDEC retained AECOM to complete groundwater monitoring for select Superfund Sites under their standby contract, one of which was the Beaver Smelting Site. The monitoring wells were sampled twice during 2005 and once each during 2007, 2008, 2010, 2011, and 2013.

A Site Management Plan (SMP) was finalized in 2014 (AECOM) defining the site monitoring requirements of inspections semi-annually and groundwater sampling of 11 wells (i.e., MW-2; MW-3; MW-4; MW-5; MW-6, MW-7; MW-9; MW-10; MW-11; MW-12; MW-13) every five quarters.

Based on AECOM's review of the historical data and information as well as completed semi-annual site inspections, the selected remedy at the site continues to function as intended. Due to the continuing persistence of site contaminants detected at elevated levels in the site groundwater and surface water, AECOM recommends continued long-term monitoring including basic site maintenance and the sampling of groundwater and leachate. Additional samples are recommended to be collected from the drainage pipe, the surface water along the west perimeter of the landfill, and from the unnamed stream in spring 2015 for dissolved metals to further evaluate the potential contribution of metals contamination from a seep identified in this area.

AECOM also recommends that groundwater and land use restrictions to the site be implemented in the form of an Environmental Easement or Environmental Notice in order to satisfy deed restrictions required by the CO. The deed restriction referenced in the CO does not discuss what the restrictions are. AECOM contacted the Sullivan County Office during the preparation of this PRR and was informed no site use restrictions exist in the referenced deed, although other deeds were referenced. AECOM later completed a records search at the Sullivan County Office in January 2015 and found no additional information.

1.0 Site Overview

The Beaver Smelting Site (site), NYSDEC Site No. 3-53-005, is located on Beaver Lane in the Town of Fallsburg, Sullivan County, New York (Figure 1). The site is Class 4, which means that the site has been properly closed but requires continued site management consisting of operation, maintenance, and monitoring. There is a small two acre capped landfill located on the west side of Beaver Lane with two large buildings remaining on the site from the former aluminum smelting activity (Figure 2). The surrounding area is both wooded and open grassy fields. Current zoning includes mixed residential, commercial, and agricultural use. The site and buildings are currently used as an equipment storage yard for a local contractor. Surrounding site use consists of a number of residences located on Beaver Lane with agriculture on adjacent fields. The site drains to an unnamed stream, referred to as Beaver Smelting Stream that flows west about 2,000 feet to the Neversink River. The stream originates in the marshy area north of the landfill.

1.1 Remedial History

Beaver Smelting and Refining was an aluminum recycling facility that operated for twenty five years. There were three large and numerous small piles of ash located on the site. In response to a complaint filed in 1984 and the results of an extraction procedure (EP) toxicity test for lead on ash from these piles (13.63 mg/L and 200.45 mg/L), field investigations and feasibility studies were completed between 1986 and 1989 by Lawler, Matusky & Skelly Engineers (LMS) for the Beaver Smelting Company. These investigations reported metals including lead, cadmium, and selenium at values above NYSDEC groundwater standards and led to a 1989 CO agreement with the Attorney General mandating remediation of the site. Per the CO, the goal of the remediation was to alleviate the threat from the hazardous substances on site as well as to prevent the migration of hazardous substances off-site by the consolidation of the ash piles, the stabilization of the hazardous substances contained therein, and the placement of clean fill material layered with lime.

The field investigation involved the following activities from the fall of 1986 through the fall of 1987:

- Construction of 11 shallow (12 to 20 feet deep) groundwater monitoring wells in the sediment adjacent to the three ash fills;
- Drilling of five additional borings in the ash to depths 2 to17 feet below grade;
- Collection of 11 water samples from the groundwater monitoring wells, eight from the seeps at the bases of the fills, and five from the stream;
- Collection of three sediment samples from an on-site pond;
- Laboratory analyses of all water and pond sediment samples for heavy metals and some groundwater samples for volatile organic compounds (VOCs);
- Laboratory analyses of soil samples for cation exchange capacity (CEC);
- Resampling of ground and surface waters for heavy metals;

- Aerial photography and photogrametric mapping of the site and surveying of wells;
- Drilling of 10 borings in each of the three fills and the collection of ash samples; and
- Bench scale chemical treatability study.

The field investigations and feasibility studies were approved in March 1989. Results of these investigations showed groundwater standards being exceeded for lead, cadmium, selenium, and pH and revealed that the overburden consisted of 10 to 20 feet of dense glacial till with large amounts of silt, clay, and fragipan. Due to the very high turbidity of the groundwater in those wells caused by suspended silts and clays, both filtered and unfiltered samples were collected with greater emphasis placed on the results of the filtered (dissolved) results, which are more representative of the groundwater chemistry. The July 1989 results indicated that concentrations ranged from 15 to 48 micrograms per liter (µg/L) for lead and 18 to 120 µg/L for selenium; however, selenium exceeded the standards in the upgradient wells and was therefore not related to the site. No VOCs were detected in the groundwater samples.

A CO for remediation of the site was signed by the Attorney General in March 1990 and includes the following remedial components:

- Consolidation of nearly 9,000 cubic yards of smelter ash;
- Grading and capping of the consolidated ash;
- Institutional controls and restrictions on the use of the property and future use of groundwater; and
- Monitoring of on-site groundwater contamination to monitor the short term and long term effectiveness of the remedy. Per the CO, groundwater monitoring was to consist of analysis of the following parameters:
    - Aluminum,
    - Beryllium,
    - Cadmium,
    - Iron,
    - Lead,
    - Manganese,
    - Selenium, and
    - Hexavalent chromium

In October 1991, approximately 9,000 cubic yards of smelter ash waste was consolidated, stabilized, and capped to prevent direct contact with the waste material and reduce leaching of the contaminants to groundwater. A lime stabilization process was utilized to minimize the potential for contaminant leaching. A groundwater collection trench was constructed upgradient of the landfilled waste to minimize infiltration. Due to the high clay content of the soil, migration of contaminants into the groundwater was deemed unlikely. Site management began in January 1992 as part of the CO. In accordance with the CO, the last round of sampling performed by the RP was conducted in October 1994. The NYSDEC then assumed responsibility to perform site operation, maintenance and monitoring (OM&M). In 2005, the NYSDEC retained AECOM to do groundwater monitoring for

selected Superfund Sites under their Standby Contract, one of which was the Beaver Smelting Site. A Site Management Plan (SMP) was finalized in 2014 (AECOM) that defined the objectives for site monitoring requirements and outlined site maintenance requirements, which included inspections semi-annually and groundwater sampling of 11 wells (i.e., MW-2; MW-3; MW-4; MW-5; MW-6, MW-7; MW-9; MW-10; MW-11; MW-12; MW-13) every five quarters.

The private drinking water supply wells serving homes near this site were sampled in 1988, 1993, 1995, and 2009. Site-related contaminants were not detected in any of the wells sampled. An on-site drinking water supply well was sampled in the spring of 2001. No site-related contaminants were detected.

2.0 Evaluate Remedy Performance, Effectiveness, and Protectiveness

Since remaining waste, contaminated soil, and contaminated groundwater exist beneath the site, engineering and institutional controls (EC/ICs) are required to protect human health and the environment. EC/ICs at the site currently consist of:

- A soil cover placed over consolidated landfilled material to prevent exposure to and migration of contaminants;
- A monitoring well network to be maintained and utilized to monitor the effectiveness of the remedial program on the groundwater at the site;
- A perimeter ditch installed to minimize infiltration of groundwater into the soil cover and to collect surface runoff;
- Land use restrictions; and
- Development and implementation of a SMP that defines the scope of required activities to properly maintain the site and ensure remedy effectiveness. This SMP outlines requirements for:
    - Long-term monitoring of negatively impacted environmental media to provide the necessary data to determine the effectiveness of the remedy, and
    - Semi-annual site inspections to verify condition of the ECs on the site.

The site has been maintained, and monitoring events have been performed (1992 through 2013) following completion of the remedial activities. The site inspections and groundwater monitoring performed at the site during the reporting period covered by this PRR, January 1, 2012 to December 31, 2014, were completed in general accordance with the draft SMP (AECOM 2008) and final SMP (AECOM 2014).

2.1 Operation, Maintenance, and Monitoring Plan Compliance Report

2.1.1 Confirm Compliance with the OM&M Plan

Site inspections are to be conducted semi-annually with a landfill inspection form completed detailing the observations. Specific areas of the inspection include the following at a minimum:

- Cap integrity (e.g., standing water, deep rooting vegetation, stressed vegetation, settling, erosion, leachate outbreaks, burrowing animals);
- Perimeter ditch condition; and
- Monitoring well network condition (e.g., identification, accessibility, physical damage, missing components, security, and infestation).

Site inspections completed in January and June of 2014 verified that the ECs were maintained as designed. AECOM did not complete site inspections during the first year of this reporting period (2012) because no work assignment existed between AECOM and the NYSDEC. Approval for Work Assignment D007623-30, which covers the work discussed herein, was received on June 28, 2013.

No issues were found with the monitoring well network. All wells were found to be in good condition. Site and monitoring well inspection logs are included as Appendix A as well as photo logs from the site inspections.

A previously identified seep was observed to still be active on the west side of the landfill during both the January 2014 and June 2014 site inspections. In January 2014 the seep was frozen. During the June 2014 site inspection, samples were collected from the surface water and drainage pipe at six locations above and below the west seep. Results for these samples are discussed below in Section 2.1.2.

Pursuant to the draft SMP (AECOM, 2008) and Final SMP (AECOM, 2014), groundwater quality at each of the site monitoring wells is to be monitored until concentrations of contaminants are less than the established remedial goals. During this reporting period, groundwater sampling of the site's monitoring well network for total and dissolved metals was completed in October 2013. A Groundwater Monitoring Report evaluating the results of the site monitoring and assessing whether this remedy is performing effectively was submitted in January 2014 for the October 2013 sampling. Results of this monitoring performed to date are discussed in Section 2.1.2, and data are presented in Tables 1, 2 and 3 and Appendix B. Figure 3 shows the 2013 groundwater concentrations for metals where the dissolved fractions exceed the ambient water quality standards.

Activity	Required Frequency		Compliance Dates
	Semi-Annual	15 Months	
Groundwater Sampling		X	October 2013
Soil Cover Inspection*	X		January 2014; June 2014
Perimeter Ditch Inspection*	X		January 2014; June 2014
Monitoring Well Network Inspection*	X		January 2014; June 2014

*Note: AECOM did not complete groundwater monitoring or site inspections during the first year of this reporting period (2012). Approval for the current work assignment (D007623-30) was received on June 28, 2013.

2.1.2 Comparison with Remedial Objectives

Tables 1 through 3 and Appendix B include data from the monitoring events performed between 1992 and 2013. The figures in Appendix B show the temporal trends for the contaminants that exceeded the New York State Ambient Water Quality Standards (AWQS) or Guidance Values (TOGS 1.1.1) in at least one of the samples collected during the monitoring period. Figure 3 shows the 2013 groundwater concentrations for the metals where the dissolved fraction exceeds the ambient water quality standards.

As noted during the early field investigations completed during the late 1980s and observed during subsequent sampling events, the turbidity in the site groundwater is very high, ranging from about 12 nephelometric turbidity units (NTUs) to levels exceeding the instrument limit (>1,000 NTUs) during the October 2013 sampling event. In order to provide a more comprehensive view of the groundwater quality in the vicinity of the site with respect to metals, both filtered and unfiltered groundwater samples were collected in 2013 and analyzed for each well consistent with Section 2.1 of NYSDEC DER-10 (May 3, 2010). These results are discussed below.

Unfiltered Groundwater Samples

Total concentrations of metals from the 2013 monitoring event were generally consistent with previous sample results (see Table 1). Iron, lead, and manganese are found widely distributed in the monitoring wells at concentrations exceeding the respective New York State Ambient Water Quality Standards (AWQS) (TOGS 1.1.1). Detections of iron ranged from 139 to 92,200 µg/l. The AWQS of 300 µg/l was exceeded at all sampled wells with the exception of MW-12 and MW-13, which are both located to the west of the landfill. Detections of lead ranged from 7.4 to 1,010 µg/l. The AWQS for lead of 25 µg/l was exceeded in all wells with the exception of MW-3, MW-9, MW-12, and MW-13, which are located upgradient from and to the west of the landfill. Detections of manganese ranged from 235 to 9,040 µg/l, exceeding the AWQS of 300 µg/L at all wells except MW-6, which is located to the east of the landfill.

In addition to the more widespread exceedances, exceedances were observed for the following parameters:

- Selenium was detected in site groundwater at concentrations exceeding the AWQS of 10 µg/L at three of the monitoring wells: 132 µg/L at MW-2, 10.3 µg/L at MW-3, and 11.1 µg/L at MW-10. Selenium was below the method detection limit for all other monitoring wells. Despite concentrations being above the AWQS, concentrations at MW-3 and MW-10 appear to be steadily declining.

- Sodium was detected in site groundwater at concentrations exceeding the AWQS of 20,000 µg/L at three monitoring wells: 23,300 µg/L at MW-4, 25,700 µg/L at MW-12, and 32,000 µg/L at MW-13. Sodium concentrations in all wells are consistent with previous sampling events or appear to be declining with the exception of MW-12. During the 2010 and 2011 sampling, sodium was detected in MW-12 at concentrations of 6,200 and 6,640 µg/L, respectively. The results for the 2013 sampling have increased considerably compared to concentrations observed during the 2005 and 2008 monitoring events.

- Thallium was detected in the site groundwater at a concentration of 10 µg/L at MW-4, exceeding the AWQS of 0.5 µg/L. Thallium has been detected in this well during the 2011 and 2013 sampling events only. There were no detections above the reporting or method detection limits of 1.9 µg/L in the other site wells; however, the laboratory limit exceeds the AWQS of 0.5 µg/L.

In addition to the exceedances discussed above, MW-4 continues to be a source of detections above the AWQS for arsenic, barium, cadmium, chromium, and nickel and above the guidance values for antimony and beryllium.

Filtered Groundwater Samples

Due to the elevated turbidity in the groundwater on this site, filtered samples were also collected and analyzed for metals. While the dissolved samples did indicate fewer exceedances of the respective AWQS and guidance values, exceedances were still observed (see Table 2).

Based on the results for the filtered data, exceedances of the AWQS for iron, manganese, and sodium were most widespread across the site. The AWQS for iron (300 µg/L) was exceeded at MW-4, MW-9, and MW-10 with elevated concentrations ranging from 944 to 5,720 µg/L. The AWQS for manganese (300 µg/L) was exceeded at MW-3, MW-4, MW-5, MW-10, MW-12, and MW-13 with elevated concentrations ranging from 218 to 1,780 µg/L. The AWQS for sodium (20,000 µg/L) was exceeded at MW-4, MW-12, and MW-13 with elevated concentrations ranging from 22,800 to 32,900 µg/L.

In addition to the more widespread exceedances, the following exceedances were observed in the dissolved samples:

- The AWQS for selenium (10 µg/L) was exceeded at MW-2 and MW-10 at concentrations of 140 and 10.3 µg/L, respectively.
- The guidance value for antimony (3 µg/L) was exceeded at MW-4 at a concentration of 11.8 µg/L.
- The AWQS for arsenic (25 µg/L) was exceeded at MW-4 at a concentration of 111 µg/L.
- The AWQS for lead (25 µg/L) was exceeded at MW-4 and MW-10 at concentrations of 194 and 26.7 µg/L, respectively.
- Thallium exceeded the AWQS of 0.5 µg/L at MW-4 with a concentration of 2.7 µg/L.

Surface Water

Leachate samples were collected from the site in 1981, 2000, 2002, and 2009. The exact location of where these samples were collected is unknown, but they are believed to be from the vicinity of the LEACHATE sample identified on Figure 2. Analytical results for these samples are summarized in Table 3 and indicate a continuing source of metals, including lead, to the on-site surface water. To further evaluate this source, samples were collected from surface water and the drain pipe adjacent to the main waste mass on the west side of the landfill for metals during the October 2013 sampling event and again in June 2014 to assess the seep present along the west slope of the landfill.

Along the west perimeter of the landfill, there is an intermittent stream that runs along the top of a buried drain pipe that originates near the northwestern edge of the landfill (see Figure 4). The pipe and this stream then discharge to a drainage ditch in the area of the Down Pipe sample shown on Figure 4. During the 2014 sampling, surface water was collected from the following locations:

- Up Pipe – Collected at the inflow of the drainage pipe that runs below the intermittent stream: lead was detected at 192 µg/L.
- Down Pipe – Collected at the outflow of the drainage pipe that runs below the intermittent stream: lead was detected at 86.1 µg/L.

- Up Ditch – Collected from the surface water adjacent to the landfill, approximately 5 feet upgradient from the West Seep: lead was detected at 4.8 µg/L.

- West Seep – Collected from the surface water adjacent to the landfill at the location of the West Seep: lead was detected at 370 µg/L.

- Down Ditch – Collected from the surface water adjacent to the landfill, approximately 5 feet downgradient from the West Seep: lead was detected at 47.3 µg/L.

- Ponded Area - Collected from the standing water where surface runoff from both the site as well as Beaver Lane pools: lead was detected at 5,800 µg/L.

These Up Pipe and Down Pipe samples suggest a source upgradient of the landfill with dilution at the outlet of the drain pipe. The Up Ditch, West Seep and Down Ditch samples from the surface water adjacent to the landfill suggest the seep does contribute to the metals in the on-site surface water; however, due to the elevated concentration upgradient from the landfill (192 µg/L), there appears to be an additional source that should be further evaluated. No water flow estimates were made during the time of the sampling; however observations during site inspections indicate intermittent water flow from both the west seep as well as in the drain pipe and ditch. At the time of sample collection in June 2014, there was approximately 3 inches of water in the ditch with minimal flow. Although the seep appeared to be active, there was no measurable flow at the time of the site visit. The Ponded Area sample indicates the accumulation of lead, as this area is a low spot and collected water either infiltrates into the groundwater or evaporates.

To further evaluate the potential contribution of metals contamination from the landfilled material, additional sampling is recommended during spring 2015 to include the dissolved fraction, and an attempt will be made to collect water directly from the seep prior to it entering the drainage ditch. This may be accomplished by digging slightly into the surface of the seep to collect sufficient standing water. Sediment samples from the ponded area and ditch should also be collected and analyzed for metals to further evaluate the extent of the contamination. Surface water and sediment samples should be collected from the unnamed stream, across Beaver Lane, to assess the potential for contaminant migration offsite.

2.2 Engineering and Institutional Control Plan Compliance Report

Determination of compliance with the IC\ECs at the site is made based on the following criteria:

- The IC/ECs applied at the site are in place and as prescribed in the CO and subsequent work plan and SOW. Site conditions are as designed for the certification period from January 1, 2012 through December 31, 2014.

- The deed restriction referenced in the CO does not describe the site restrictions. AECOM contacted the Sullivan County Office during the preparation of this PRR and was informed no site use restrictions exist in the referenced deed, although other deeds were referenced. AECOM later completed a records search at the Sullivan County Office in January 2015 and found no additional information.

- Nothing has occurred that would impair the ability of such controls to protect the public health and the environment, or constitute a violation or failure to comply with any element of the SMP for such controls.

2.2.1 IC / EC Certification Forms

See Appendix C for the Standby Consultant/Contractor Certification Form and the Property Owner Survey.

3.0 Evaluate Costs

Total annual costs for completion of all the required monitoring and reporting is approximately $15,000. Major cost components are allocated as follows:

Long-term monitoring and reporting	$9,200 (with analytical costs)
Semi-annual inspections and associated reporting	$5,800

4.0 Conclusions and Recommendations

4.1 Conclusions

The PRR process is used for determining if a remedy continues to be properly managed, as set forth in the SMP and continues to be protective of human health and the environment. On the Beaver Smelting Site, metals remain widely distributed across the site in groundwater and surface water surrounding the landfill at concentrations exceeding the applicable standards.

The following remedial elements were included in the 1989 CO:

- Consolidation of approximately 9,000 cubic yards of smelter ash: **Completed in 1991**.

- Installation of a soil cover and perimeter ditch: **Completed in 1991 with the construction of the landfill cover and ditch.** Based on site inspections completed during this reporting period, the cap and ditch appear to be intact and maintained. At least one active seep has been identified on the west slope of the landfill. An evaluation as to whether the seep contains leaching site contaminants has begun, as discussed in Section 2.1, with the collection of additional samples being recommended.

- Monitoring well network: **Inspections completed semi-annually demonstrating the monitoring well network is intact and well maintained**.

- Deed restrictions: **No apparent restrictions exist for land use on the site**. The deed restriction referenced in the CO does not discuss what the restrictions are. AECOM contacted the Sullivan County Office during the preparation of this PRR and was informed no site use restrictions exist in the referenced deed, although other deeds were referenced. An environmental easement or environmental notice is recommended for the site.

- Groundwater Monitoring: **Completed pursuant to the SMP during the current reporting period**, and levels of metals continue to exceed regulatory limits.

4.2 Recommendations

Based on the PRR, recommendations for the Beaver Smelting Site include the following:

- Continuing semi-annual site inspections including the perimeter ditch, monitoring wells, and cap integrity;

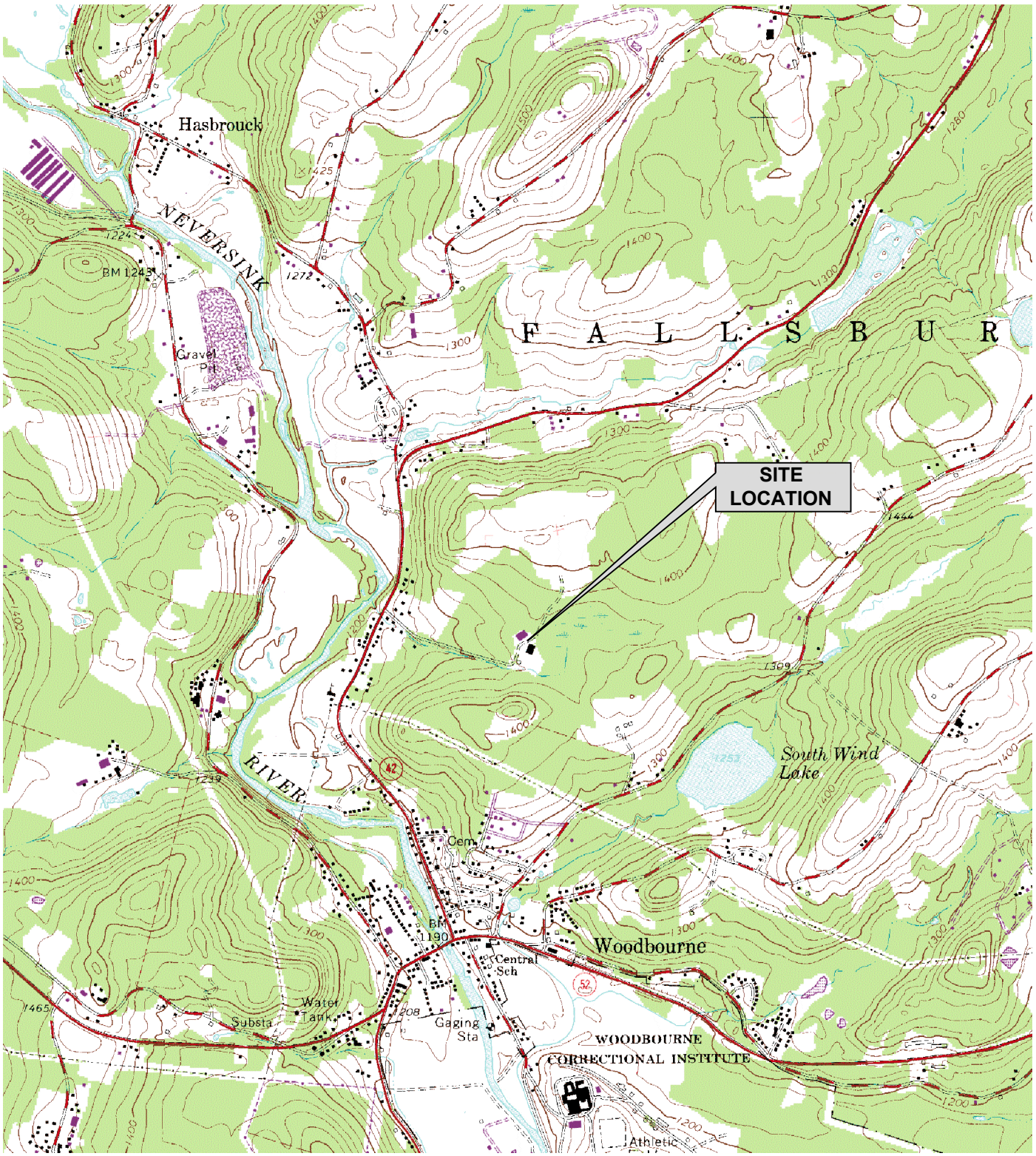
- Continuing groundwater monitoring on a five quarter basis from the current monitoring well network;

- Monitoring sediment and surface water in ponded areas, drainage ditch, and seep on a five quarter basis, through sampling and estimating water flow;

- Completing an elevation survey of the monitoring well network; surface water and seep locations; collecting groundwater/surface water/seep elevations, and developing a groundwater flow map (this is currently planned for spring 2015); and

- Implementing groundwater and land use restrictions to the site in the form of an environmental easement or environmental notice.

Figures



MAPPING REFERENCE:
BACKGROUND IMAGERY FROM NEW YORK STATE GIS CLEARING HOUSE.

0' 1000' 2000' 400'

AECOM

FIGURE 1
SITE LOCATION MAP
BEAVER SMELTING SITE
NYSDEC SITE # 353005
TOWN OF FALLSBURG, NEW YORK

FILE NAME:	DRN	PROJECT NO.	DATE	FIGURE NO.
	---	60302031.2	12/2013	1

Plotted By: meisterk
Layout-Sheet Name: FIGURE 1
Plot File Date Created: Dec/09/2013 11:20 AM

Filename: P:\105989\CADD\BEAVER_SMELTING_IMAGE.DWG

Plotted By: meisterk
Layout-Sheet Name: FIGURE 2
Plot File Date Created: Jan/02/2014 9:16 AM
Filename: P:\105989\CADD\BEAVER_SMELTING_IMAGE.DWG

MAPPING REFERENCE:
BACKGROUND IMAGERY FROM NEW YORK STATE GIS CLEARING HOUSE.

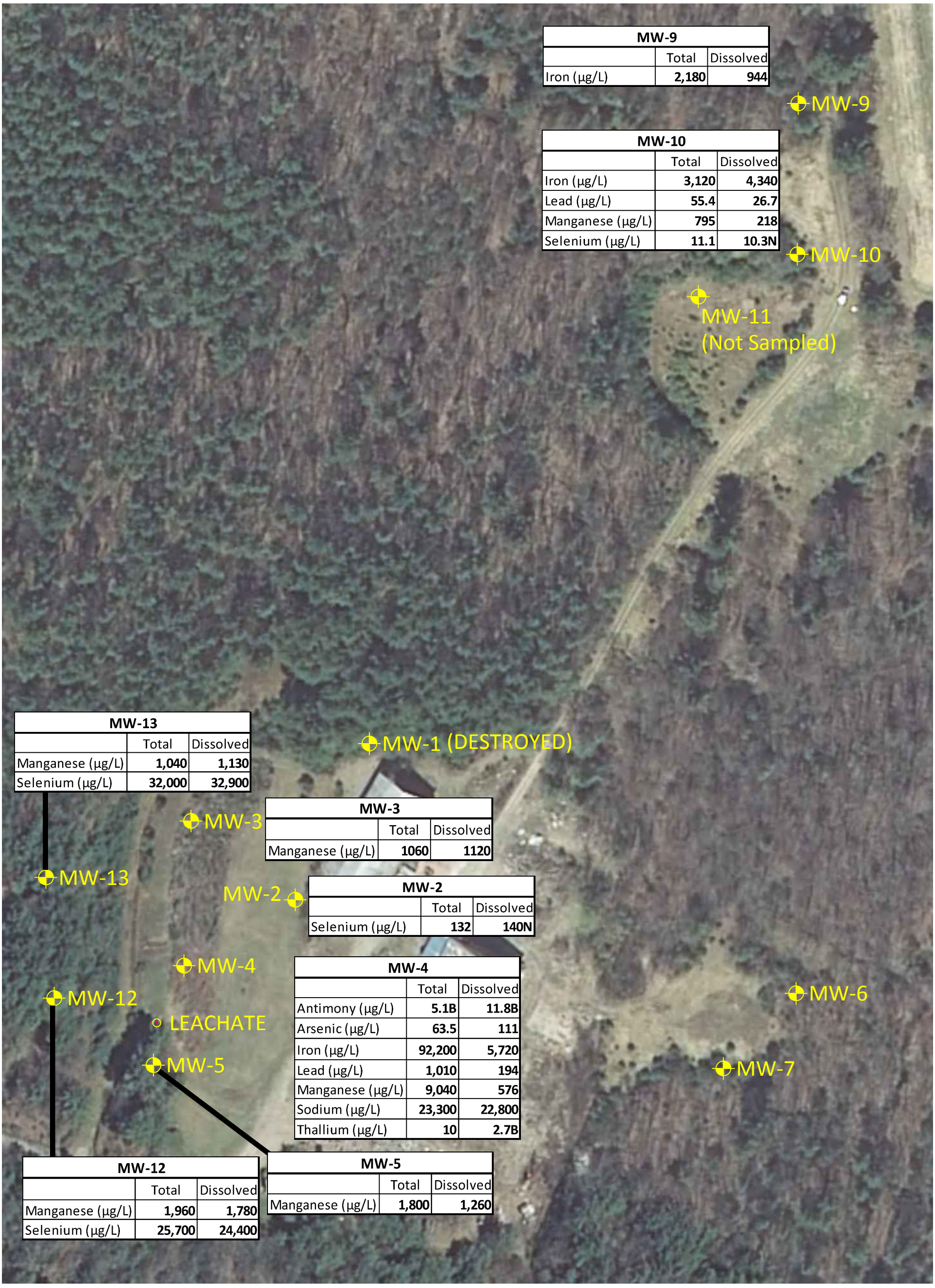
0' 50' 100' 200'

APPROXIMATE

AECOM

FIGURE 2
LOCATION OF MONITORING WELLS
BEAVER SMELTING SITE
NYSDEC SITE # 353005
TOWN OF FALLSBURG, NEW YORK

FILE NAME:	DRN	PROJECT NO.	DATE	FIGURE NO.
	---	60302031.2	12/2013	2



MW-9		
	Total	Dissolved
Iron (µg/L)	**2,180**	**944**

MW-10		
	Total	Dissolved
Iron (µg/L)	**3,120**	**4,340**
Lead (µg/L)	**55.4**	**26.7**
Manganese (µg/L)	**795**	**218**
Selenium (µg/L)	**11.1**	**10.3N**

MW-13		
	Total	Dissolved
Manganese (µg/L)	**1,040**	**1,130**
Selenium (µg/L)	**32,000**	**32,900**

MW-3		
	Total	Dissolved
Manganese (µg/L)	**1060**	**1120**

MW-2		
	Total	Dissolved
Selenium (µg/L)	**132**	**140N**

MW-4		
	Total	Dissolved
Antimony (µg/L)	**5.1B**	**11.8B**
Arsenic (µg/L)	**63.5**	**111**
Iron (µg/L)	**92,200**	**5,720**
Lead (µg/L)	**1,010**	**194**
Manganese (µg/L)	**9,040**	**576**
Sodium (µg/L)	**23,300**	**22,800**
Thallium (µg/L)	**10**	**2.7B**

MW-12		
	Total	Dissolved
Manganese (µg/L)	**1,960**	**1,780**
Selenium (µg/L)	**25,700**	**24,400**

MW-5		
	Total	Dissolved
Manganese (µg/L)	**1,800**	**1,260**

MAPPING REFERENCE:
BACKGROUND IMAGERY FROM NEW YORK STATE GIS CLEARING HOUSE.
NOTES:

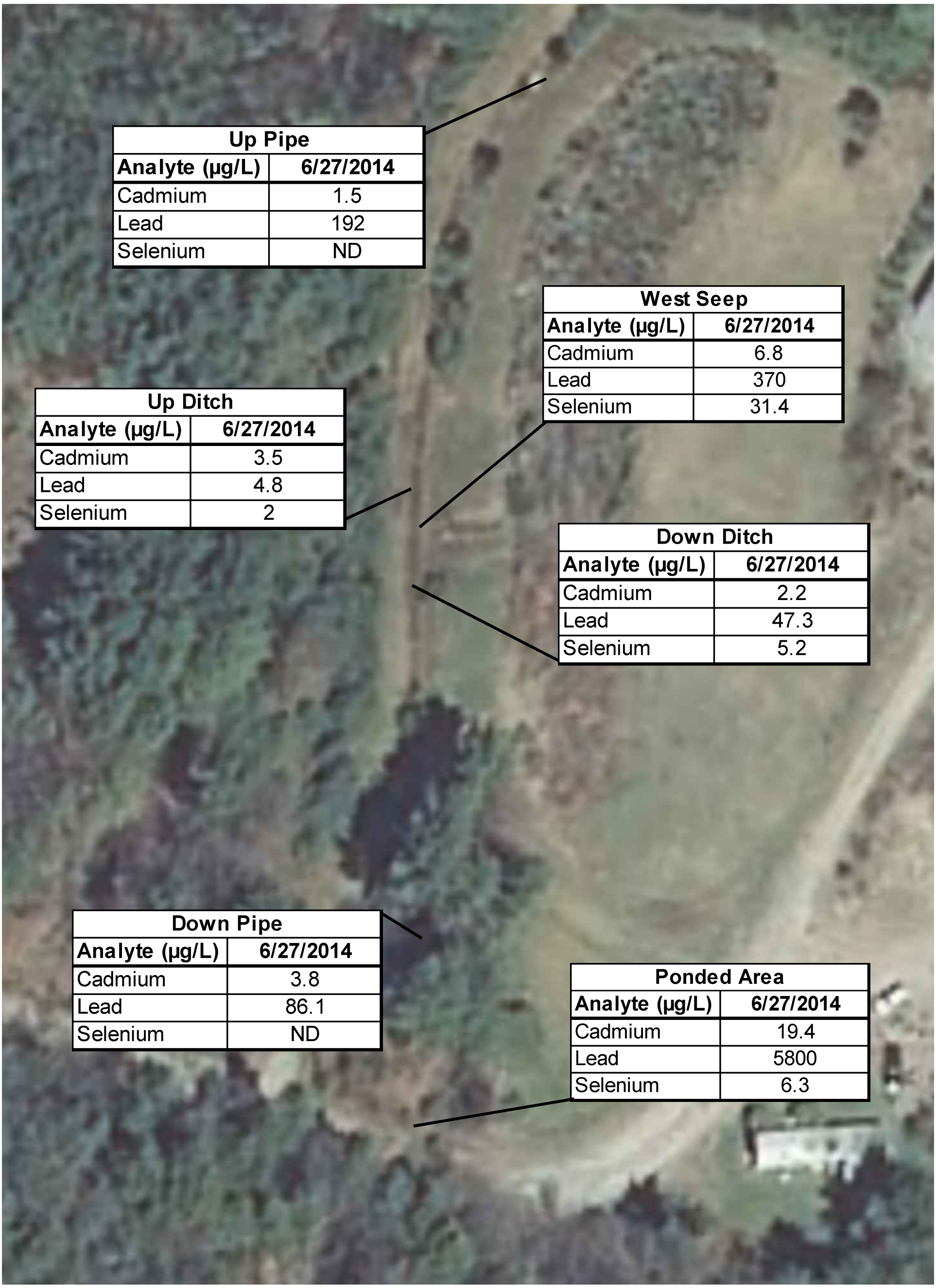
*GROUNDWATER METALS RESULTS WHERE DISSOLVED FRACTIONS EXCEEDED AMBIENT WATER QUALITY STANDARDS.
B: THE REPORTED VALUE IS LESS THAN THE CONTRACT REQUIRED DETECTION LIMIT BUT GREATER THAN THE INSTRUMENT DETECTION LIMIT.
N: MATRIX SPIKE SAMPLE RECOVERY IS NOT WITHIN CONTROL LIMITS.

0’ 50’ 100’ 200’
APPROXIMATE

AECOM

FIGURE 3
GROUNDWATER METALS RESULTS*
BEAVER SMELTING SITE
NYSDEC SITE # 353005
TOWN OF FALLSBURG, NEW YORK

FILE NAME:	DRN	PROJECT NO.	DATE	FIGURE NO.
	---	60302031.2	01/2015	3



Up Pipe	
Analyte (µg/L)	**6/27/2014**
Cadmium	1.5
Lead	192
Selenium	ND

West Seep	
Analyte (µg/L)	**6/27/2014**
Cadmium	6.8
Lead	370
Selenium	31.4

Up Ditch	
Analyte (µg/L)	**6/27/2014**
Cadmium	3.5
Lead	4.8
Selenium	2

Down Ditch	
Analyte (µg/L)	**6/27/2014**
Cadmium	2.2
Lead	47.3
Selenium	5.2

Down Pipe	
Analyte (µg/L)	**6/27/2014**
Cadmium	3.8
Lead	86.1
Selenium	ND

Ponded Area	
Analyte (µg/L)	**6/27/2014**
Cadmium	19.4
Lead	5800
Selenium	6.3

MAPPING REFERENCE:
BACKGROUND IMAGERY FROM NEW YORK STATE GIS CLEARING HOUSE.
NOTES:
1. Up Pipe and Down Pipe were collected from the inflow and outflow of a drainage pipe that runs buried beneath the perimeter ditch on the west side of the landfill. The pipe then discharges to the perimeter ditch.
2. West Seep was collected from the perimeter ditch just downslope from the seep.
3. Up Ditch and Down Ditch were collected just above and below the West Seep sample.
4. ND – analyte not detected above the laboratory reporting limit.
5. Samples from 2014 Perimeter Ditch Sampling

N

0’ 50’ 100’ 200’

APPROXIMATE

AECOM

FIGURE 4
CADMIUM, LEAD, AND SELENIUM RESULTS
BEAVER SMELTING SITE
NYSDEC SITE # 353005
TOWN OF FALLSBURG, NEW YORK

FILE NAME:	DRN	PROJECT NO.	DATE	FIGURE NO.
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Tables

Table 1
Analytical Results for Unfiltered Groundwater Samples
Beaver Smelting
Fallsburg, New York
Contaminants of Concern
April 1992 to October 2013

Analyte		Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
AWQS + GV		*NA*	*3 (GV)*	*25*	*1000*	*3 (GV)*	*5*	*NA*	*50*	*NA*	*200*	*300*	*25*	*35,000 (GV)*	*300*	*0.7*	*100*	*NA*	*10*	*50*	*20,000*	*0.5*	*NA*	*2,000 (GV)*
MW-2	Apr-92	5100	-	-	-	U	**5**	-	-	-	-	**4500**	**500**	-	**1000**	-	-	-	**15**	-	-	-	-	-
	Jul-92	4300	-	-	-	U	**6**	-	-	-	-	**4200**	**470**	-	**950**	-	-	-	**190**	-	-	-	-	-
	Oct-92	14000	-	-	-	2	**10**	-	-	-	-	**17000**	**770**	-	**2000**	-	-	-	**240**	-	-	-	-	-
	Jan-93	16600	-	-	-	**3**	**10**	-	-	-	-	**11800**	**1400**	-	**2000**	-	-	-	**211**	-	-	-	-	-
	Apr-93	9300	-	-	-	2	**8**	-	-	-	-	**7200**	**1020**	-	**1400**	-	-	-	**184**	-	-	-	-	-
	Jul-93	5700	-	-	-	1	**8**	-	-	-	-	**6500**	**516**	-	**1000**	-	-	-		-	-	-	-	-
	Oct-93	4500	-	-	-	U	**6**	-	-	-	-	**3100**	**570**	-	**800**	-	-	-	**135**	-	-	-	-	-
	Apr-94	17200	-	-	-	U	U	-	-	-	-	**25100**	**313**	-	**1100**	-	-	-	**83.5**	-	-	-	-	-
	Oct-94	15800	-	-	-	U	U	-	-	-	-	**23500**	**383**	-	**1100**	-	-	-	**191**	-	-	-	-	-
	Nov-98	6640	-	-	-	U	3.8B	-	-	-	-	**11400**	**100**	-	**506**	-	-	-	**341**	-	-	-	-	-
	Nov-99	780	-	-	-	1	**7**	-	-	-	-	**550**	**64**	-	170	-	-	-	**260**	-	-	-	-	-
	Oct-00	38700 E	U	**40.7**	382	2.7B	U	12800	**68.4**	48.8 B	**286**	**54,800**	**334**	**43400**	**2,220**	U	82.8	38300 E	**180**	6.1 B	2810 B	U	30.8 B	321
	Apr-02	3800	U	U	U	U	U	12000	U	U	100	**4,800**	**140**	**45000**	**530**	U	U	26000	**230**	U	3800 B	U	U	60
	Nov-02	3200	U	U	U	U	U	10000	U	U	57	**5,000**	**82**	**37000**	**540**	U	U	28000	**280**	U	3500 B	U	U	27
	May-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-05	55,700	**39.5J**	**42.9**	555	**4.5J**	U	15,000	**92**	70.3	**417**	**96,700**	**542**	**47,900**	**3,980**	0.27	**126**	31,500	**57.9**	5.3J	5,610	U	29.2J	468
	Sep-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Feb-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-13	2190*E	U	2.2B	116B	U	0.60B	12300E	4.4B	4.6B	65.2	**1700***	**154***	26000E	**563**	U	4.9B	16500E	**132**	U	U	U	1.2B	79.2E
MW-3	Apr-92	470	-	-	-	U	U	-	-	-	-	180	U	-	**2900**	-	-	-	**32**	-	-	-	-	-
	Oct-92	7100	-	-	-	U	**10**	-	-	-	-	**8900**	**39.4**	-	**7400**	-	-	-	**53**	-	-	-	-	-
	Jul-92	940	-	-	-	U	**8**	-	-	-	-	**440**	5.3	-	**5700**	-	-	-	**70**	-	-	-	-	-
	Oct-00	1720 E	U	U	39.6 B	.26 B	U	25900	1.6 B	2.8 B	14.8 B	**2070**	2.1 B	12400	**1670**	U	14.3 B	12200 E	**38**	U	**26700**	U	1.6 B	68.9
	Apr-02	1400	U	U	U	U	U	30000	U	U	30	**2000**	U	15000	**1100**	U	U	9100	**38**	U	**29000**	U	U	77
	Nov-02	320	U	U	U	U	U	23000	U	U	U	**480**	U	11000	**810**	U	U	10000	**40**	U	**27000**	U	U	26
	May-05	46,800	U	16.2	680	**3.96J**	U	34,000	**62.2**	52.9	**535**	**68,300**	**87.8**	30,800	**2,710**	0.56	**115**	13,900	**29.9**	U	**22,800**	U	42.1J	674
	Oct-05	17,000	U	12.9	252	1.3J	U	30,200	12.2	15.7J	162	**30,400**	**69.2**	17,600	**1,640**	0.15J	42.9	10,300	**20.2**	2.8J	**20,600**	**5.5J**	U	200
	Sep-08	2,130	U	U	61.5	U	U	19,900	2.97J	U	17.7	**4,070**	4.55J	9,320	**793**	U	11J	8,360	**35.8**	U	**20,800**	U	U	52.9
	Feb-10	3,520		U	54.1	U	U	19,200	3.28J	J	11.9	**4,640**	5.92J	9,730	**804**	0.07J	12.3J	7,390	**32.2**		18,000		4.48J	53
	Nov-11	855	**6.95 J**	4.55 J	41.5 J	U	U	22,800	U	U	13.6	**1,980**	2.39 J	10,300	**894**	U	12.4 J	7,990	**29.3**	2.01 J	**21,000**	**6.33 J**	U	46.3
	Oct-13	930*E	U	U	55.2B	0.30B	0.30B	28600E	2.6B	1.8B	16B	**1130***	11.4*	12000E	**1060**	U	8.9B	8720E	**10.3**	U	17,500	U	0.90B	76.9E
MW-4	Apr-92	380	-	-	-	U	U	-	-	-	-	**460**	U	-	**2600**	-	-	-	**37**	-	-	-	-	-
	Jul-92	340	-	-	-	U	U	-	-	-	-	270	6.2	-	**4000**	-	-	-	**150**	-	-	-	-	-
	Oct-92	5100	-	-	-	1	**10**	-	-	-	-	**6900**	U	-	**5900**	-	-	-	**254**	-	-	-	-	-
	Jan-93	11900	-	-	-	4	**20**	-	-	-	-	**8900**	**61**	-	**12400**	-	-	-	**231**	-	-	-	-	-
	Apr-93	5600	-	-	-	3	**30**	-	-	-	-	**3100**	**39**	-	**16900**	-	-	-	**106**	-	-	-	-	-
	Jul-93	2700	-	-	-	2	**20**	-	-	-	-	**830**	18	-	**11100**	-	-	-	U	-	-	-	-	-
	Oct-93	890	-	-	-	U	**20**	-	-	-	-	**450**	3.7	-	**13100**	-	-	-	**12.2**	-	-	-	-	-
	Apr-94	4300	-	-	-	U	**7**	-	-	-	-	**6400**	9.7	-	**9900**	-	-	-	U	-	-	-	-	-
	Oct-94	2500	-	-	-	U	U	-	-	-	-	**3600**	19.7	-	**9500**	-	-	-	2.2	-	-	-	-	-
	Nov-98	9420	-	-	-	1.8B	**6.3**	-	-	-	-	**11800**	**162**	-	**934**	-	-	-	3.3B	-	-	-	-	-
	Nov-99	2600	-	-	-	1.1	**7**	-	-	-	-	**2400**	**310**	-	**680**	-	-	-	5	-	-	-	-	-
	Oct-00	17300	U	**312**	140 B	2.1B	4.1B	8900	20.9	12.8 B	174	**16500**	**268**	4580 B	**963**	U	31.1 B	329000 E	U	U	**102000**	U	50.3	114
	Apr-02	6700	U	120	U	U	U	7600	U	U	110	**4900**	**250**	2600 B	**720**	U	U	260000	U	U	**100000**	U	29 B	83
	May-05	43,000	U	**146**	420	**4.52J**	**7.4**	9,270	**108**	55.9	**465**	**57,600**	**584**	16,200	**2,810**	0.45	90.1	221,000	U	U	**68,100**	U	68.7	397
	Oct-05	44,500	**35.4J**	**270**	442	**5.7**	3.1J	10,500	**65.8**	63.9	**500**	**67,900**	**696**	16,200	**3,130**	0.41	91.9	NA	5.7J	5.0J	**62,900**	U	66	468
	Sep-08	39,700	U	**122**	343	**4.16**	**8.44**	6,770	**64.1**	40.5	**390**	**53,100**	**484**	12,300	**2,390**	0.27	69.9	132000	**14.2**	U	**38,000**	U	63.4	291
	Feb-10	31,200	U	**92.3**	297	**3.65**	**5.39**	6,800	**55**	37	**288**	**49,500**	**387**	11,600	**2,190**	0.1J	68	97,700	**15.2**	U	**27,000**	U	49.9	265
	Nov-11	30,700	U	**113.0**	443	**5.81**	**7.65**	5,410	**54.5**	41.9	**421**	**41,200**	**585**	9,080	**3,080**	0.3 J	64	103,000	5.87 J	U	**25,400**	**5.65 J**	48.8	281
	Oct-13	63400*E	**5.1B**	**63.5**	**1,020**	**20.1**	**12.7**	17600E	**117**	98	195	**92200***	**1010***	15900E	**9,040**	U	**121**	115000E	U	U	**23,300**	**10**	93.7	733E
MW-5	Apr-92	340	-	-	-	U	U	-	-	-	-	180	U	-	**1100**	-	-	-	**44**	-	-	-	-	-
	Jul-92	390	-	-	-	U	U	-	-	-	-	280	U	-	**1700**	-	-	-	**140**	-	-	-	-	-
	Oct-92	6100	-	-	-	1	U	-	-	-	-	**8800**	17.6	-	**2100**	-	-	-	**119**	-	-	-	-	-
	Jan-93	3700	-	-	-	U	U	-	-	-	-	**3600**	16.2	-	**2100**	-	-	-	**46.5**	-	-	-	-	-
	Apr-93	2800	-	-	-	U	U	-	-	-	-	**3100**	11.4	-	**2000**	-	-	-	**42.9**	-	-	-	-	-
	Jul-93	1600	-	-	-	U	U	-	-	-	-	**1600**	13.1	-	**2400**	-	-	-	U	-	-	-	-	-
	Oct-93	1700	-	-	-	U	U	-	-	-	-	**1500**	7.9	-	**1400**	-	-	-	**26.6**	-	-	-	-	-
	Apr-94	3100	-	-	-	U	U	-	-	-	-	**4800**	4.6	-	**1600**	-	-	-	**14.9**	-	-	-	-	-
	Oct-94	1500	-	-	-	U	U	-	-	-	-	**2300**	4	-	**2100**	-	-	-	**39.6**	-	-	-	-	-
	Nov-98	6890	-	-	-	U	3.8B	-	-	-	-	**15000**	6.5	-	**2440**	-	-	-	**13.7**	-	-	-	-	-
	Nov-99	1100	-	-	-	U	**7**	-	-	-	-	**1600**	3	-	**1000**	-	-	-	**14**	-	-	-	-	-
	Oct-00	2370 E	U	1.8 B	115 B	0.3B	U	22800	3.2 B	5.0 B	11.5 B	**3380**	3.8	13900	**2090**	U	13.8 B	17100 E	**12.2**	U	18500	U	1.9 B	37.9
	Apr-02	350	U	U	U	U	U	16000	U	U	U	270	U	11000	**1400**	U	U	9200	**13**	U	16000	U	U	28
	May-05	34,400	U	**25.5**	577	2.92J	U	27,100	**70.6**	44.4J	93.1	**55,500**	**55.6**	26,600	**3,410**	0.13J	88.5	12,400	8.5J	U	11,400	U	31.7J	283
	Oct-05	37,500	**28.6J**	**25.5**	631	**3.4J**	U	31,100	**69.2**	47.8J	104	**68,900**	**78.3**	29,400	**3,600**	U	88.5	13,800	8.4J	3.7J	14,800	**5.5J**	16.1J	260
	Sep-08	6,100	U	U	159	0.48J	U	15,000	9.58J	7.48J	19.8	**9,520**	10.5	10,200	**1,410**	U	15.8J	12,600	**11**	U	8,190	U	5.98J	54
	Feb-10	2,700	U	U	111	U	U	14,700	3.37J	U	10	**3,630**	4.32J	9,420	**999**	0.12J	7.25J	10,700	6.59J	U	6,740	U	U	31.2
	Nov-11	7,570	U	7.19 J	279	1.47 J	U	15,900	13.2	13.8 J	35.5	**11,300**	**27.8**	9,380	**1,720**	U	21.9	10,000	7.63 J	1.49 J	7,110	**6.46 J**	5.68 J	92.8
	Oct-13	4370*E	U	1.5B	287	1.1B	U	18700E	8.7B	8.6B	18B	**4520***	**32.2***	9900E	**1,800**	U	10.6B	14500E	U	U	5,700	U	3.6B	75.7E
MW-6	Apr-92	1500	-	-	-	U	**7**	-	-	-	-	230	U	-	**670**	-	-	-	U	-	-	-	-	-
	Jul-92	1700	-	-	-	0.2	**8**	-	-	-	-	**1100**	**36**	-	**650**	-	-	-	U	-	-	-	-	-
	Oct-92	10000	-	-	-	**4**	**10**	-	-	-	-	**17000**	**180**	-	**800**	-	-	-	6.7	-	-	-	-	-
	Jan-93	5500	-	-	-	2	**7**	-	-	-	-	**8900**	**170**	-	**640**	-	-	-	4	-	-	-	-	-
	Apr-93	4100	-	-	-	2	**6**	-	-	-	-	**5700**	**89.7**	-	**580**	-	-	-	5.5	-	-	-	-	-
	Jul-93	2000	-	-	-	1	**8**	-	-	-	-	**3000**	**60.4**	-	**590**	-	-	-	U	-	-	-	-	-
	Oct-93	1600	-	-	-	1	U	-	-	-	-	**2100**	**36.6**	-	**490**	-	-	-	5.5	-	-	-	-	-
	Apr-94	4100	-	-	-	U	U	-	-	-	-	**5000**	22.3	-	**410**	-	-	-	2	-	-	-	-	-
	Oct-94	3900	-	-	-	U	U	-	-	-	-	**5000**	**38.5**	-	**410**	-	-	-	7.4	-	-	-	-	-
	Nov-98	9760	-	-	-	1.7B	4.3B	-	-	-	-	**13800**	**67**	-	**469**	-	-	-	U	-	-	-	-	-
	Nov-99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-02	2200	U	U	U	U	U	4600 B	U	U	23 B	3800	45	3600 B	410	U	U	U	U	U	4900 B	U	U	360
	May-05	90,200	U	**134**	**2,520**	**12.7**	1.76J	13,500	**160**	100	**270**	**183,000**	**1,320**	**37,800**	**3,510**	0.29	**175**	11,100	U	U	4,710J	U	120	1,190
	Oct-05	61,700	**33.5J**	**74.6**	**1,350**	**8.6**	U	11,500	**117**	72.5	195	**136,000**	**827**	26,100	**2,510**	0.16J	**121**	8,360	**11.6**	8.1J	3,770J	**6.9J**	61	753
	Sep-08	29,100	U	13.5	470	**3.56**	1.58J	3,810	44.8	29.5	93.4	**53,100**	**331**	11,000	**1,040**	U	55.6	6,690	8.05J	U	3,330	U	33.2	375
	Feb-10	19,800	U	16.9	301	2.44J	U	2,460	30	18.8	44.5	**35,100**	**163**	7,510	**665**	0.09J	37	5,300	6.57J	U	2,920	U	24.2	291
	Nov-11	4,770	U	12.2	188	1.33 J	0.47 J	1,860	10.6	8.39 J	31.6	**10,000**	**89.2**	2,070	235	U	22.5	1,810	U	2.07 J	3,550	**6.09 J**	6.5 J	207
	Oct-13	2410*E	2.8B	3.7B	364	2.0B	0.80B	2720BE	9.0B	7.6B	33.5	**5920***	**156***	1280BE	235	U	9.7B	1790BE	U	U	U	U	4.7B	262E

Table 1
Analytical Results for Unfiltered Groundwater Samples
Beaver Smelting
Fallsburg, New York
Contaminants of Concern
April 1992 to October 2013

Analyte		Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
AWQS + GV		*NA*	*3 (GV)*	*25*	*1000*	*3 (GV)*	*5*	*NA*	*50*	*NA*	*200*	*300*	*25*	*35,000 (GV)*	*300*	*0.7*	*100*	*NA*	*10*	*50*	*20,000*	*0.5*	*NA*	*2,000 (GV)*
MW-7	Apr-92	2400	-	-	-	U	**30**	-	-	-	-	190	5.8	-	**980**	-	-	-	U	-	-	-	-	-
	Jul-92	3200	-	-	-	U	**20**	-	-	-	-	**1500**	14	-	**970**	-	-	-	8.3	-	-	-	-	-
	Oct-92	9400	-	-	-	**5**	**30**	-	-	-	-	**6,700**	**72**	-	**1,600**	-	-	-	**14**	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	May-05	11,500	U	U	249	1.27J	U	4,340J	12.8	13.1J	56.7	**18,600**	**35.2**	4,820J	**771**	0.09J	31.1J	2,320J	U	U	991J	U	11.2J	770
	Oct-05	11,000	U	11.3	351	1.6J	2.0J	5,540	1.2J	12.5J	82.8	**19,900**	**84.2**	4,690J	**770**	U	38.2J	3,250J	U	U	682J	U	U	1,020
	Sep-08	4,610	U	U	190	0.95J	3.27	2,950	7.03J	9.46J	60.8	**5,980**	19.1	2330	**374**	U	29.5	3,650	U	U	1,330	U	U	887
	Feb-10	13,300	U	4.34J	215	1.24J	1.93J	2,390	16.4	12J	51.7	**16,900**	**29.9**	4,400	**582**	0.12J	30	6,080	U	U	1,350	U	14.5J	645
	Nov-11	2,480	U	6.63 J	193	0.88 J	2.26 J	2,510	4.2 J	7.33 J	43.0	**4,360**	13.8	1,520	**326**	U	21.3	2,310	U	2.57 J	2,480	**5.75 J**	U	624
	Oct-13	7660*E	U	U	499	2.4B	3.0B	4620BE	10.2	12.6B	88.0	**4450***	**87.6***	1630BE	**726**	U	24.9B	2820BE	U	U	U	U	3.0B	816E
MW-9	Apr-92	240	-	-	-	U	U	-	-	-	-	**290**	U	-	120	-	-	-	U	-	-	-	-	-
	Jul-92	630	-	-	-	U	U	-	-	-	-	**740**	6.6	-	150	-	-	-	U	-	-	-	-	-
	Oct-92	5200	-	-	-	2	U	-	-	-	-	**5,400**	**40.4**	-	**800**	-	-	-	U	-	-	-	-	-
	Jan-93	1700	-	-	-	U	U	-	-	-	-	**2,300**	18.7	-	**310**	-	-	-	U	-	-	-	-	-
	Apr-93	1500	-	-	-	U	U	-	-	-	-	**2,200**	23.4	-	200	-	-	-	U	-	-	-	-	-
	Jul-93	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-	-	-	-	-
	Oct-93	1000	-	-	-	U	U	-	-	-	-	**1,500**	5.1	-	150	-	-	-	3.2	-	-	-	-	-
	Apr-94	3300	-	-	-	U	U	-	-	-	-	**4,100**	4.5	-	130	-	-	-	U	-	-	-	-	-
	Oct-94	3600	-	-	-	U	U	-	-	-	-	**5,500**	7.7	-	**570**	-	-	-	2.7	-	-	-	-	-
	Nov-98	8520	-	-	-	1.7B	3.8B	-	-	-	-	**16,400**	13.6	-	**786**	-	-	-	U	-	-	-	-	-
	Nov-99	62	-	-	-	1	**7**	-	-	-	-	**2,100**	3	-	**460**	-	-	-	5	-	-	-	-	-
	Oct-00	1180 E	U	8.8 B	78.1 B	U	U	2780 B	U	4.9 B	7.2 B	**2,180**	2.8B	1290 B	**1060**	U	3.3 B	903 B	U	U	1910 B	U	U	17.3 B
	Apr-02	290	U	U	U	U	U	3200 B	U	U	U	**540**	U	1300 B	**300**	U	U	U	U	U	2800 B	U	U	19 B
	May-05	5,840	U	U	197J	0.43J	U	5,960	4.74J	8.19J	65.8	**10,200**	17	3,830J	**700**	0.12J	11.9J	U	U	U	2,090J	U	7.46J	51.7
	Oct-05	12,700	**9.3J**	**43**	353	1.6J	0.77J	7,550	19.5	15.1J	167	**31,000**	**140**	6,760	**755**	0.05J	22.3J	2,890J	U	2.5J	2,210J	U	1.7J	69.9
	Sep-08	4,020	U	U	155	U	U	3,630	4.79J	4.32J	26.6	**7,240**	16	2,180	**586**	U	7.46J	1,850	U	U	2,240	U	6.95J	37.1
	Feb-10	1,650	U	U	81.2	U	U	3,040	U	U	6.41J	**4,590**	3.23J	1,450	**410**	0.13J	U	1,060	U	U	2,310	U	U	18J
	Nov-11	1,040	U	11.6	112.0	U	U	4,270	U	U	16.6	**3,680**	5.19 J	1,730	**516**	U	6.61 J	845 J	U	2.35 J	3,610	**7.18 J**	U	24.6
	Oct-13	1550*E	U	2.4B	120B	0.30B	U	3770BE	3.9B	2.2B	5.6B	**2180***	20.5*	1470BE	**320**	U	4.1B	1220BE	U	U	2060B	U	2.0B	29.8E
MW-10 (MW-9A)	Apr-92	140	-	-	-	U	U	-	-	-	-	180	U	-	30	-	-	-	**640**	-	-	-	-	-
	Jul-92	500	-	-	-	U	U	-	-	-	-	**480**	6.6	-	70	-	-	-	**1,300**	-	-	-	-	-
	Oct-92	7100	-	-	-	2	**6**	-	-	-	-	**4,800**	**37**	-	**420**	-	-	-	**976**	-	-	-	-	-
	May-05	78,500	U	**49.2**	862	**6.62**	**6.18**	24,700	**89.8**	95.7	**265**	**122,000**	**192**	**49,400**	**8,720**	0.45	**158**	42,300	**30.6**	8.42J	2,760J	U	69	514
	Oct-05	154,000	**9.4J**	**100**	**1,610**	**13.4**	U	39,600	**166**	193	**582**	**284,000**	**502**	**77,600**	**20,100**	0.58	**335**	56,800	**157**	14.4	3,210J	**10.1**	111	1,060
	Sep-08	45,500	U	**27.4**	458	**3.48**	4.31	15,100	40.5	57	144	**82,600**	**110**	26,100	**3,980**	U	88.2	34,500	**31**	U	2,970	U	38.4	282
	Feb-10	13,800	U	8.44J	151	0.81J	U	10,200	10.9	7.89J	27.1	**17,700**	**28.8**	14,600	**607**	0.12J	16.6J	26,000	**27.9**	U	2,630	U	14.6J	69.9
	Nov-11	2,000	U	9.4 J	75.2	0.37 J	U	8,230	2.77 J	5.11 J	14.5	**4,410**	13.5	7,690	**651**	U	8.39 J	23,300	**17.6**	2.18 J	3,490	**5.62 J**	U	33.4
	Oct-13	8460*E	2.2B	6.3B	478	2.6B	2.4B	10900E	3.5B	5.2B	37.9	**3120***	**55.4***	8030E	**795**	U	7.0B	25600E	**11.1**	U	2100B	U	1.8B	72.6E
MW-11	Apr-92	1200	-	-	-	U	U	-	-	-	-	**1,600**	U	-	170	-	-	-	**360**	-	-	-	-	-
	Jul-92	1100	-	-	-	U	U	-	-	-	-	**1,400**	5.6	-	200	-	-	-	**390**	-	-	-	-	-
	Oct-92	9400	-	-	-	**3**	**6**	-	-	-	-	**1,100**	**33.7**	-	**1,500**	-	-	-	**340**	-	-	-	-	-
	May-05	171,000	U	**34.5**	**2,550**	**15.8**	0.57J	21,900	**391**	184	**270**	**285,000**	**207**	**83,700**	**10,000**	0.68	**320**	42,100	**44.6**	U	1,830J	U	142	1,180
	Oct-05	258,000	**6.6J**	**52.4**	**3,580**	**22.9**	U	23,700	**569**	285	**436**	**497,000**	**442**	**118,000**	**19,800**	**0.83**	**510**	56,400	**69**	24.2	3,500J	U	190	1,710
	Sep-08	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
	Feb-10	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
	Nov-11	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
	Oct-13	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
MW-12	Apr-92	4500	-	-	-	U	U	-	-	-	-	80	U	-	**1,900**	-	-	-	9.8	-	-	-	-	-
	Jul-92	1500	-	-	-	U	U	-	-	-	-	170	U	-	**2,500**	-	-	-	**17**	-	-	-	-	-
	Oct-92	3800	-	-	-	1	U	-	-	-	-	**1,100**	13.5	-	**2,600**	-	-	-	**16.1**	-	-	-	-	-
	Oct-00	1210 E	U	2.6 B	106 B	.33 B	U	54,400	1.8 B	9.6 B	8.6 B	**1,370**	5.6	24,000	**2,300**	U	24 B	9890 E	6.6	U	**42,500**	U	U	51.4
	Apr-02	3300	U	U	U	U	U	27,000	U	U	U	**110**	U	14,000	**2,700**	U	U	U	5.6	U	**27,000**	U	U	130.0
	May-05	1,150	U	U	71.6J	0.145J	U	30,900	2.78J	8.12J	9.26J	**1,350**	3.66J	13,700	**2,210**	0.12J	13.5J	5,740	U	U	**30,700**	U	2.77J	35.2
	Oct-05	521	U	5.6J	83.0J	U	0.78J	30,200	U	U	U	**522**	12.4	10,400	**1,490**	U	U	3,560J	U	U	**22,900**	U	U	26.5
	Sep-08	14,200	U	U	204	0.71J	0.74J	43,100	15.6	14.7	41.9	**16,900**	**33.2**	21,300	**1,910**	0.2	31.4	6,480	U	U	**37,300**	U	10.3J	129.0
	Feb-10	602	U	U	68.7	0.31J	0.43J	5,780	U	6.23J	2.64J	**965**	2.72J	2,780	**793**	0.14J	5.82J	1,990	U	U	6,200	U	U	46
	Nov-11	330	U	15.2	111	U	1.01 J	5,780	U	9.34 J	6.31 J	**432**	3.36 J	2,490	**1,030**	U	12.4 J	2,690	U	2.32 J	6,640	**4.78 J**	U	53.2
	Oct-13	192B*E	U	1.3B	147B	U	0.40B	27600E	1.1B	3.8B	5.0B	177*	7.4*	12300E	**1,960**	U	9.0B	4190BE	1.9B	U	**25,700**	U	U	38.9E
MW-13	Apr-92	U	-	-	-	U	U	-	-	-	-	U	U	-	**1,400**	-	-	-	**60**	-	-	-	-	-
	Jul-92	70	-	-	-	U	U	-	-	-	-	50	U	-	**1,500**	-	-	-	**88**	-	-	-	-	-
	Oct-92	450	-	-	-	U	U	-	-	-	-	**600**	5.5	-	**1,400**	-	-	-	**88.3**	-	-	-	-	-
	Oct-00	1610 E	U	1.8 B	65.7 B	0.2 B	U	24700	2.2 B	4.8 B	9.0 B	**2,240**	3.8	9,780	**1,700**	U	13.9 B	23500 E	?	U	**45,400**	U	1.9 B	31.3
	Apr-02	72 B	U	U	U	U	U	29000	U	U	U	**62 B**	U	11,000	**1,500**	U	U	17000	19	U	**52,000**	U	U	19 B
	May-05	3,590	U	U	90.5J	U	U	25,800	5.87J	5.96J	12.9J	**5,670**	7.75	10,700	**1,440**	0.08J	15.2J	18,000	5	U	**43,400**	U	3.48J	40.3
	Oct-05	1,530	U	U	63.0J	0.22J	U	24,900	U	3.5J	8.0J	**2,660**	3.7J	9,020	**1,120**	0.08J	3.5J	18,000	U	U	**41,400**	U	U	U
	Sep-08	208J	U	U	48.2	U	U	19,300	U	U	4.87J	**451**	U	6,930	**984**	U	6.14J	16,600	U	U	**39,500**	U	U	25
	Feb-10	318	U	U	40J	U	U	17,400	U	U	3.45J	**489**	U	6,610	**923**	0.19J	6.55J	12,600	U	U	**32,100**	U	U	17.6J
	Nov-11	108	**5.61 J**	U	40.4 J	U	U	18,100	U	U	4.23 J	**326**	U	6,350	**956**	U	9.77 J	14,700	U	2.89 J	**33,700**	**5.99 J**	U	20.3
	Oct-13	146B*E	U	U	54.3B	U	U	19700E	1.1B	1.6B	4.5B	139*	8.1*	7580E	**1,040**	U	7.0B	14800E	3.0B	U	**32,000**	U	U	46.8E

1. All data are presented in micrograms per liter (µg/L).
2. Metals analysis by US EPA Method 6010/7470.
3. B - Analyte found in associated method blank.
4. U - Compound not detected at or above the method detection limit (MDL).
5. J - Estimated concentration above the MDL but less than the reporting limit.
6. * - Duplicate analysis not in control limits
7. E - Serial dilution is not within acceptance criteria, or the reported value is estimated because of the presence of interference.
8. AWQS - New York State Ambient Water Quality Standards (TOGs 1.1.1); GV - guidance value.
9. NA indicates 1) no standard or guidance value exists for the compound, or 2) sample was not analyzed for indicated compound.
10. xx - Well could not be located.
11. **BOLD** font in shaded cell indicates exceedances of AWQS+GV.
12. - Sample was not analyzed for indicated compound.

Table 2
Analytical Results for Filtered Groundwater Samples
Beaver Smelting
Fallsburg, New York
Contaminants of Concern
October 2013

Analyte			Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
AWQS + GV		*Dissolved or Total*	*NA*	*3 (GV)*	*25*	*1000*	*3 (GV)*	*5*	*NA*	*50*	*NA*	*200*	*300*	*25*	*35,000 (GV)*	*300*	*0.7*	*100*	*NA*	*10*	*50*	*20,000*	*0.5*	*NA*	*2,000 (GV)*
MW-2	Oct-13	D	143B	2.4B	2.8B	55.6B	0.80B	0.70B	11900	1.2B	1.2B	11.5B	120	8.1	26400	183	U	1.4B	16700	**140N**	U	U	U	0.90B	20.9
		T	2190*E	U	2.2B	116B	U	0.60B	12300E	4.4B	4.6B	65.2	**1700***	**154***	26000E	**563**	U	4.9B	16500E	**132**	U	U	U	1.2B	79.2E
MW-3	Oct-13	D	50.2B	U	U	45.0B	U	U	35,000	0.5B	1.1B	8.0B	193	7.9	12,600	**1,120**	U	5.7B	7,780	5.7N	U	16,800	U	U	47.4
		T	930*E	U	U	55.2B	0.30B	0.30B	28600E	2.6B	1.8B	16B	**1130***	11.4*	12000E	**1060**	U	8.9B	8720E	**10.3**	U	17,500	U	0.90B	76.9E
MW-4	Oct-13	D	4,400	11.8B	**111.0**	63B	0.90B	1.5B	3780B	8.5B	5.0B	123	**5,720**	**194**	682B	**576**	U	9.1B	90,200	6.5N	U	**22,800**	**2.7B**	42.7B	61
		T	63400*E	**5.1B**	**63.5**	**1,020**	**20.1**	**12.7**	17600E	**117**	98	195	**92200***	**1010***	15900E	**9,040**	U	**121**	115000E	U	U	**23,300**	**10**	93.7	733E
MW-5	Oct-13	D	84.0B	U	U	112B	U	U	16,800	0.4B	0.50B	5.5B	U	6.1	9,510	**1,260**	U	5.3B	11,500	3.8BN	U	6,170	U	U	24.8
		T	4370*E	U	1.5B	287	1.1B	U	18700E	8.7B	8.6B	18B	**4520***	**32.2***	9900E	**1,800**	U	10.6B	14500E	U	U	5,700	U	3.6B	75.7E
MW-6	Oct-13	D	116B	2.4B	U	80.5B	U	0.30B	1430B	1.1B	2.9B	5.6B	U	13.1	802B	71	U	5.2B	1320B	U	U	U	U	U	162
		T	2410*E	2.8B	3.7B	364	2.0B	0.80B	2720BE	9.0B	7.6B	33.5	**5920***	**156***	1280BE	235	U	9.7B	1790BE	U	U	U	U	4.7B	262E
MW-7	Oct-13	D	282	2.1B	U	164B	U	2.4B	2220B	1.1B	5.6B	29.1	U	11.4	992B	170	U	18.3B	2210B	2.9BN	U	U	U	U	703
		T	7660*E	U	U	499	2.4B	3.0B	4620BE	10.2	12.6B	88.0	**4450***	**87.6***	1630BE	**726**	U	24.9B	2820BE	U	U	U	U	3.0B	816E
MW-9	Oct-13	D	35.9B	U	2.2B	73.4B	U	U	2950B	1.0B	1.1B	U	**944**	7	1170B	298	U	4.4B	972B	U	U	2220B	U	U	17.4B
		T	1550*E	U	2.4B	120B	0.30B	U	3770BE	3.9B	2.2B	5.6B	**2180***	20.5*	1470BE	**320**	U	4.1B	1220BE	U	U	2060B	U	2.0B	29.8E
MW-10 (MW-9A)	Oct-13	D	3,520	U	4.7B	80.6B	U	U	5,010	3.8B	2.7B	12.5B	**4,340**	**26.7**	5,340	**218**	U	4.2B	23,000	**10.3N**	U	2,170	U	3.5B	42.9
		T	8460*E	2.2B	6.3B	478	2.6B	2.4B	10900E	3.5B	5.2B	37.9	**3120***	**55.4***	8030E	**795**	U	7.0B	25600E	**11.1**	U	2100B	U	1.8B	72.6E
MW-11	Oct-13	D	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
		T	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
MW-12	Oct-13	D	76.8B	U	U	141B	U	0.30B	27,900	0.9B	3.6B	4.6B	U	8.6	12,500	**1,780**	U	8.6B	4280B	U	U	**24,400**	U	U	41.5
		T	192B*E	U	1.3B	147B	U	0.40B	27600E	1.1B	3.8B	5.0B	177*	7.4*	12300E	**1,960**	U	9.0B	4190BE	1.9B	U	**25,700**	U	U	38.9E
MW-13	Oct-13	D	31.0B	U	U	52.8B	U	U	21,500	0.5B	1.8B	2.9B	U	8	8,220	**1,130**	U	7.0B	15,100	2.0BN	U	**32,900**	U	U	46.1
		T	146B*E	U	U	54.3B	U	U	19700E	1.1B	1.6B	4.5B	139*	8.1*	7580E	**1,040**	U	7.0B	14800E	3.0B	U	**32,000**	U	U	46.8E

1. All data are presented in micrograms per liter (µg/L).
2. Metals analysis by US EPA Method 6010/7470.
3. B - Analyte found in associated method blank.
4. U - Compound not detected at or above the method detection limit (MDL).
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6. * - Duplicate analysis not in control limits
7. E - Serial dilution is not within acceptance criteria, or the reported value is estimated because of the presence of interference.
8. AWQS - New York State Ambient Water Quality Standards (TOGs 1.1.1); GV - guidance value.
9. NA indicates 1) no standard or guidance value exists for the compound, or 2) sample was not analyzed for indicated compound.
10. xx - Well could not be located.
11. **BOLD** font in shaded cell indicates exceedances of AWQS+GV.

Table 3
Analytical Results for Leachate and Ditch Samples
Beaver Smelting
Fallsburg, New York
Contaminants of Concern

Analyte	Leachate #1 10/21/1981	Leachate #1 11/19/1981	Leachate Sample 10/27/2000	Leachate Sample 4/17/2002 SDG: 107-03	Leachate Sample 5/26/2009	Drainage Ditch 10/22/2013	West Seep 6/27/2014	Up Ditch 6/27/2014	Up Pipe 6/27/2014	Down Pipe 6/27/2014	Down Ditch 6/27/2014	Ponded Area 6/27/2014
Aluminum	NA	NA	3820	3100	3490	4080 *E	45200	1320	234	1430	6810	18000
Antimony	NA	NA	36	U	U	12.1 B	18.8 B	U	5.7 B	5.9 B	3.2 B	153
Arsenic	U	40	48	U	U	4.2 B	18.8	U	U	U	3.2 B	14.7
Barium	810	550	225	U	U	112 B	322	196 B	82.4B	118 B	152 B	195 B
Beryllium	NA	NA	U	U	U	6.2	2.7 B	0.6 B	0.2 B	0.5 B	0.8 B	1.1 B
Cadmium	769	38	20	U	15.7	12.4	6.8	3.5 B	1.5 B	3.8 B	2.2 B	19.4
Calcium	NA	NA	17500	58000	9140	6460 E	20900	4230 B	2950 B	8550	4980 B	9250
Chromium	25	36	**4.8**	U	U	5.7 B	30.2	0.7 B	1.1 B	1.2 B	4.9 B	20.5
Cobalt	NA	NA	20	U	U	5.3 B	31.5 B	0.4 B	3 B	2.8 B	6.7 B	30.2 B
Copper	NA	NA	690	5100	1130	559	1780	134	64.5	154	298	2440
Iron	NA	NA	35900	1300	6130	7520 *	31600	62.8 B	33.9 B	338	4170	12200
Lead	13.63	200.45	168	18	240	503 *	370	4.8	192	86.1	47.3	5800
Magnesium	NA	NA	20900	810 B	5750	7030 E	5410 E	539 E	771 B	2830 E	1180 E	5350 E
Manganese	NA	NA	3210	180	668	1110	2510	435	89.8	1320	965	1560
Mercury	0.9	0.9	0.2	U	U	U	0.14 B	U	U	U	U	0.15 B
Nickel	NA	NA	19.2	U	U	13.5 B	45.3	11.7 B	3.7 B	12 B	13.7 B	46.6
Potassium	NA	NA	19700	84000	80300	65700 E	15300	3950 B	806 B	26900	7500	27400
Selenium	U	U	16	66	U	5.8	31.4	2 B	U	U	5.2	6.3
Silver	U	U	U	U	U	U	4.0 B	U	0.47 B	0.79	0.62 B	3.4 B
Sodium	NA	NA	63100	24000	27400	18800	3300 E	1230 E	1320 E	8600	2200 E	8550 E
Thallium	NA	NA	U	U	U	U	4.9 B	U	U	4.5 B	U	U
Vanadium	NA	NA	8.9	U	U	3.5 B	38.3 B	U	0.6 B	0.22	5.8 B	13.7 B
Zinc	NA	NA	569	16 B	492	397 E	370	156	212	131	129	1290

1. B - Analyte found in associated method blank.
2. U - Compound not detected at or above the method detection limit (MDL).
3. J - Estimated concentration above the MDL but less than the reporting limit.
4. * - Duplicate analysis not in control limits
5. E - Serial dilution is not within acceptance criteria, or the reported value is estimated because of the presence of interference.
6. All locations are approximate and not from same location each event.
7. All units are in micrograms per liter (µg/L).
8. See Figure 4 for approximate locations of samples collected in 2014.

Appendix A

Site-Wide Semi-Annual Inspection Form

Beaver Smelting
Beaver Lane
Fallsburg, New York

Engineering Control (s): Soil Cover, Monitoring well network, GW interceptor trench Inspection Date: 1/28/14

Item	Yes	No	N/A	Comments
Does the Engineering Control continue to perform as designed?	X			located one active seep – was frozen – on west side of landfill – same location as 1/2012.
Does the Engineering Control continue to protect human health and the environment?	X			*Should Sample and evaluate Seep*
Does the Engineering Control comply with requirements established in the SMP?	X			
Has remedial performance criteria been achieved or maintained?	X			maintained
Has sampling and analysis of appropriate media been performed during the monitoring event?	X			October 2013 – groundwater and drainage ditch Sampled.
Have there been any modifications made to the remedial or monitoring system?		X		
Does the remedial or monitoring system need to be changed or altered at this time?		X		
Has there been any intrusive activity, excavation, or construction occurred at the site?		X		
Were the activities mentioned above, performed in accordance with the SMP?			X	
Was there a change in the use of the site or were there new structures constructed on the site?	X			last inspection (1/2012) reported Soil piles around site. This inspection found numerous log piles / machinery
In case a new occupied structure is constructed or the use of the current building changed, was a vapor intrusion evaluation done?			X	
Were new mitigation systems installed based on monitoring results?			X	
Were the groundwater wells in the monitoring network inspected during this site inspection? If so, were the Monitoring Well Field Inspection Logs Completed?	X			

Note: Upon completion of the form any non-conforming items warranting corrective action should be identified here within.

Name of Inspector: Kelly Lurie w/Chris French Signature of Inspector: Kelly Lurie
Inspector's Company: AECOM Date: 1/28/2014

IMMEDIATELY REPORT ANY FAILURE OR DEFECT TO THE PROJECT MANAGER SO A COUNTERMEASURE PLAN CAN BE IMPLEMENTED.

* Drainage ditch on west side of landfill was sampled in Oct. 2013 and found to have high levels of lead and other metals. Seep likely drains to this ditch.

SITE NAME: Beaver Smelting

SITE ID.: 353005
INSPECTOR: CF
DATE/TIME: 1/28/14 11:50
WELL ID.: MW-2

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	
WELL COORDINATES? NYTM X_____ NYTM Y_____		
PDOP Reading from Trimble Pathfinder:_____ Satelites:_____		
GPS Method (circle) Trimble And/Or Magellan		

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

	YES	NO
WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:		
SURFACE SEAL PRESENT?		X
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)		X
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED	
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	riser 1 ft
PROTECTIVE CASING MATERIAL TYPE:	Steel
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?		X

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):	
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):	
MEASURE WELL DIAMETER (Inches):	
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	Good
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	NO

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Very accessible to truck mounted rig, few boulders around well ~15 yds to nearest structure

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

located at the boundary between a field (landfill soil cap) and brush pile in front of large corrugated steel building.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:

Sketch

SITE NAME: Beaver Smelting

SITE ID.: 353005
INSPECTOR: CF
DATE/TIME: 1/28/14 11:00
WELL ID.: MW-3

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	
WELL COORDINATES? NYTM X_____ NYTM Y_____		
PDOP Reading from Trimble Pathfinder:_____ Satelites:_____		
GPS Method (circle) Trimble And/Or Magellan		
WELL I.D. VISIBLE?	X	
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: MW-3

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED:

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): riser 2 ft

PROTECTIVE CASING MATERIAL TYPE: steel

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?		X

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

MEASURE WELL DIAMETER (Inches):

WELL CASING MATERIAL: ~~flush~~ PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: good, ~~[illegible]~~

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: no

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Accessible by truck mounted rig, ~100 yards to nearest structure. No significant obstructions.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

located in an open area, below the riprap on the West Side of the land fill

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:

Sketch

SITE NAME: Beaver Smelting

SITE ID.: 353005
INSPECTOR: CF
DATE/TIME: 1/29/14 11:10
WELL ID.: MW-4

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYTM X_____ NYTM Y_____
PDOP Reading from Trimble Pathfinder:_____ Satelites:_____
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?	X	
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: MW-4

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED.....
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): riser 2 ft
PROTECTIVE CASING MATERIAL TYPE: steel
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?		X

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....
MEASURE WELL DIAMETER (Inches): .....
WELL CASING MATERIAL: ~~Steel~~ PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: good, ~~Slight rust~~
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: no

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Accessible by truck mounted rig, ~100 yds to nearest structure, no natural obstructions or utilities

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
Open area, on South West side of land fill, just below the rip rap

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:

Sketch

SITE NAME: Beaver Smelting

SITE ID.: 353005
INSPECTOR: CF
DATE/TIME: 1/29/14 1100
WELL ID.: MW-5

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	
WELL COORDINATES? NYTM X_____ NYTM Y_____		
PDOP Reading from Trimble Pathfinder:_____ Satelites:_____		
GPS Method (circle) Trimble And/Or Magellan		
WELL I.D. VISIBLE?	X	
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: MW-5

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED:

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): riser 2 ft

PROTECTIVE CASING MATERIAL TYPE: steel

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

MEASURE WELL DIAMETER (Inches):

WELL CASING MATERIAL: PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: good

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: NO

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Ft. limited to no truck mounted rig accessibility, surrounded by small & large trees, ~100 yds to nearest structure

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

located in a small stand of trees on the south end of the site 50 yds from beaver lane

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:

Sketch

SITE NAME: Beaver Smelting

SITE ID.: 353005
INSPECTOR: CF
DATE/TIME: 1/29/14 12:15
WELL ID.: MW-6

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	
WELL COORDINATES? NYTM X_____ NYTM Y_____		
PDOP Reading from Trimble Pathfinder:_____ Satelites:_____		
GPS Method (circle) Trimble And/Or Magellan		
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	
WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:		
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below) but tubing missing	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) see	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: riser ~1 ft
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): steel
PROTECTIVE CASING MATERIAL TYPE:
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):
MEASURE WELL DIAMETER (Inches):
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: good
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: no

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Prior to none, Site is within the woods line. ~200 yds to nearest structure

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Site is within the woodsline off of a small field.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

Salt pile located ~150 yds from well on the other side of a steep ditch (~4 ft deep)

REMARKS:

Sketch

SITE NAME: Beaver Smelting

SITE ID.: 353005
INSPECTOR: CF
DATE/TIME: 1/29/19 12:10
WELL ID.: MW-7

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	
WELL COORDINATES? NYTM X_____ NYTM Y_____		
PDOP Reading from Trimble Pathfinder:_____ Satelites:_____		
GPS Method (circle) Trimble And/Or Magellan		
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	
WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:		
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED	
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	riser 2ft
PROTECTIVE CASING MATERIAL TYPE:	steel
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?	X	X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?		X

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):	
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):	
MEASURE WELL DIAMETER (Inches):	
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	good
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	no

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Poor to none for truck mounted rig. In the forest surrounded by trees ~150 yds to nearest structure

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Within the woods line just south of a small field (Same field as monitored in MW-6)

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

Salt pile ~100 yds from well, separated by large drainage ditch (~4ft Deep)

REMARKS:

Sketch

SITE NAME: Beaver Smelting

SITE ID.: 253005
INSPECTOR: CF
DATE/TIME: 1/28/14 13:00
WELL ID.: MW-7

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	
WELL COORDINATES? NYTM X_____ NYTM Y_____		
PDOP Reading from Trimble Pathfinder:_____ Satelites:_____		
GPS Method (circle) Trimble And/Or Magellan		
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	
WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:		
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	
HEADSPACE READING (ppm) AND INSTRUMENT USED		
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	riser 2.5 ft	
PROTECTIVE CASING MATERIAL TYPE:	steel	
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):		
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?		X
MEASURE WELL DEPTH FROM MEASURING POINT (Feet):		
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):		
MEASURE WELL DIAMETER (Inches):		
WELL CASING MATERIAL:	PVC	
PHYSICAL CONDITION OF VISIBLE WELL CASING:	good	
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE		
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	no	

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Within the woods = poor to no access, Boulders & trees in the way ~12 yds from road

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

In the woods, 20 yds north of clearing and 12 yds west of road.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:

Sketch

SITE NAME: Denver Smelting

SITE ID.: 353005
INSPECTOR: CF
DATE/TIME: 1/29/14 13:10
WELL ID.: MW-10

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYTM X_____ NYTM Y_____
PDOP Reading from Trimble Pathfinder:_____ Satelites:_____
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED	
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	riser 2 ft
PROTECTIVE CASING MATERIAL TYPE:	Steel
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):	
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):	
MEASURE WELL DIAMETER (Inches):	
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	good
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	no

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

medium to poor, within 5ford of trees however cutting down 2-3 small ones could give vehicular access ~ 20 yds of road

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

within a small clump of trees seperating the north & South sides of the field. located on an northern side of clump 20 yds from rd.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:

Sketch

SITE NAME: Beaver Smelting

SITE ID.: 353005
INSPECTOR: CF
DATE/TIME: 1/25/19 13:20
WELL ID.: MW-11

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYTM X_____ NYTM Y_____
PDOP Reading from Trimble Pathfinder:_____ Satelites:_____
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)		X

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

	YES	NO
SURFACE SEAL PRESENT? N/A		
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below) N/A		
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED:
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): riser 4 ft
PROTECTIVE CASING MATERIAL TYPE: Steel
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

	YES	NO	
LOCK PRESENT?	X		
LOCK FUNCTIONAL?	X		could not open
DID YOU REPLACE THE LOCK?		X	
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X	
WELL MEASURING POINT VISIBLE? N/A			

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):
MEASURE WELL DIAMETER (Inches):
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: unknown
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: no

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Poor, within Stand of small pine trees & up a small but steep bank. ~50 yds from road.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
within a Stand of trees dividing field into northern & Southern half on South side of Stand, just into trees ~50 yds from rd.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:
Well was locked and either was sized closed or we locked correct key.

Sketch

SITE NAME: Beaver Smelting

SITE ID.: 353005
INSPECTOR: CF
DATE/TIME: 1/29/14 11:30
WELL ID.: MW12

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	
WELL COORDINATES? NYTM X_____ NYTM Y_____		
PDOP Reading from Trimble Pathfinder:_____ Satelites:_____		
GPS Method (circle) Trimble And/Or Magellan		
WELL I.D. VISIBLE?	X	
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	
WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:		
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	
HEADSPACE READING (ppm) AND INSTRUMENT USED		
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	riser 3.5 ft	
PROTECTIVE CASING MATERIAL TYPE:	steel	
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):		
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?		X
MEASURE WELL DEPTH FROM MEASURING POINT (Feet):		
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):		
MEASURE WELL DIAMETER (Inches):		
WELL CASING MATERIAL:	PVC	
PHYSICAL CONDITION OF VISIBLE WELL CASING:	Good	
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE		
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	ND	

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

~~Trimm~~ limited to no truck rig access, rough terrain & trees obstructed ~100 yds to nearest structure

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

located in woods, obstructed by many small - large trees

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:

Sketch

SITE NAME: Beaver Smelting

SITE ID.: 353005
INSPECTOR: CE
DATE/TIME: 1/25/14 11:49
WELL ID.: MW-13

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	
WELL COORDINATES? NYTM X_____ NYTM Y_____		
PDOP Reading from Trimble Pathfinder:_____ Satelites:_____		
GPS Method (circle) Trimble And/Or Magellan		
WELL I.D. VISIBLE?	X	
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: MW-13

	YES	NO
SURFACE SEAL PRESENT?		X
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)		X
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: _____

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): riser 3 ft

PROTECTIVE CASING MATERIAL TYPE: steel

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): _____

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): _____

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): _____

MEASURE WELL DIAMETER (Inches): _____

WELL CASING MATERIAL: PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: good

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE _____

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: NO

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

~~limited to one~~ limited to none, within the woods over rough terrain (boulders, downed trees). ~100 yds to nearest structure

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

In the woods, between the western boundary of old landfill & a residence.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:

Sketch

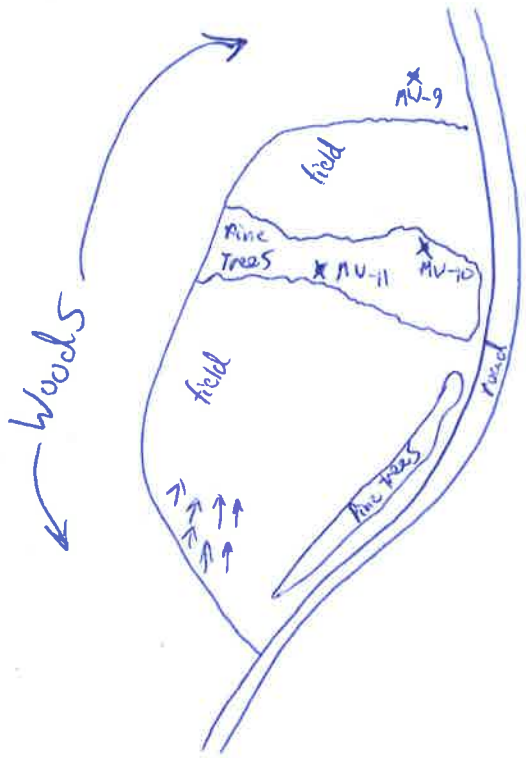

MV-9
field
Pine Trees
MV-11
MV-10
Woods
field
road
Pine Trees

Photo 1 Facing East. West Side of Landfill

Photo 2 MW-4. Well Closest to Down Gradient Seep

Photo 3 Frozen Seep on West Side of Landfill

Photo 4 Drainage Ditch on West Side of Landfill. Sampled October 2013.

Photo 5 Facing South Numerous Log Piles and Machinery

Photo 6 Above Ground Storage Tanks Next to Main Building

Photo 7 Cap Snow Covered but Appears Maintained

Photo 8 Facing North. Cleared Road and Machinery around Building

Site-Wide Semi-Annual Inspection Form

Beaver Smelting
Beaver Lane
Fallsburg, New York

Engineering Control (s): Soil cover, monitoring well network, trench, GW interceptor Inspection Date: 6/26/14

Item	Yes	No	N/A	Comments
Does the Engineering Control continue to perform as designed?	X			
Does the Engineering Control continue to protect human health and the environment?	X			Surface water sampled to evaluate seep.
Does the Engineering Control comply with requirements established in the SMP?	X			
Has remedial performance criteria been achieved or maintained?	X			maintained
Has sampling and analysis of appropriate media been performed during the monitoring event?			X	No monitoring since last inspection. -surface water sampled during this site inspection.
Have there been any modifications made to the remedial or monitoring system?		X		
Does the remedial or monitoring system need to be changed or altered at this time?		X		Pending results of seep sampling.
Has there been any intrusive activity, excavation, or construction occurred at the site?		X		
Were the activities mentioned above, performed in accordance with the SMP?	X			
Was there a change in the use of the site or were there new structures constructed on the site?		X		
In case a new occupied structure is constructed or the use of the current building changed, was a vapor intrusion evaluation done?			X	
Were new mitigation systems installed based on monitoring results?			X	
Were the groundwater wells in the monitoring network inspected during this site inspection? If so, were the Monitoring Well Field Inspection Logs Completed?	X			

Note: Upon completion of the form any non-conforming items warranting corrective action should be identified here within.

Name of Inspector: Kelly Lusk
Inspector's Company: AECOM

Signature of Inspector: Kelly Lusk
Date: 6/26/14

IMMEDIATELY REPORT ANY FAILURE OR DEFECT TO THE PROJECT MANAGER SO A COUNTERMEASURE PLAN CAN BE IMPLEMENTED.

SITE NAME: Beaver Smelting

SITE ID.: 353005
INSPECTOR: KAL
DATE/TIME: 6/26/14
WELL ID.: MW-2

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYTM X_____ NYTM Y_____
PDOP Reading from Trimble Pathfinder:_____ Satelites:_____
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

	YES	NO
SURFACE SEAL PRESENT?		X
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)		X
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED.....
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): Riser ~ 1'
PROTECTIVE CASING MATERIAL TYPE: Steel
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?		X

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....
MEASURE WELL DIAMETER (Inches): .....
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: Good
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES..... NO

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
accessible - but heavy vegetation beginning to grow in this area - beginning to shield well.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
field along boundary of landfill - will want to clear vegetation.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:

Sketch

SITE NAME: Bauer Smelting

SITE ID.: 353005
INSPECTOR: KAL
DATE/TIME: 6/26/14
WELL ID.: MW-3

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYTM X_____ NYTM Y_____
PDOP Reading from Trimble Pathfinder:_____ Satelites:_____
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?	X	
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: MW-3

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): 2' nSer
PROTECTIVE CASING MATERIAL TYPE: Steel
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?		X

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):
MEASURE WELL DIAMETER (Inches):
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: good
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: NO

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Accessible - few obstructions

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
Below rip rap on west slope of landfill

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:

Sketch

SITE NAME: _____ SITE ID.: 353005

INSPECTOR: KAL

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 6/26/14

WELL ID.: MW-4

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	
WELL COORDINATES? NYTM X_____ NYTM Y_____		
PDOP Reading from Trimble Pathfinder:_____ Satelites:_____		
GPS Method (circle) Trimble And/Or Magellan		
WELL I.D. VISIBLE?	X	
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	
WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: MW-4		
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	
HEADSPACE READING (ppm) AND INSTRUMENT USED		
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	2' riser	
PROTECTIVE CASING MATERIAL TYPE:	steel	
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):		
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?		X
MEASURE WELL DEPTH FROM MEASURING POINT (Feet):		
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):		
MEASURE WELL DIAMETER (Inches):		
WELL CASING MATERIAL:	PVC	
PHYSICAL CONDITION OF VISIBLE WELL CASING:	good	
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE		
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	NO	

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Accessible

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Below rip rap on west side of landfill

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:

Sketch

SITE NAME: Beaver Smelting

SITE ID.: 353005
INSPECTOR: KAL
DATE/TIME: 6/24/14
WELL ID.: MW-5

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYTM X_____ NYTM Y_____
PDOP Reading from Trimble Pathfinder:_____ Satelites:_____
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?	X	
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: MW-5

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): 2' Riser
PROTECTIVE CASING MATERIAL TYPE: steel
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):
MEASURE WELL DIAMETER (Inches):
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: good
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: NO

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Limited w/ truck; accessible by foot.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
within trees/brush - Southwestern area below landfill.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:

Sketch

SITE NAME: Boone Smelting

SITE ID.: 353005
INSPECTOR: KAL
DATE/TIME: 6/24/14
WELL ID.: MW-6

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYTM X_____ NYTM Y_____
PDOP Reading from Trimble Pathfinder:_____ Satelites:_____
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED.....
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): 2' riser
PROTECTIVE CASING MATERIAL TYPE: steel
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....
MEASURE WELL DIAMETER (Inches): .....
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: good
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES..... NO

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
very poor - accessible by foot

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
within trees along open field

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:

Sketch

SITE NAME: Beaver Smelting

SITE ID.: 353005
INSPECTOR: KAL
DATE/TIME: 6/26/14
WELL ID.: MW-7

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYTM X_____ NYTM Y_____
PDOP Reading from Trimble Pathfinder:_____ Satelites:_____
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED.....
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): 2' riser
PROTECTIVE CASING MATERIAL TYPE: Steel
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?		X

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....
MEASURE WELL DIAMETER (Inches): .....
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: Good
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES..... NO

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
poor - accessible by foot - but not easily

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
in heavily wooded area

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:

Sketch

SITE NAME: Beaver Smelting

SITE ID.: 353005
INSPECTOR: KAL
DATE/TIME: 6/26/14
WELL ID.: MW-9

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYTM X_____ NYTM Y_____
PDOP Reading from Trimble Pathfinder:_____ Satelites:_____
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED:
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): 3' riser
PROTECTIVE CASING MATERIAL TYPE: steel
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?		X

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):
MEASURE WELL DIAMETER (Inches):
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: good
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: NO

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Poor access - by foot but difficult

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
in heavily wooded area.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:

Sketch

SITE NAME: Beaver Smelting

SITE ID.: 353005
INSPECTOR: KAL
DATE/TIME: 6/26/14
WELL ID.: MW-10

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYTM X_____ NYTM Y_____
PDOP Reading from Trimble Pathfinder:_____ Satelites:_____
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED:
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): 2' Riser
PROTECTIVE CASING MATERIAL TYPE: Steel
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):
MEASURE WELL DIAMETER (Inches):
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: Good
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: NO

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
accessible by foot - in small wooded area.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
within small stand of trees along small access road.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:

Sketch

SITE NAME: Beaver Smelting

SITE ID.: 353005
INSPECTOR: KAL
DATE/TIME: 6/26/14
WELL ID.: MW-11

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYTM X_____ NYTM Y_____
PDOP Reading from Trimble Pathfinder:_____ Satelites:_____
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)		X

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

	YES	NO
SURFACE SEAL PRESENT?		X
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)		X
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED.....
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): 4' nsor
PROTECTIVE CASING MATERIAL TYPE: Steel
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL? — lock Could not be opened - will cut	X	
DID YOU REPLACE THE LOCK? and replace next site visit.		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	NA	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....
MEASURE WELL DIAMETER (Inches): .....
WELL CASING MATERIAL: .....
PHYSICAL CONDITION OF VISIBLE WELL CASING: .....
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
poor - accessible by foot

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
within wooded area.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:

Sketch

SITE NAME: _____ SITE ID.: 353005

INSPECTOR: KAL

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 6/26/14

WELL ID.: MW-12

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYTM X_____ NYTM Y_____

PDOP Reading from Trimble Pathfinder:_____ Satelites:_____

GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?	X	
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: 31 nSor

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE: Steel

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?		X

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

MEASURE WELL DIAMETER (Inches): .....

WELL CASING MATERIAL: PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: good

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: NO

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

accessible by foot

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

heavily wooded area

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:

Sketch

SITE NAME: Beaver Smelting

SITE ID.: 353005
INSPECTOR: KAL
DATE/TIME: 6/26/14
WELL ID.: MW13

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	
WELL COORDINATES? NYTM X_____ NYTM Y_____		
PDOP Reading from Trimble Pathfinder:_____ Satelites:_____		
GPS Method (circle) Trimble And/Or Magellan		

	YES	NO
WELL I.D. VISIBLE?	X	
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: MW-13

	YES	NO
SURFACE SEAL PRESENT?		X
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)		X
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): 3' riser

PROTECTIVE CASING MATERIAL TYPE: Steel

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

MEASURE WELL DIAMETER (Inches):

WELL CASING MATERIAL: PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: Good

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: NO

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Limited - by foot

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

heavily wooded area

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:

Sketch

Photo 1 Facing North. West Side of Landfill Near Seep and Wetland Vegetation Present.

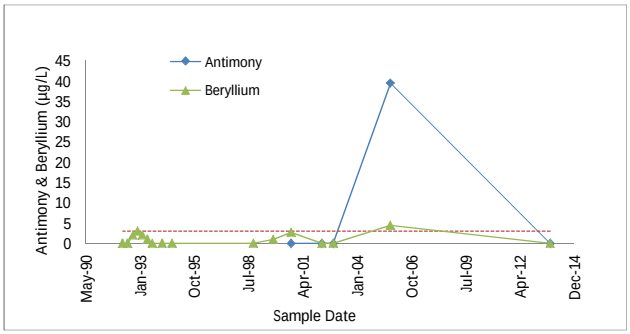
Photo 2 Facing East. West Side of Landfill Seep.

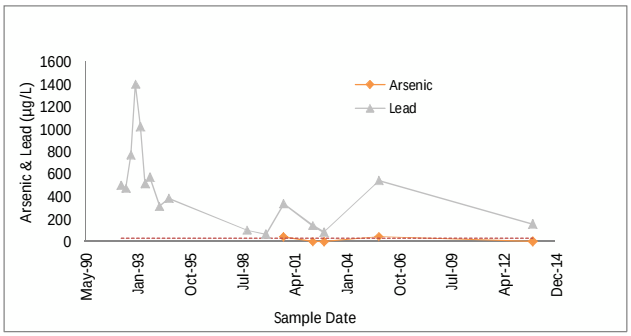
Photo 3 Drainage Ditch West of Landfill. Sampled June 2014.

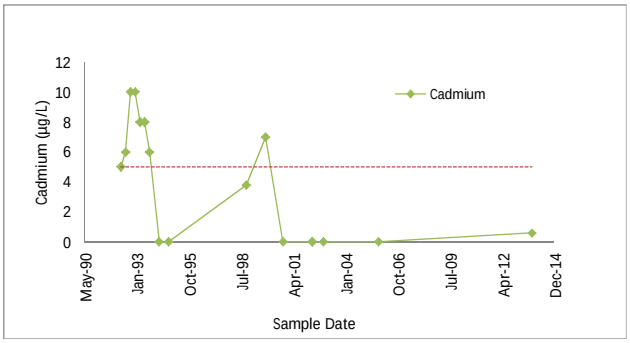
Photo 4 Confluence of Drainage Ditch and Unnamed Tributary

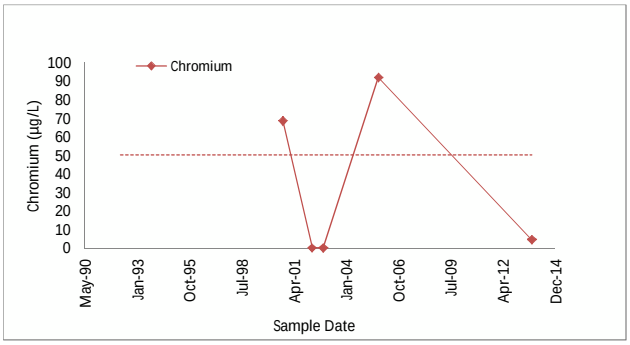
Appendix B

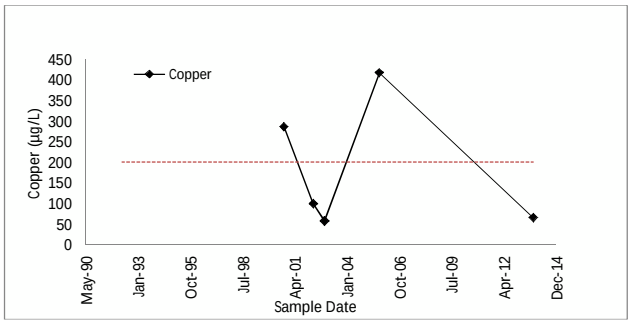
Analytical Results for Metals Exceeding NYS AWQS or Guidance Values in Monitoring Well MW-2
Beaver Smelting Site, Fallsburg, New York

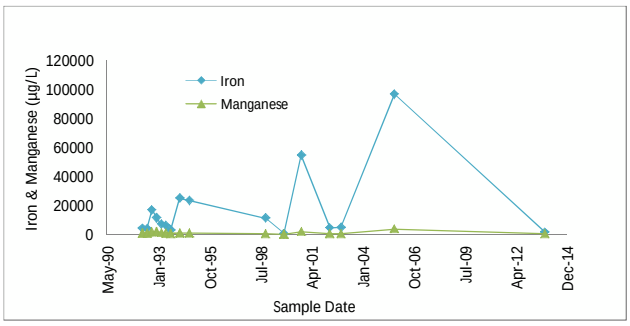


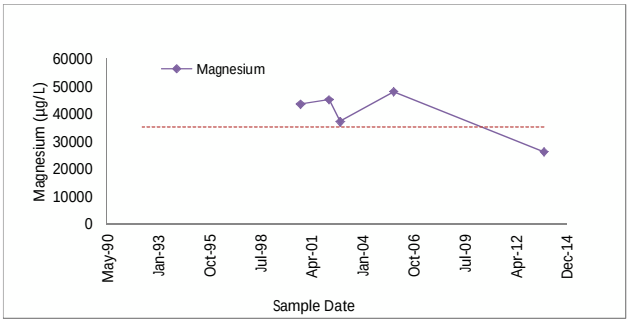


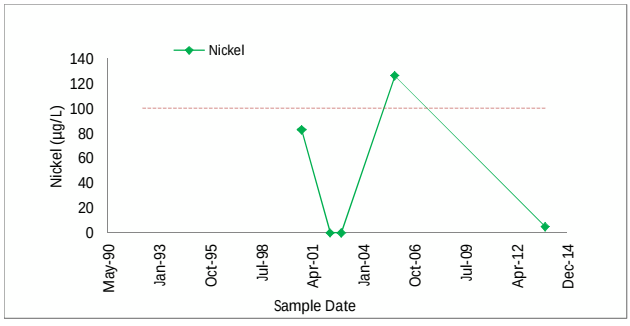


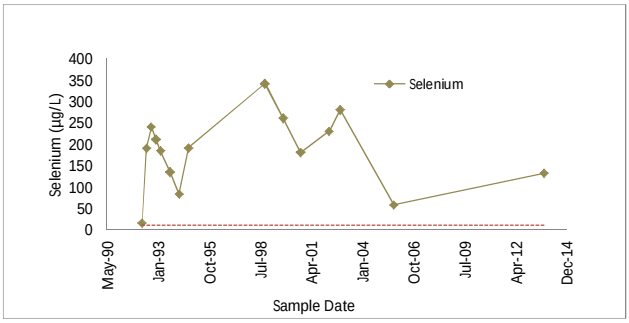






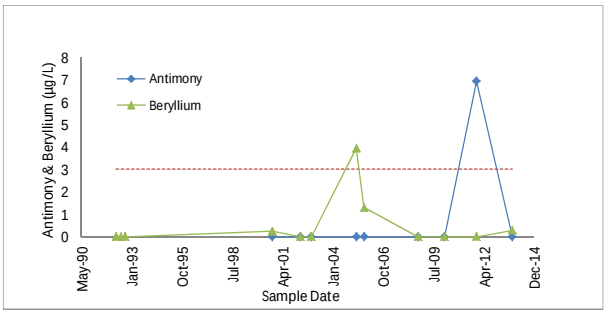


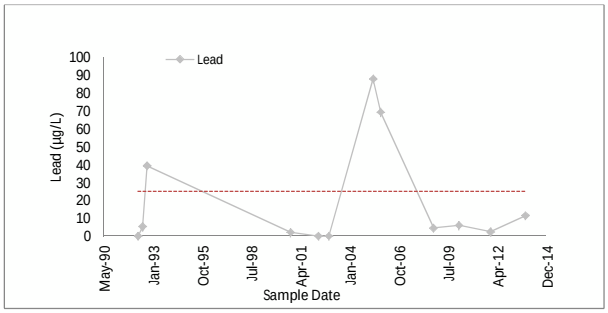


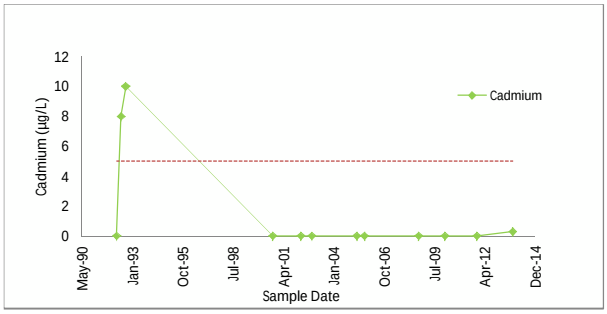


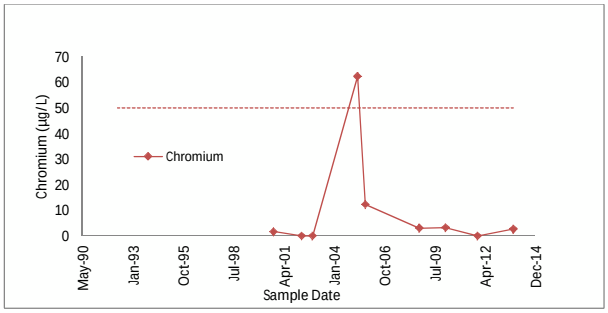
Notes:
1. The New York State Ambient Water Quality Standards (NYS AWQS) and the New York State Guidance Values (NYS GVs) are represented by a red dashed line.
2. NYS AWQSs and NYS GVs are from 6. NYCRR Part 703.5.
3. Only metals that exceeded in at least one of the sampling events in this well are plotted.
4. Analytes not detected above the laboratory method detections limits are included in the plots as 0.

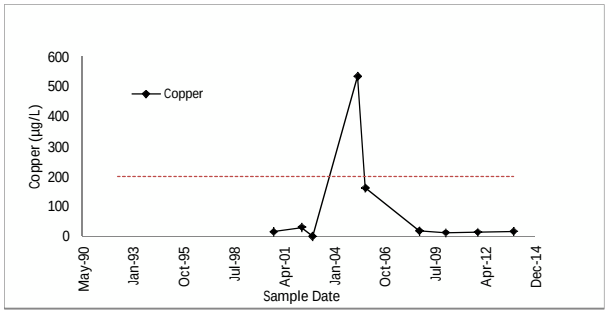
Analytical Results for Metals Exceeding NYS AWQS or Guidance Values in Monitoring Well MW-3
Beaver Smelting Site, Fallsburg, New York

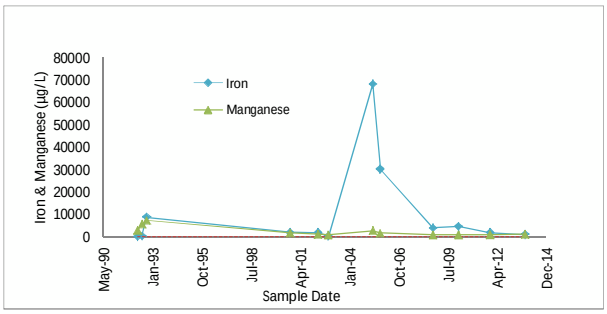


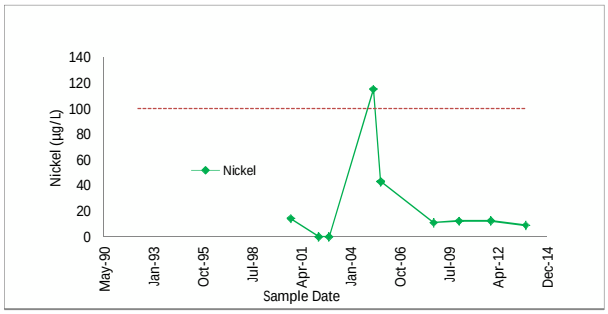


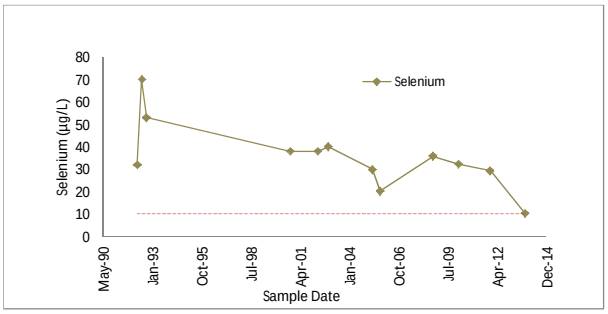


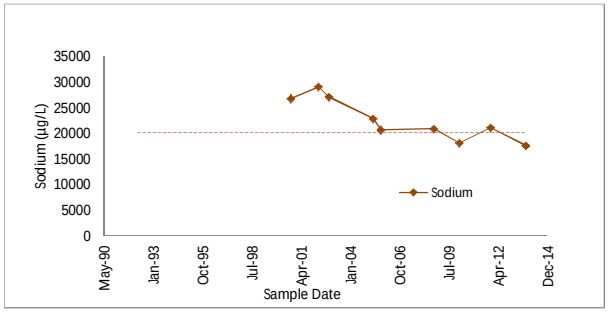


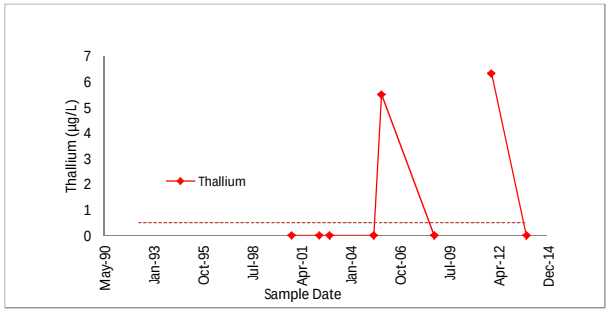






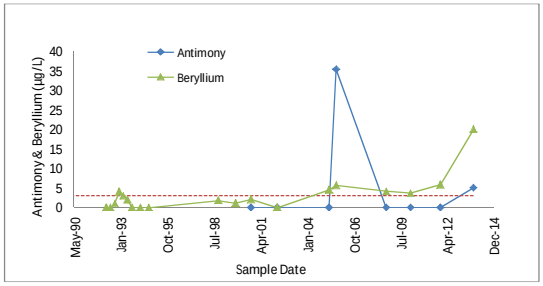


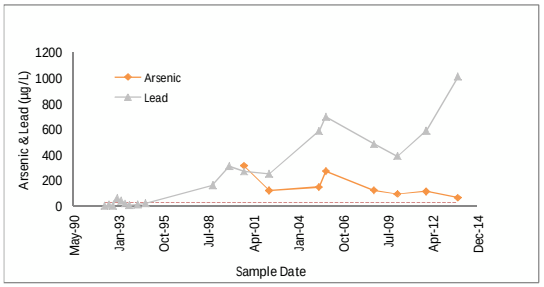


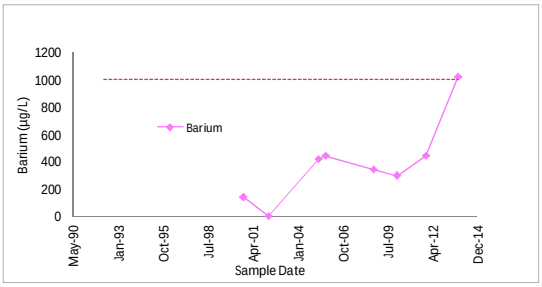


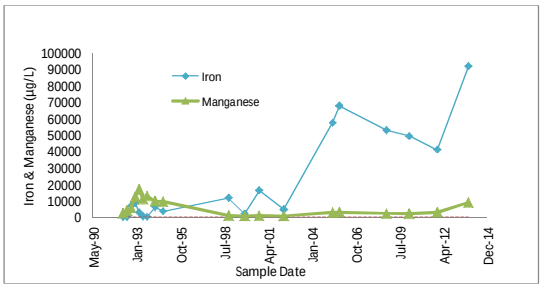
Notes:
1. The New York State Ambient Water Quality Standards (NYS AWQS) and the New York State Guidance Values (NYS GVs) are represented by a red dashed line.
2. NYS AWQSs and NYS GVs are from 6. NYCRR Part 703.5.
3. Only metals that exceeded in at least one of the sampling events in this well are plotted.
4. Analytes not detected above the laboratory method detections limits are included in the plots as 0.

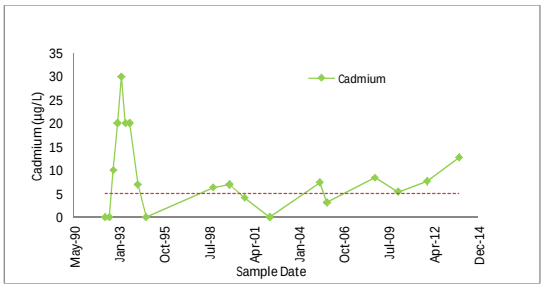
Analytical Results for Metals Exceeding NYS AWQS or Guidance Values in Monitoring Well MW-4
Beaver Smelting Site, Fallsburg, New York

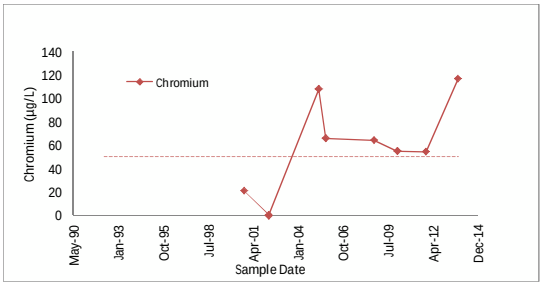


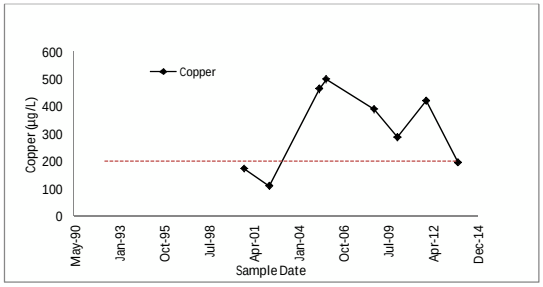


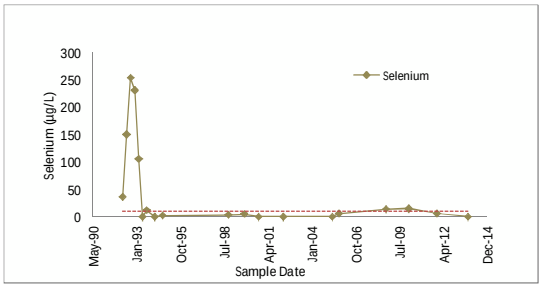


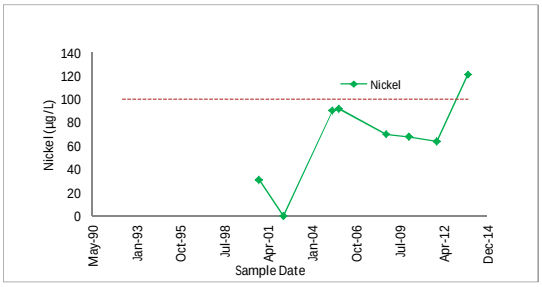


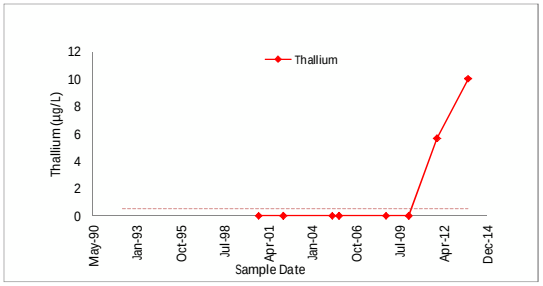


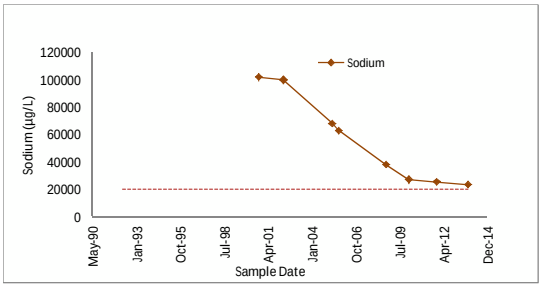






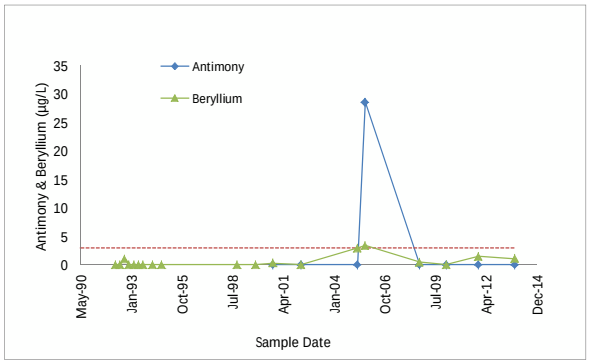


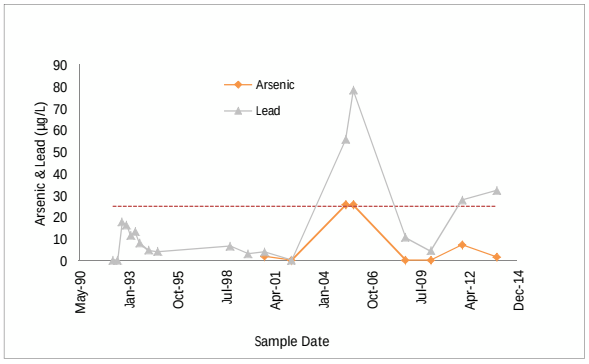


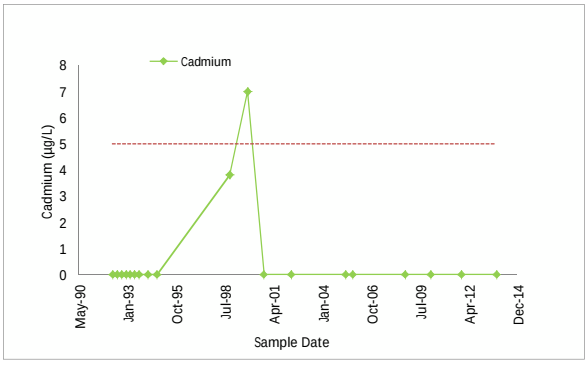


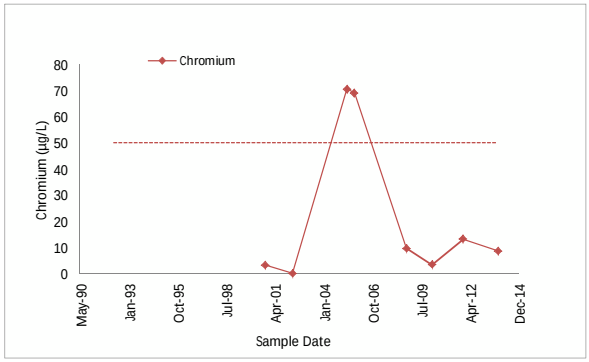
Notes:
1. The New York State Ambient Water Quality Standards (NYS AWQS) and the New York State Guidance Values (NYS GVs) are represented by a red dashed line.
2. NYS AWQSs and NYS GVs are from 6. NYCRR Part 703.5.
3. Only metals that exceeded in at least one of the sampling events in this well are plotted.
4. Analytes not detected above the laboratory method detections limits are included in the plots as 0.

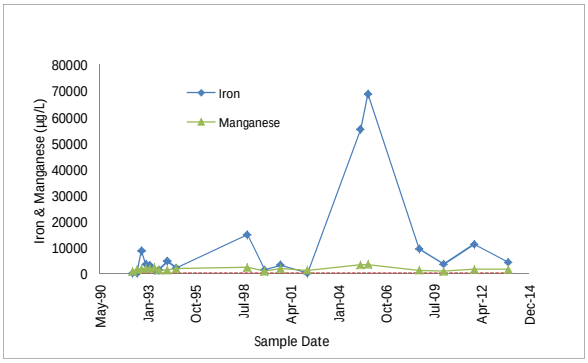
Analytical Results for Metals Exceeding NYS AWQS or Guidance Values in Monitoring Well MW-5
Beaver Smelting Site, Fallsburg, New York

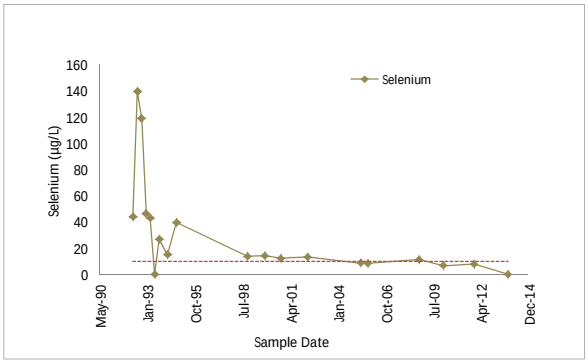


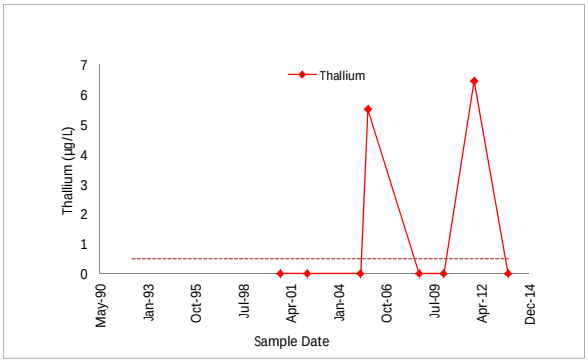






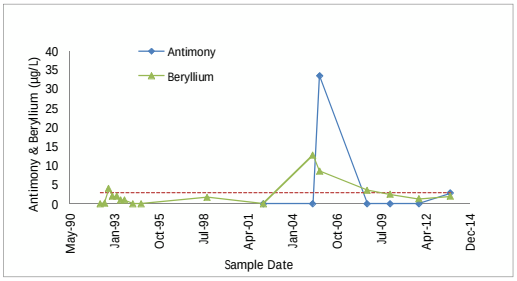


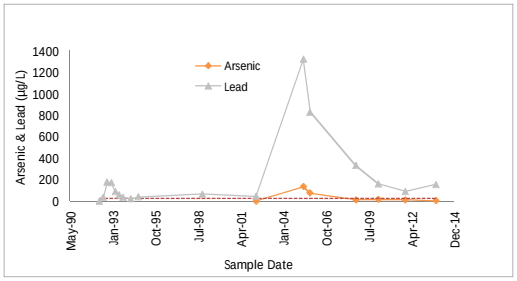


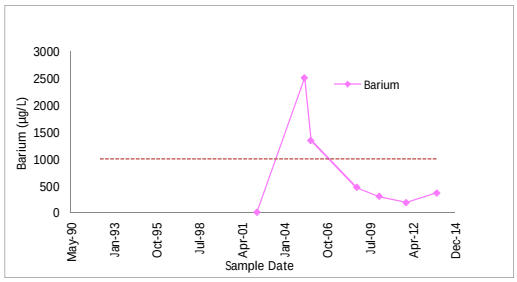


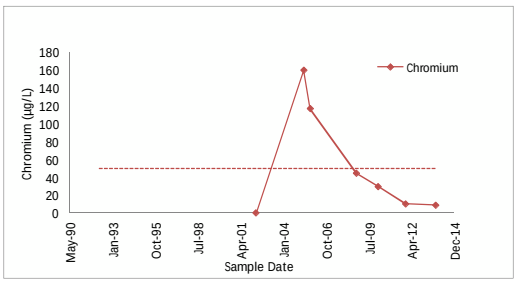
Notes:
1. The New York State Ambient Water Quality Standards (NYS AWQS) and the New York State Guidance Values (NYS GVs) are represented by a red dashed line.
2. NYS AWQSs and NYS GVs are from 6. NYCRR Part 703.5.
3. Only metals that exceeded in at least one of the sampling events in this well are plotted.
4. Analytes not detected above the laboratory method detections limits are included in the plots as 0.

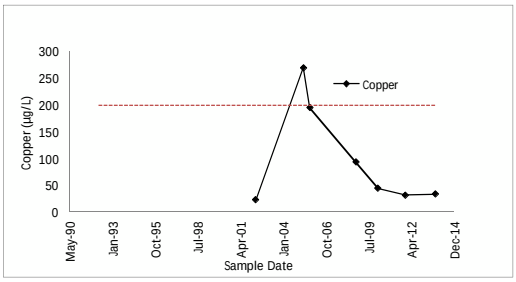
Analytical Results for Metals Exceeding NYS AWQS or Guidance Values in Monitoring Well MW-6
Beaver Smelting Site, Fallsburg, New York

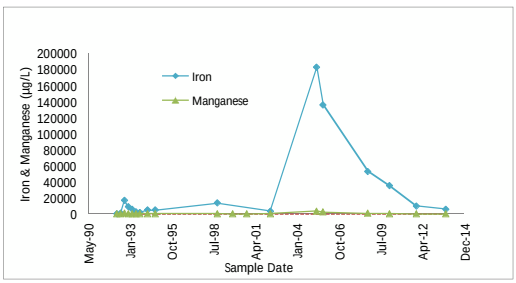


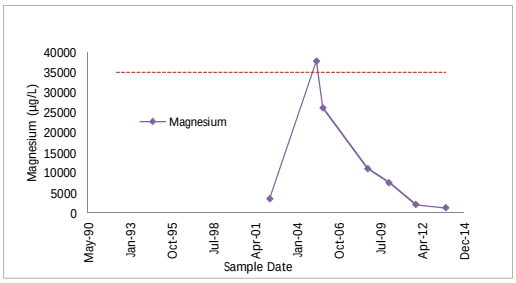


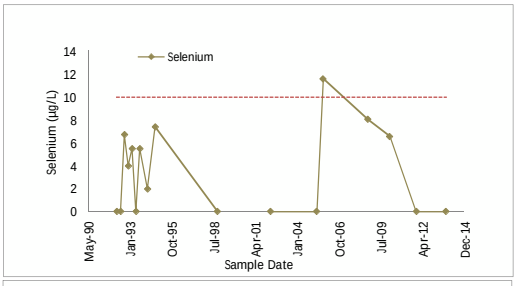


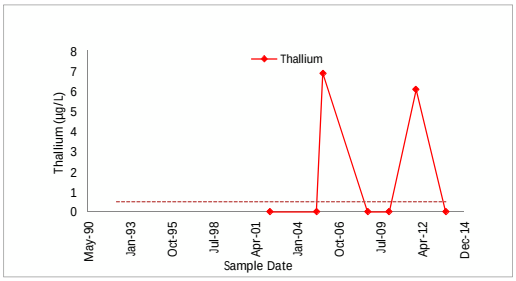


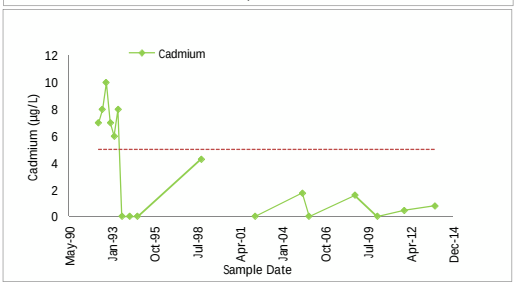


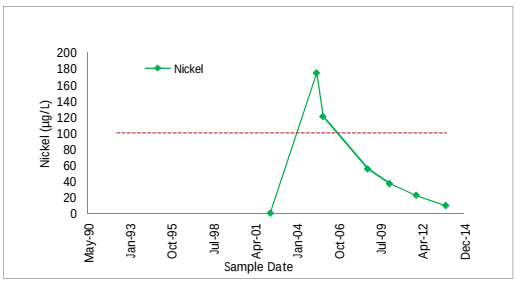






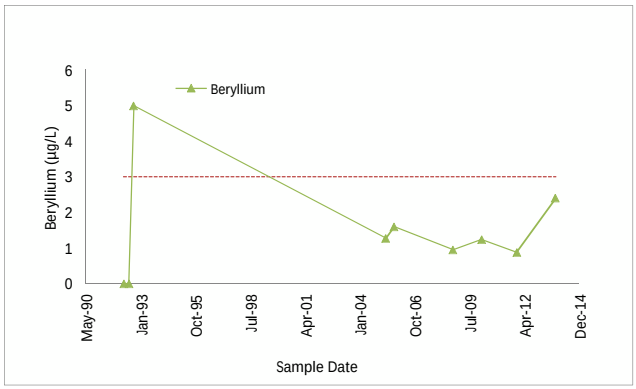


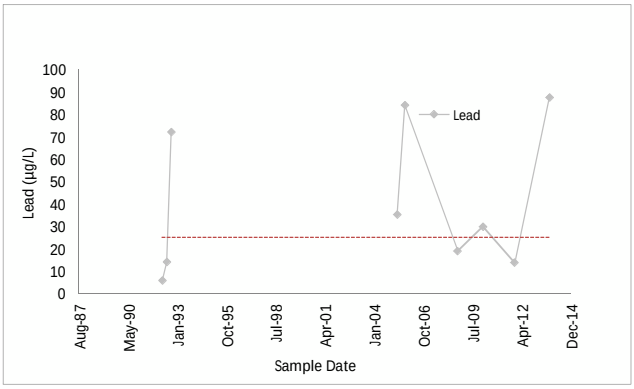


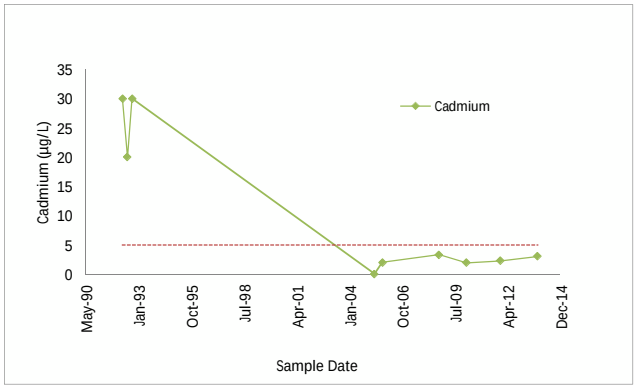


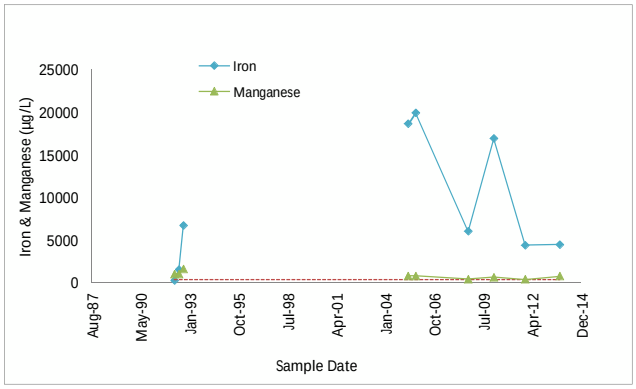
Notes:
1. The New York State Ambient Water Quality Standards (NYS AWQS) and the New York State Guidance Values (NYS GVs) are represented by a red dashed line.
2. NYS AWQSs and NYS GVs are from 6. NYCRR Part 703.5.
3. Only metals that exceeded in at least one of the sampling events in this well are plotted.
4. Analytes not detected above the laboratory method detections limits are included in the plots as 0.

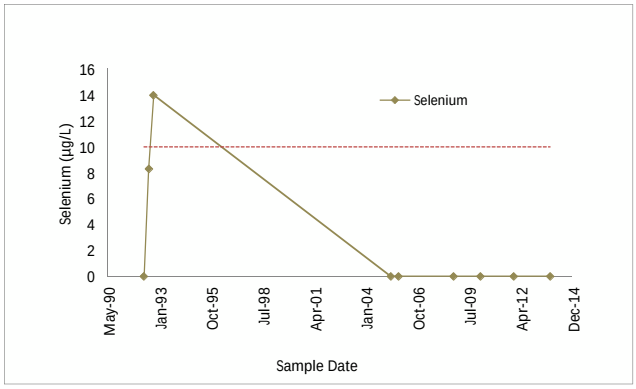
Analytical Results for Metals Exceeding NYS AWQS or Guidance Values in Monitoring Well MW-7
Beaver Smelting Site, Fallsburg, New York

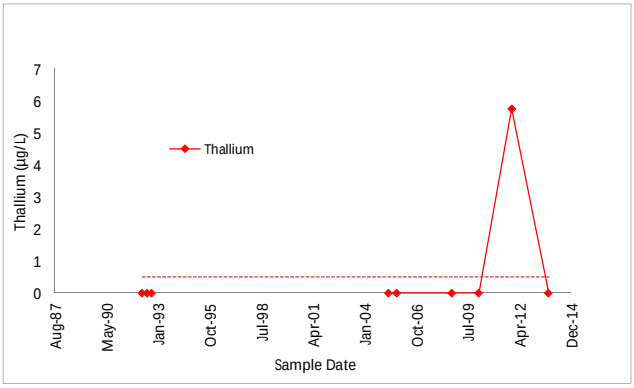












Notes:
1. The New York State Ambient Water Quality Standards (NYS AWQS) and the New York State Guidance Values (NYS GVs) are represented by a red dashed line.
2. NYS AWQSs and NYS GVs are from 6. NYCRR Part 703.5.
3. Only metals that exceeded in at least one of the sampling events in this well are plotted.
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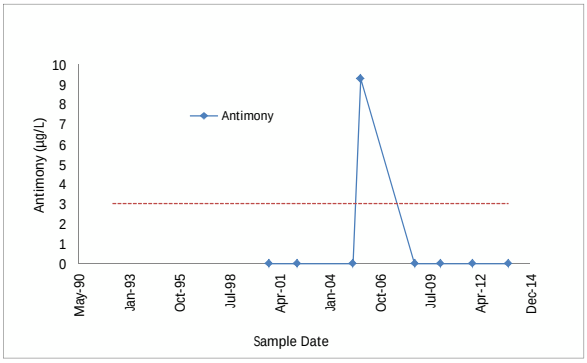
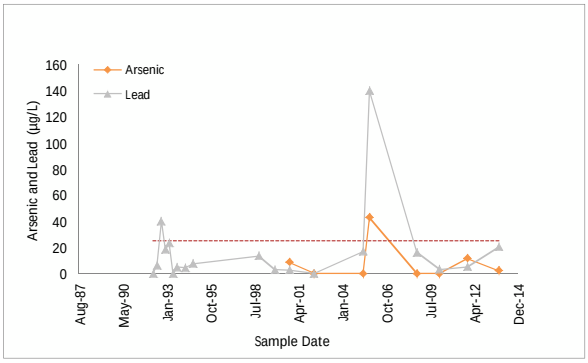
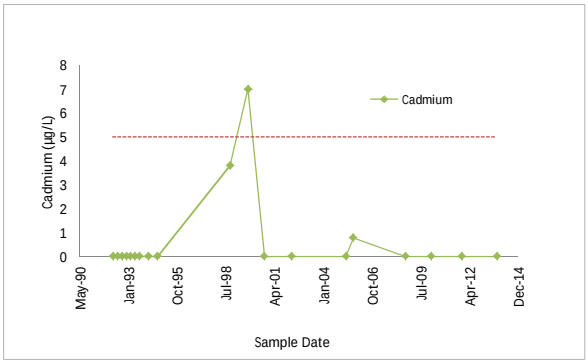
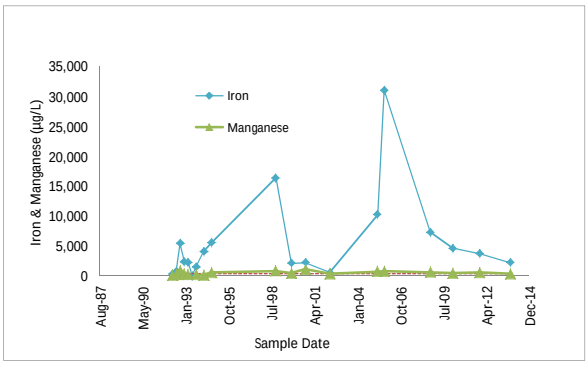
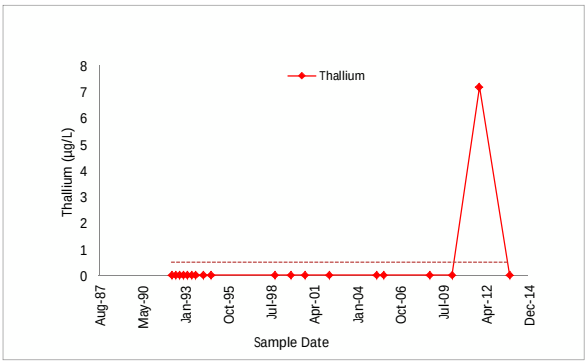
Analytical Results for Metals Exceeding NYS AWQS or Guidance Values in Monitoring Well MW-9
Beaver Smelting Site, Fallsburg, New York











Notes:
1. The New York State Ambient Water Quality Standards (NYS AWQS) and the New York State Guidance Values (NYS GVs) are represented by a red dashed line.
2. NYS AWQSs and NYS GVs are from 6. NYCRR Part 703.5.
3. Only metals that exceeded in at least one of the sampling events in this well are plotted.
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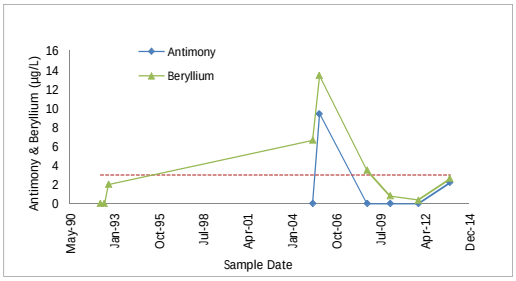
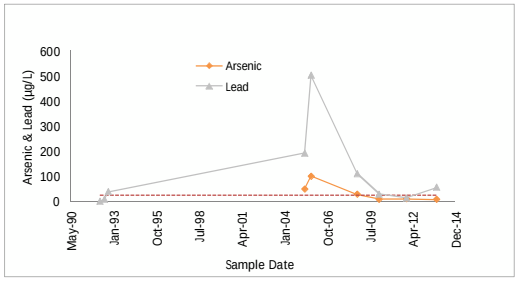
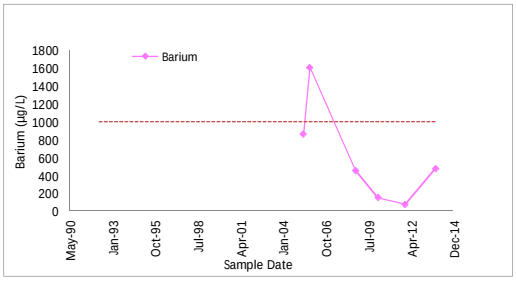
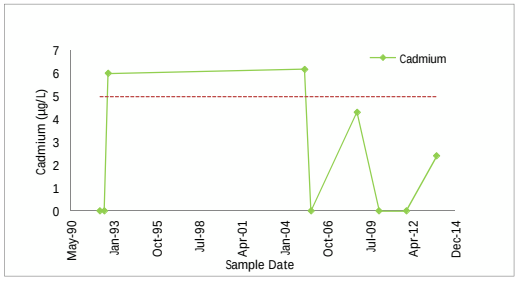
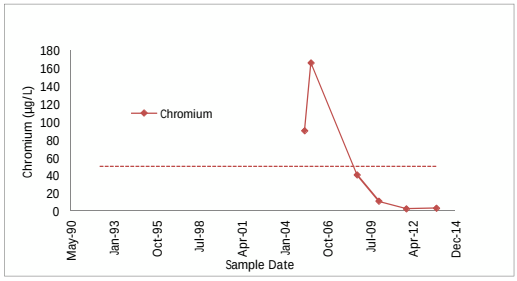
Analytical Results for Metals Exceeding NYS AWQS or Guidance Values in Monitoring Well MW-10
Beaver Smelting Site, Fallsburg, New York

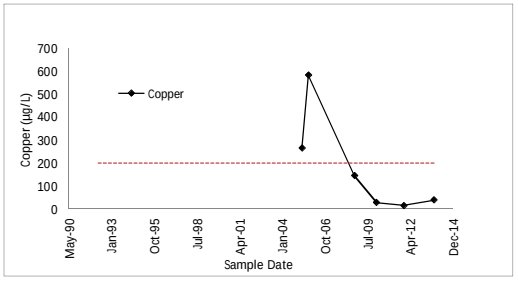


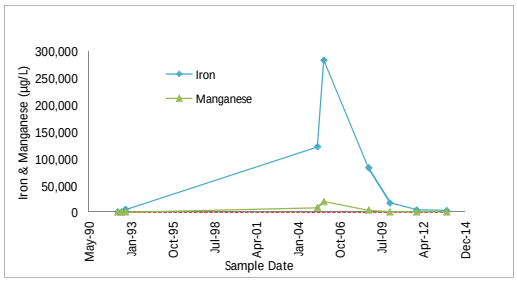


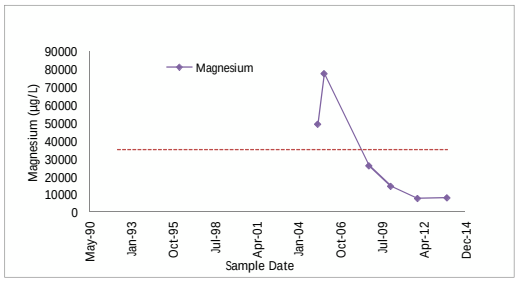


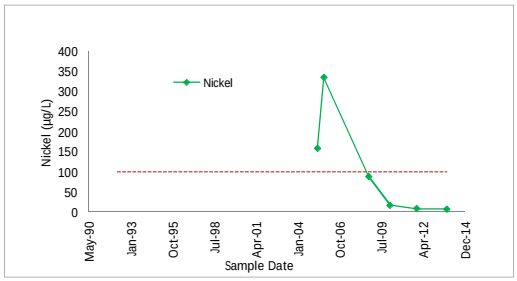


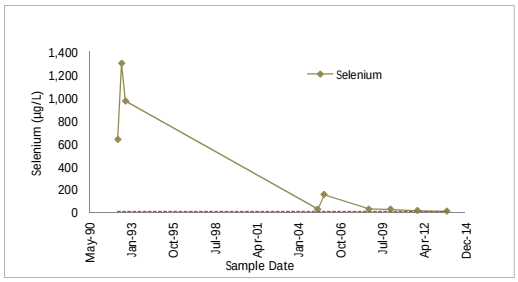


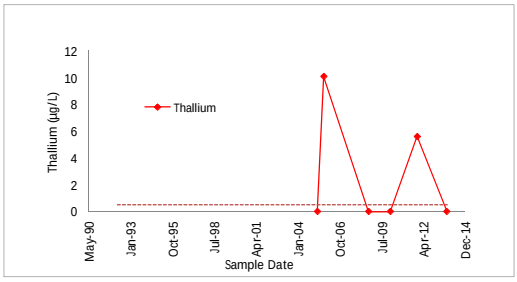












Notes:
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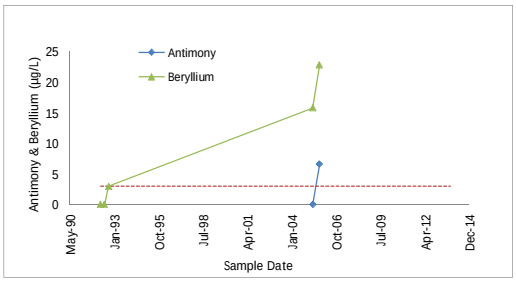
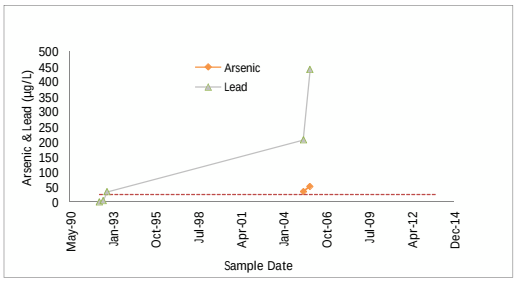
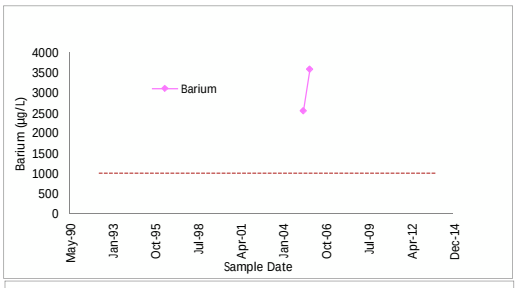
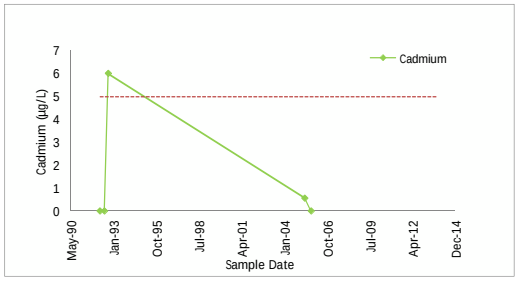
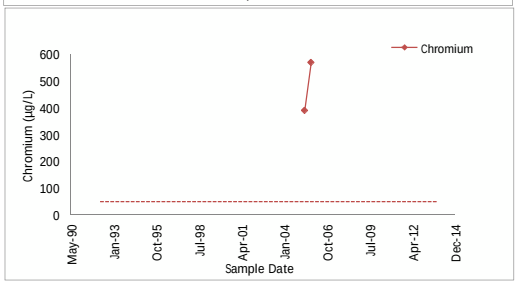
Analytical Results for Metals Exceeding NYS AWQS or Guidance Values in Monitoring Well MW-11
Beaver Smelting Site, Fallsburg, New York

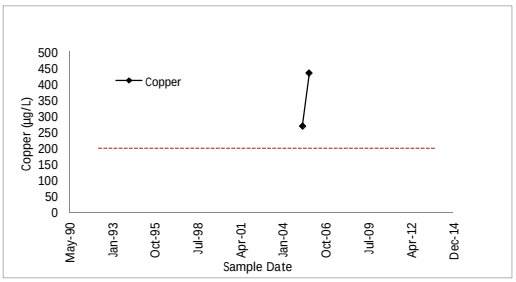


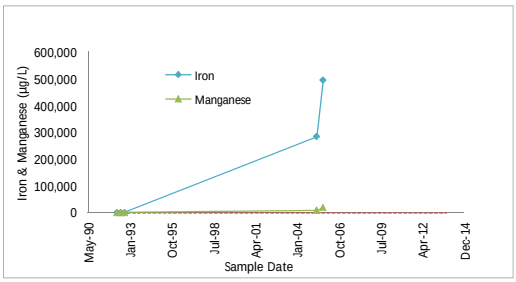


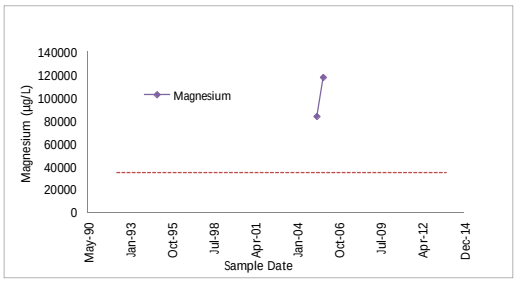


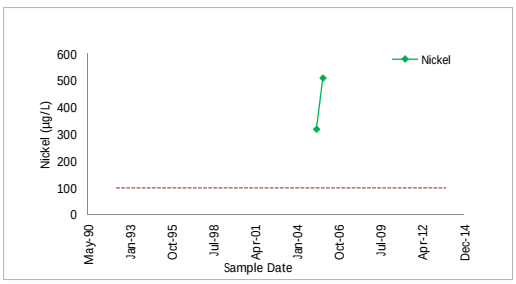


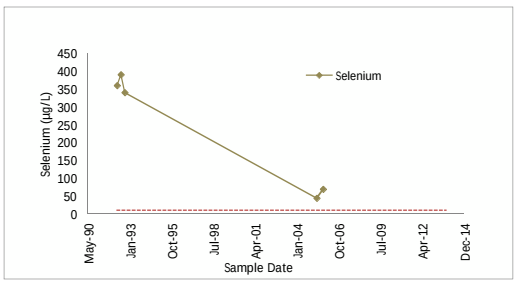


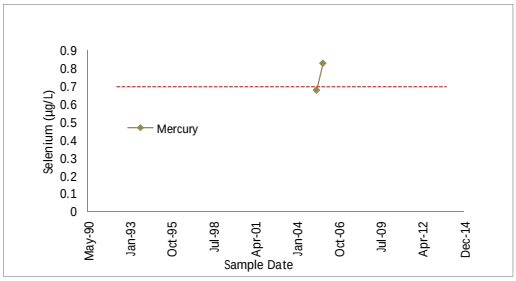












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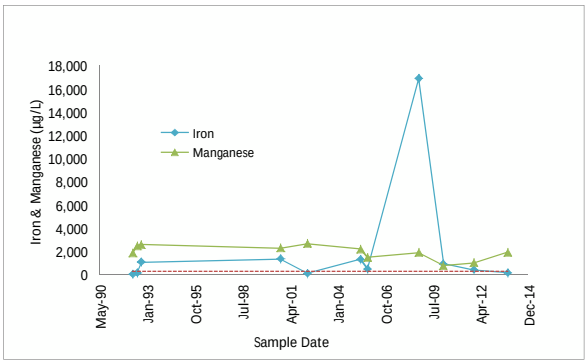
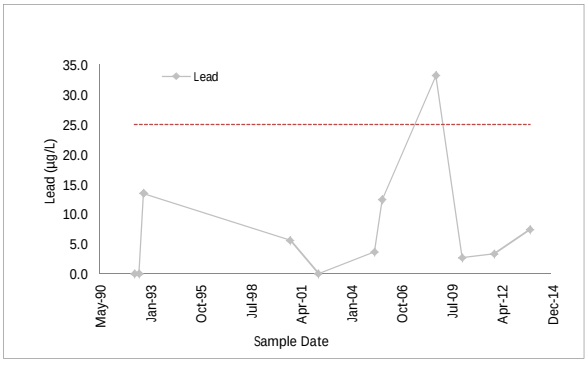
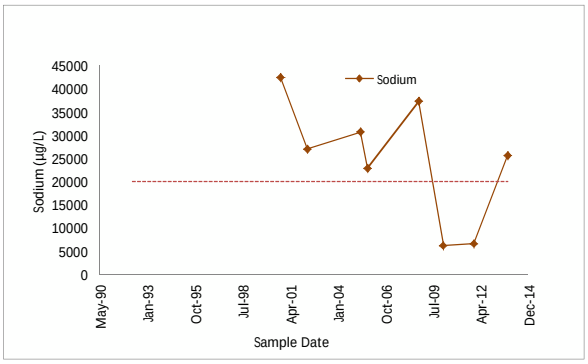
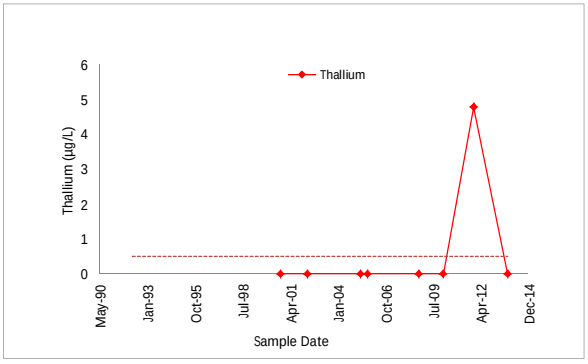
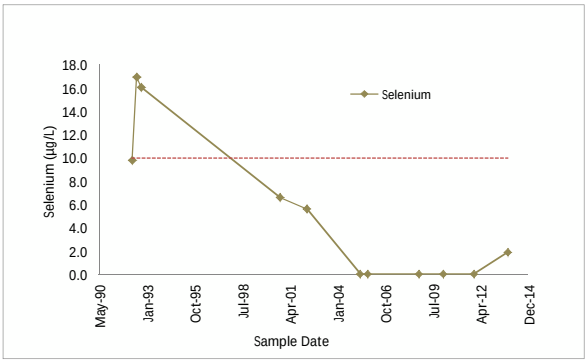
Analytical Results for Metals Exceeding NYS AWQS or Guidance Values in Monitoring Well MW-12
Beaver Smelting Site, Fallsburg, New York











Notes:
1. The New York State Ambient Water Quality Standards (NYS AWQS) and the New York State Guidance Values (NYS GVs) are represented by a red dashed line.
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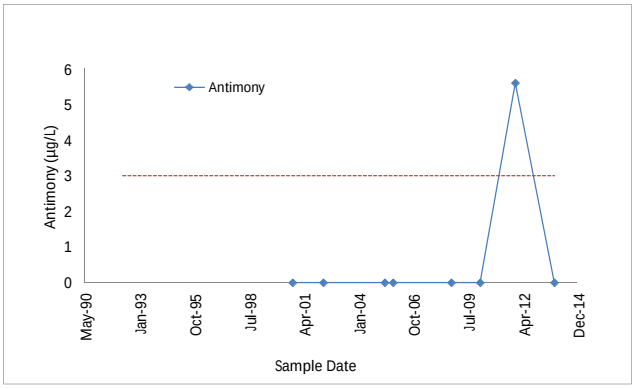
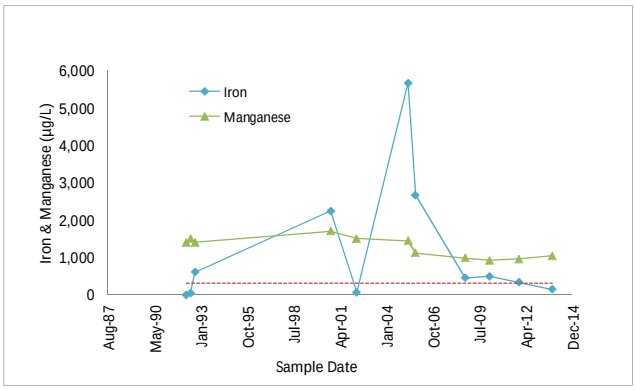
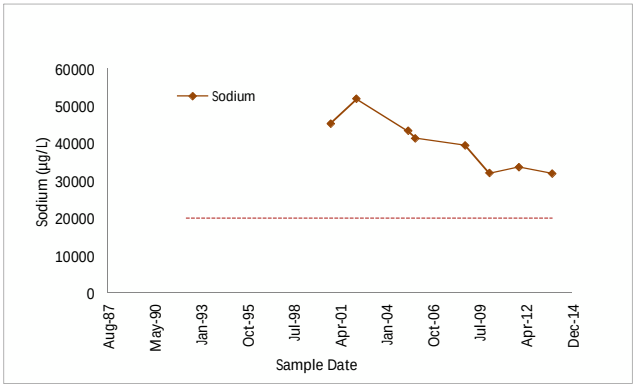
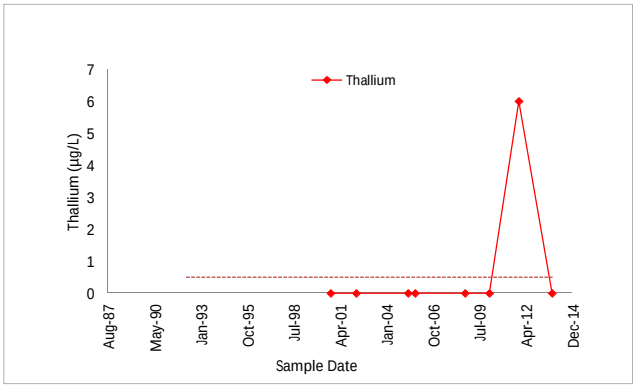
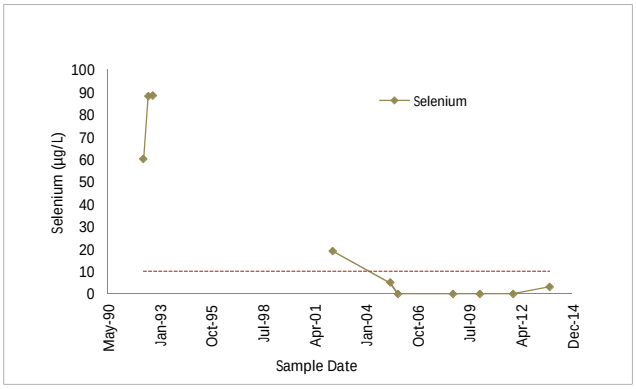
Analytical Results for Metals Exceeding NYS AWQS or Guidance Values in Monitoring Well MW-13
Beaver Smelting Site, Fallsburg, New York











Notes:
1. The New York State Ambient Water Quality Standards (NYS AWQS) and the New York State Guidance Values (NYS GVs) are represented by a red dashed line.
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Appendix C

Enclosure 1
Institutional and Engineering Controls - Property Owner Survey

Site Details **Box 1**

Site No. **353005**

Site Name **Beaver Smelting**

Site Address: Beaver Lane Zip Code: 12788
City/Town: Woodbourne
County: Sullivan
Site Acreage: 2.0

Reporting Period: January 01, 2012 to December 31, 2014

	YES	NO
1. Is the information above correct?	☒	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☒
If you answered YES to questions 2, 3 or 4, include documentation with this form.		
5. Is the site currently undergoing development?	☐	☒

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Industrial	☒	☐
7. Are all Institutional Controls (ICs) in place and functioning as designed?	☒	☐

Arthur D. Rosenshein
Signature of Propert Owner

1 December 2014
Date

SITE NO. 353005

Box 3

Description of Institutional Controls

Parcel	Owner	Institutional Control
14.-1-25.7	WOODBOURNE MINING	Monitoring Plan O&M Plan

Box 4

Description of Engineering Controls

Parcel	Engineering Control
14.-1-25.7	Cover System

Box 5

Periodic Review Report (PRR) Survey Statements

For each Institutional or Engineering control listed in Boxes 3 and/or 4, by checking "YES" below I believe all of the following statements to be true:

(a) the Institutional Control(s) and/or Engineering Control(s) employed at this site remain unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control; and

(d) if a Site Management Plan (SMP) exists, nothing has occurred that would constitute a violation or failure to comply with the SMP for this Control.

YES	NO
☒	☐

Arthur N. Rosenshein 1 December 2014

Signature of Property Owner Date

Arthur N. Rosenshein
6438 RR 42
PO Box 89
Woodbourne, NY 12788-0089

Enclosure 1
Engineering Controls - Standby Consultant/Contractor Certification Form

Site Details **Box 1**

Site No. **353005**

Site Name Beaver Smelting

Site Address: Beaver Lane Zip Code: 12788
City/Town: Woodbourne
County: Sullivan
Site Acreage: 2.0

Reporting Period: January 01, 2012 to December 31, 2014

	YES	NO
1. Is the information above correct?	☑	☐
If NO, include handwritten above or on a separate sheet.		
2. To your knowledge has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☑
3. To your knowledge has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☑
4. To your knowledge have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☑
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. To your knowledge is the site currently undergoing development?	☐	☑

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Industrial	☑	☐
7. Are all ICs/ECs in place and functioning as designed?	☑	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and contact the DEC PM regarding the development of a Corrective Measures Work Plan to address these issues.

Signature of Standby Consultant/Contractor Date

SITE NO. 353005 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
14.-1-25.7	WOODBOURNE MINING	Monitoring Plan O&M Plan

Box 4

Description of Engineering Controls

Parcel	Engineering Control
14.-1-25.7	Cover System

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification, including data and material prepared by previous contractors for the current certifying period, if any;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☑	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) nothing has occurred that would constitute a failure to comply with the Site Management Plan, or equivalent if no Site Management Plan exists.

YES	NO
☑	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and contact the DEC PM regarding the development of a Corrective Measures Work Plan to address these issues.

Signature of Standby Consultant/Contractor _____ Date _____

IC/EC CERTIFICATIONS

Box 6

Qualified Environmental Professional Signature

I certify that all information in Boxes 2 through 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Scott A. Underhill at AECOM Technical Services Northeast, Inc
print name

40 British American Blvd

Latham NY 12110
(Print business address)

am certifying as a Qualified Environmental Professional

Scott Underhill
Signature of Qualified Environmental Professional

STATE OF NEW YORK
SCOTT ANDREW UNDERHILL
LICENSED PROFESSIONAL ENGINEER
Stamp
(Required for PE)

2-23-15
Date