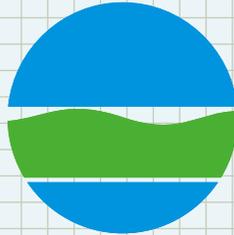


**PERIODIC REVIEW REPORT NO. 1
2011
REPORTING PERIOD**



**SPECTRUM FINISHING SITE
SITE NO 1-52-029**

Town of Babylon, Suffolk County, New York

WORK ASSIGNMENT NO. D004446-8

Prepared For

**New York State Department
of Environmental Conservation**

DECEMBER 2011



DRAFT

PERIODIC REVIEW REPORT NO. 1

2011 REPORTING PERIOD

SPECTRUM FINISHING SITE

SITE REGISTRY NO. 1-52-029

TOWN OF BABYLON, SUFFOLK COUNTY, NEW YORK

WORK ASSIGNMENT NO. D004446-8

Prepared for:

**NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION**

Prepared by:

**DVIRKA AND BARTILUCCI CONSULTING ENGINEERS
SYRACUSE, NEW YORK**

DECEMBER 2011

**PERIODIC REVIEW REPORT NO. 1
2011 REPORTING PERIOD
SPECTRUM FINISHING SITE
TOWN OF BABYLON, NEW YORK**

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
1.0	INTRODUCTION.....	1-1
2.0	SITE OVERVIEW	2-1
2.1	Site Description	2-1
2.2	Site History	2-1
2.2.1	Previous Investigations	2-2
2.2.2	Record of Decision	2-3
2.2.3	Remedial Activities.....	2-3
3.0	EVALUATION OF REMEDY PERFORMANCE, EFFECTIVENESS AND PROTECTIVENESS	3-1
3.1	Remedial Action Objectives	3-1
3.2	Institutional and Engineering Control Plan Compliance	3-1
3.2.1	Description of Institutional Control	3-2
3.2.2	Description of Engineering Control.....	3-3
3.2.3	Institutional and Engineering Control Plan Compliance Status	3-3
3.3	Excavation Plan Compliance	3-4
3.3.1	Description of Excavation Plan	3-4
3.3.2	Description of Groundwater Use On-Site.....	3-5
3.3.3	Excavation Plan Compliance Status	3-5
3.4	Monitoring Plan Compliance.....	3-6
3.4.1	Description of Site Inspections	3-6
3.4.2	Performance and Effectiveness Monitoring.....	3-7
3.4.2.1	Water Level Monitoring	3-8
3.4.2.2	Groundwater Sampling and Analysis	3-10
4.0	COST EVALUATION	4-1
5.0	FINDINGS, CONCLUSIONS AND RECOMMENDATIONS	5-1
5.1	Findings.....	5-1
5.2	Conclusions.....	5-2
5.3	Recommendations.....	5-3
6.0	REFERENCES.....	6-1

**PERIODIC REVIEW REPORT NO. 1
2011 REPORTING PERIOD
SPECTRUM FINISHING SITE
TOWN OF BABYLON, NEW YORK**

TABLE OF CONTENTS (Continued)

<u>Section</u>	<u>Title</u>	<u>Page</u>
----------------	--------------	-------------

List of Appendices

Figures.....	A
Daily Field Activity Reports.....	B
Groundwater Elevation Data.....	C
Field Forms	D
Analytical Results	E

List of Figures

1-1	Site Location Map.....	1-2
2-1	Site Layout Map.....	2-2

List of Tables

3-1	Water Level Measurements	3-9
-----	--------------------------------	-----

Section 1

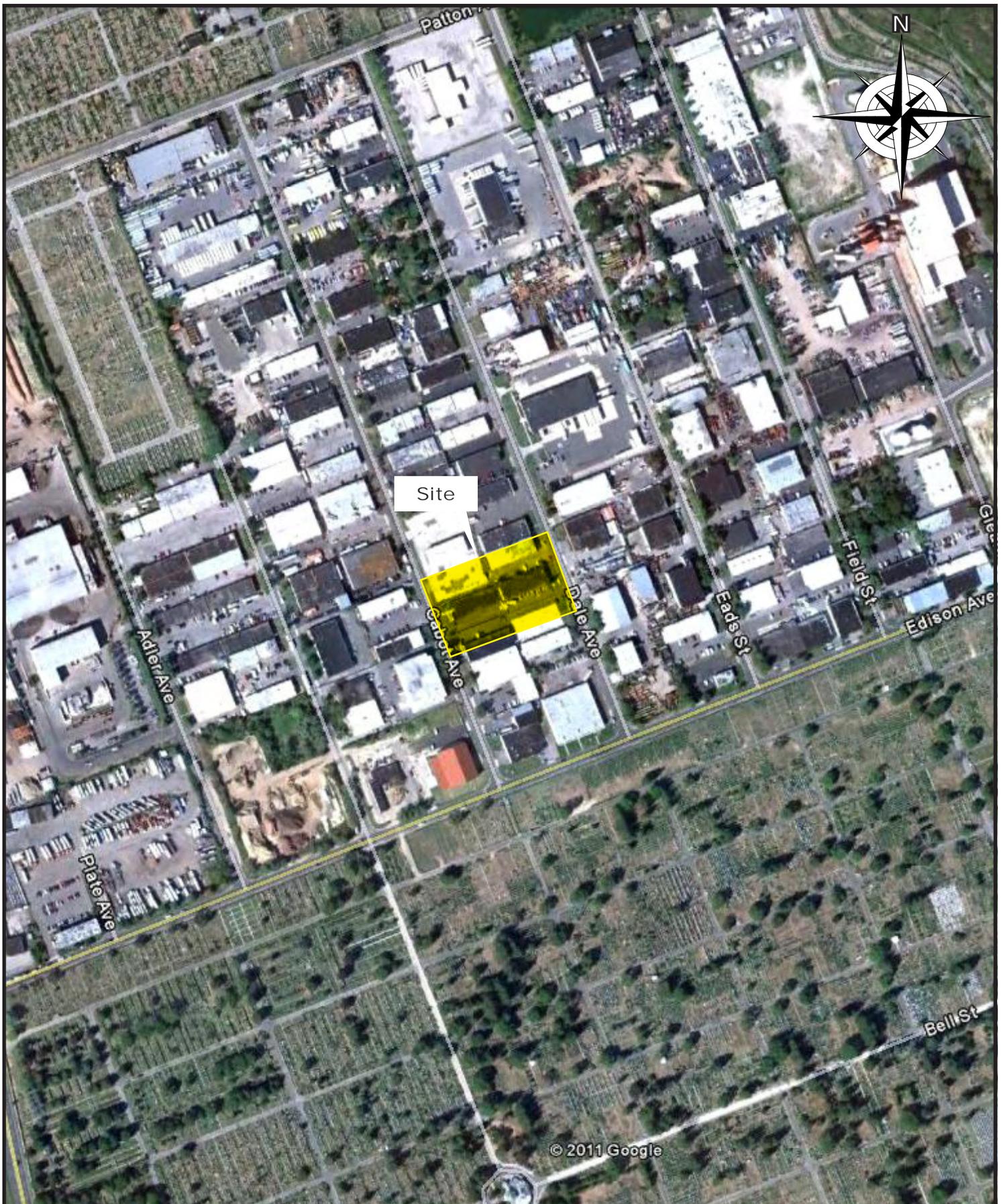
1.0 INTRODUCTION

The Spectrum Finishing Site (the Site), located in the Town of Babylon, Suffolk County, New York (Figure 1-1), is a New York State Class 2 Inactive Hazardous Waste Disposal Site, Site Registry Number 1-52-029. The New York State Department of Environmental Conservation (NYSDEC) issued a work assignment for the Spectrum Finishing Site to Dvirka and Bartilucci Consulting Engineers (D&B) under D&B's State Superfund Standby Contract with the NYSDEC. The work is being performed with funds allocated under the New York State Superfund Program, as part of New York's program to investigate and remediate hazardous waste sites. The work assignment involves site management services associated with the Spectrum Finishing Site.

By way of background, a Record of Decision (ROD) for the Site was signed in March 2003 with the selected remedy of soil excavation and off-site disposal and an Explanation of Significant Difference was signed in March 2008. After completion of the remedial work, subsurface soil containing contaminants above the remedial site cleanup objectives were left in place at the Site. A Site Management Plan (SMP) was prepared on behalf of NYSDEC by CDM in August 2010 to control exposure to remaining contamination during the use of the Site and to ensure protection of public health and the environment. The SMP provides a description of procedures required to manage remaining contamination at the Site including:

- Implementation and management of all Engineering Controls (ECs) and Institutional Controls (ICs);
- Media Monitoring;
- Performance of periodic inspections, certification of results, and,
- Submittal of Periodic Review Reports (PRRs).

This report represents the first PRR for the Spectrum Finishing Site. The report summarizes the site management activities completed during the monitoring period from January 2011 through December 2011. The report has been prepared in accordance with NYSDEC's document entitled "*DER-10 Technical Guidance for Site Investigation and Remediation*", dated May 2010, as well as the Site Management Pilot Program Work Plan, dated January 2011, and includes the following:



SCALE: Not to Scale

Source: Googlearth.com



Spectrum Finishing Site
Periodic Review Report
Site Location Map

Figure 1-1

- Presentation of site background information;
- Identification of the remedial goals established for the Site;
- A description of the ICs/ECs for the Site;
- A brief review of the site monitoring protocols;
- A description of the site management activities performed including groundwater sampling and site inspections;
- An evaluation of remedy performance, effectiveness and protectiveness based on monitoring data; and,
- Conclusions and recommendations.

Section 2

2.0 SITE OVERVIEW

D&B was not involved in the investigation and remediation phases of work at the Spectrum Finishing Site. As a result, the following description of site background information and investigation and remediation activities is based on information provided to D&B by the NYSDEC.

2.1 Site Description

The Spectrum Finishing Site is a former metal finishing facility which was used for metal finishing operations from approximately 1968 to 1993. The Site is located in the Pinelawn Industrial Area on 50 Dale Street and within the shared parking lots of 60 Dale Street and 51 and 61 Cabot Street in the Town of Babylon, New York. The Site currently consists of a fenced vacant lot surrounded by a paved parking lot and three occupied one-story buildings. The Site is approximately 2.3 acres in size. A layout of the Site is presented on Figure 3 and Figure 4, Appendix A.

The Pinelawn Industrial Area is a high density industrial area bounded by cemeteries and open land to the north, south and west sides and a residential area to the east. The Site and surrounding area are provided with public water. However, storm water and sewage are discharged into dry wells and sanitary septic systems, respectively.

2.2 Site History

Spectrum Finishing operated at this property from approximately 1968 to 1993. The company specialized in electroplating high strength alloys and descaling titanium alloys for the aerospace industry. From 1970 to 1975, the Suffolk County Department of Health Services (SCDHS) reported discharges of industrial waste into on-site storm drains. High concentrations of heavy metals were noted from samples collected from an on-site leaching tank and storm drain as well as site runoff. During the 1970s and 1980s, SCDHS inspections revealed discharges of liquid plating waste to the soil and discharge of wastewater into on-site storm drains.

2.2.1 Previous Investigations

A Phase II Investigation was completed in March 1988. Elevated concentrations of metals including cadmium, chromium, iron and lead were detected in the soil and groundwater on-site. Volatile organic compounds (VOCs) including 1,1,1-trichloroethane, trichloroethene and toluene were detected at elevated concentrations in groundwater, however, no VOCs were detected in on-site soils.

In May 1997, a potentially responsible party (PRP) for the Site, reportedly pumped liquid waste from several on-site holding tanks into approximately 300 55-gallon drums. The United States Environmental Protection Agency (USEPA) reportedly witnessed the process being performed “haphazardly” with many spills. According to the USEPA, the drums were either not labeled or they were mislabeled, and wastes were mixed. The NYSDEC and the New York State Department of Health (NYSDOH) conducted a visit to the Site on October 7, 1997. The PRP was observed pumping wastes from one tank to another tank and rinsing several drums.

The USEPA completed a Time Critical Removal Action from August 1997 through March 1998 to address drums, sumps and other waste containers left on-site and to address wastes located in the building. The removal action included the removal and disposal of a total of 25,767 gallons and 77 cubic feet of various hazardous wastes. Following the USEPA removal action, environmental samples were collected in April 1998. Analytical results indicated that soil, groundwater, storm water and storm water sediment were impacted with elevated concentrations of metals and VOCs.

NYSDEC conducted a remedial investigation/feasibility study (RI/FS) between June 1999 and May 2001. The RI was completed to evaluate surface and subsurface environmental conditions and to provide data pertaining to the nature and extent of on-site contamination. The RI revealed that the primary contaminant type in the subsurface soil was metals. Areas impacted by metals contamination included cesspools and the drainage structures, the alleyway and a sump inside the building. The shallow groundwater underlying the Site was determined to be contaminated by VOCs and metals.

2.2.2 Record of Decision

A ROD was issued in March 2003 with the selected remedy of soil excavation and off-site disposal and an Explanation of Significant Difference was issued in March 2008.

2.2.3 Remedial Activities

The remedial construction was conducted in several phases between October 2008 and June 2009 by the NYSDEC under the State Superfund Program. As part of the remedial construction, the Spectrum Finishing building was demolished and demolition debris was removed from the Site. A summary of the remedial construction activities is presented below. A complete description of the remedial construction activities are presented in the Final Remediation Report prepared on behalf of the NYSDEC by CDM in March 2010.

Interim Remedial Measures

NYSDEC conducted an interim remedial measure (IRM) in 2000 to remove sediments from 11 cesspools and drainage structures contaminated with VOCs, semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides and metals. The IRM included the removal of 11,500 gallons of non-hazardous water; 3,950 gallons of impacted water; and 43 tons of soil/sediment identified as hazardous waste. Post-IRM analytical results indicated that the VOCs, PCBs and SVOCs had been removed to levels below the site cleanup objectives. Metal concentrations were greatly reduced, however, metal concentrations, above the site cleanup objectives, remained in many of the cesspools and drainage structures.

Underground Storage Tank Removals

A total of 11 underground storage tanks (USTs) were removed from the Site between December 4, 2008 and June 18, 2009, which included tanks located at 50 and 60 Dale Street and 51 and 61 Cabot Street. The removed tanks were all 1,000 gallons in capacity except for two tanks which were 3,000 gallons in capacity. Approximately 6,000 gallons of liquid waste was

removed from the 11 USTs and was disposed of off-site at an approved facility. The areas of impacted soil around the tanks were also excavated for off-site disposal.

Asbestos Abatement and Building Demolition

Asbestos abatement was conducted at 50 Dale Street in November 2008 prior to building demolition. All asbestos waste was transported and disposed at an approved disposal facility. Building demolition of 50 Dale Street was performed in February 2009. The adjoining west addition of the building, known as 51 Cabot Street, was left standing.

Alleyway Soil Excavations

Approximately 150 tons of waste excavated from the east, west and south alleyways was disposed of at an off-site facility. Based on the east alley excavation, soil contamination is believed to extend off-site under 40 Dale Street. This contamination is to be addressed under a separate operable unit identified for that site.

Building Sump Soil Excavations

Three building sumps and associated contaminated soil were excavated and disposed of at an approved off-site disposal facility. Analytical results of sump end point samples revealed hazardous concentrations of cadmium and chromium remained in soil. Consequently, additional soil and concrete was excavated from the sump areas. Approximately 1,500 tons of hazardous soil and 230 tons of non-hazardous concrete were transported to an off-site facility for disposal.

Drainage and Septic Structure Abandonment

The on-site drainage and cesspool structures were abandoned by removing liquid in the structure and the sediment in the structure to a depth of approximately 18-feet below grade surface (bgs). End point samples were collected at each structure and analyzed for VOCs and metals.

Asphalt Paving

All of the existing asphalt on-site was removed and replaced with recycled concrete aggregate (RCA) and a 2-inch thick asphalt binder course and a 1.5-inch thick asphalt wear course. The alleyway excavations were restored in the following manner:

- The south alleyway was graded and compacted with RCA and then paved with a 3-inch binder course and a 2-inch wear course; and,
- The east and west alleyways were restored with a 12-inch layer of compacted RCA to allow for drainage.

Remaining Contamination

During the remedial construction, remediation work was conducted that included the removal of additional contaminated soils beneath the building. The contaminated soils were removed to the extent practical but levels of contamination above cleanup objectives for metals still remain. The areas include:

- East Alleyway at depths greater than 4 feet bgs: Additional removal was not practical due to the adjacent building foundation. This area is delineated by a filter fabric at the base of the excavation.
- Sump areas beneath 50 Dale Street - the south east sidewall near the east alleyway and the bottom of the sump excavation below approximately 15 to 18-feet bgs: Additional removal was not practical due to the proximity to the adjacent building foundation. The limit of the excavation was delineated using filter fabric at the base of the excavation.
- Former cesspool structures CP-3, CP-4, CP-7 and CP-8: Structures were cleaned to the base of the structure (approximately 18 feet bgs). Due to groundwater entering the base of the structure removal efforts were discontinued.
- Former drainage structures DS-1, DS-5, and DS-9: Structures were cleaned to the base of the structure (approximately 18 feet bgs). Due to groundwater entering the base of the structure removal efforts were discontinued.

Section 3

3.0 EVALUATION OF REMEDY PERFORMANCE, EFFECTIVENESS AND PROTECTIVENESS

3.1 Remedial Action Objectives

The overall goal of the remedial program for the Spectrum Finishing Site, as described in the March 2003 ROD (NYSDEC, 2003) was to eliminate or mitigate the significant threats to public health and/or the environment that were posed by the hazardous waste at the Site.

As specified in the ROD, the objectives for operating the engineering controls as part of the approved site remedy are to:

- Eliminate to the extent practicable, the leaching of contaminants to the groundwater;
- Protect public water supply wells and potential receptors from exposure to contaminated groundwater; and,
- Eliminate to the extent practicable the risk of exposure to groundwater.

The following sections discuss performance, effectiveness, and protectiveness of the approved site remedy relative to the Remedial Action Objectives (RAOs) identified in the ROD. In addition, the sections discuss compliance with the NYSDEC-approved SMP.

3.2 Institutional and Engineering Control Plan Compliance

The Institutional and Engineering Control Plan details the steps necessary to manage and implement the institutional and engineering controls for the Site, consistent with the requirements of the ROD. The Institutional and Engineering Control Plan identifies issues to be specifically evaluated with respect to the institutional and engineering control certification.

The Institutional and Engineering Control Plan also identifies requirements to be placed on future site development activities within the restricted areas of the Site. These requirements are necessary to ensure that any disturbance of soil and/or groundwater at the Site does not compromise the integrity of the site cover, and subsequently, result in unacceptable exposure of contamination to the public and the environment.

3.2.1 Description of Institutional Control

An IC is any non-physical means of enforcing a restriction on the use of real property that limits human and environmental exposure, restricts the use of groundwater, provides notice to the potential owners, operators, or members of the public, or prevents actions that would interfere with the effectiveness of the remedial program or with the effectiveness and/or integrity of operation, maintenance or monitoring activities at or pertaining to the Site. Types of ICs include, but are not necessarily limited to, environmental easements, deed restrictions, discharge permits, site security (other than fencing), local permits, consent orders/decrees, zoning restrictions, hazardous waste site registry, groundwater use restrictions, condemnation of property, and public health advisories.

A Deed Restriction was recorded with the Suffolk County Clerk's Office on March 1, 2011 which places the following restrictions on the property:

- The property may only be used for commercial or industrial use provided that the long-term ECs/ICs included in the SMP are employed;
- The property may not be used for a higher level of use, such as unrestricted or restricted residential use without additional remediation and amendment of the Deed Restriction, as approved by the NYSDEC;
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for its intended use;
- The potential for vapor intrusion must be evaluated for any new buildings developed on the Site and any potential impacts that are identified must be mitigated; and,
- Vegetable gardens and farming, including livestock and dairy farming, on the property are prohibited.

In addition, the Spectrum Finishing Site is currently managed as part of New York State's Inactive Hazardous Waste Disposal Site Program (Superfund). The Site is listed on the Superfund registry. The listing on the registry is also an IC for the Spectrum Finishing Site. In general, Superfund sites go through a process of investigation, evaluation, cleanup, and monitoring in distinct stages. Subsequently, New York State maintains detailed assessment files for each listed site. Generally, individual site records contain detailed reviews of the site and are

used as the basis for listing and classifying the site in the registry. Site records may be accessed through the contaminated site database. Site information generally includes site name, identification number, description, cleanup status, types of cleanup, owner information, types and quantities of contaminants, and an assessment of health and environmental problems.

3.2.2 Description of Engineering Control

An EC is any physical barrier or method employed to actively or passively contain, stabilize, or monitor contamination, restrict the movement of contamination to ensure the long-term effectiveness of the remedial program, or eliminate potential exposure pathways to contamination. Engineering controls include, but are not limited to, pavement, caps, covers, subsurface barriers, vapor barriers, slurry walls, building ventilation systems, fences, access controls, treatment and filtrations systems, and alternate water supplies.

Engineering controls for the Spectrum Finishing Site include a final cover system as well as perimeter fencing. Remedial design drawings identifying remedial activities at the Site are provided in the Final Engineering Report dated March 2010.

3.2.3 Institutional and Engineering Control Plan Compliance Status

Institutional Control Plan

As noted above current institutional controls at the Site consist of a Deed Restriction and the listing on the New York State Inactive Hazardous Waste Site Registry. D&B conducted a detailed review of the site records and concluded that the institutional controls are in-place and effective, and nothing has occurred that would impair the ability of the controls to protect the public health and environment (e.g., removal of site from the registry or termination of the Deed Restriction).

No modifications to the IC Plan are recommended at this time.

Engineering Control Plan

During the 2011 reporting period, the Site was inspected by D&B representatives. The site inspection included observations of the site grounds, general condition of the site cover and the monitoring wells. Observations were recorded in a field notebook dedicated to the project. Photographs were also taken to document pertinent observations. A Daily Field Activity Report (DFAR) detailing the results of the 2011 site inspection is included in Appendix B.

The Site was inspected and the engineering controls were determined to be in-place and effective; performing as designed; and nothing was observed to have occurred that would impair the ability of the controls to protect the public health and environment (e.g., major erosion or flooding).

No modifications to the EC Plan are recommended at this time.

3.3 Excavation Plan Compliance

Excavation of soil at the Site may be required as a part of future site maintenance or development activities. Development of the Site for commercial and/or industrial uses is currently permitted provided that the long-term ECs/ICs included in the SMP are employed. Since the Site was not remediated to unrestricted levels and contamination remains at the Site, any proposed future activities that may result in the exposure of contamination must be handled in accordance with the Excavation Plan, which is included in the SMP. In addition, any proposed change in the current site use must include an evaluation of potential impacts on the integrity, operability, reliability, and effectiveness of the institutional and engineering controls.

3.3.1 Description of Excavation Plan

In general, the Excavation Plan specifies that the NYSDEC must be notified prior to the initiation of any work. In addition, adequate personal protective equipment (PPE) must be used to prevent exposure to potentially contaminated soil during excavation, which must be identified by a qualified health and safety professional. All excavation work must also be conducted in

accordance with the Site-Specific Health and Safety Plan (HASP) as well as in accordance with the Community Air Monitoring Program (CAMP). The Excavation Plan also specifies that a summary of the work to be performed must be developed prior to initiating any excavation activities within the Site. The summary of work must be submitted to the NYSDEC. The Excavation Plan specifies minimum requirements for the information required to be submitted prior to initiation of the excavation activities.

3.3.2 Description of Groundwater Use On-Site

The Deed Restriction prohibits the use of groundwater underlying the property without treatment rendering it safe for its intended use. In addition, the Excavation Plan requires treatment or off-site disposal of all liquids generated as a result of excavation dewatering activities.

3.3.3 Excavation Plan Compliance Status

Excavation Plan

Based on the result of the site inspections, no excavation activities were performed at the Site during the 2011 reporting period. In addition, no changes in site use have occurred. Currently, the Excavation Work Plan for the Site is in-place and effective.

No modifications to the Excavation Work Plan are recommended at this time.

Groundwater Use Restrictions

Based on the result of the site inspections, no unauthorized use of groundwater has occurred at the Site during the 2011 reporting period. Currently, the groundwater use restrictions are in-place and effective.

No modifications to the groundwater use restrictions are recommended at this time.

3.4 Monitoring Plan Compliance

The monitoring program includes the collection and analysis of groundwater samples and periodic inspections of the Spectrum Finishing Site to observe general site conditions. The purpose of the inspections, as described in the SMP, is to determine if all ICs, including site usage, are being adhered to; evaluate the condition and continued effectiveness of ECs; evaluate general site conditions; and, if appropriate, determine if site management activities are being conducted and confirm that site records are up to date.

3.4.1 Description of Site Inspections

During the 2011 reporting period, the Site was inspected to certify that site usage and site activities are consistent with those required by the ECs/ICs for the Site. One site inspection was performed during the reporting period for the Spectrum Finishing Site. The site inspection included observations of the condition of the cover system, perimeter fence and monitoring wells. A DFAR documenting results of the site inspection and, where appropriate, the need for maintenance and/or repairs was prepared for the site visit performed in 2011. The DFAR for 2011 is included in Appendix B.

Monitoring Wells

Inspection of existing monitoring wells during the site inspection and sampling event focused on the following areas:

- Concrete surface seals;
- Protective outer casings and lids;
- Locks and locking well caps; and,
- Excessive silt in the wells.

In general, the inspections have indicated the wells are in fair condition, with the exception of MW-3S, MW-4D, MW-9S and MW-14D1. The following provides the details of the issues found during the site inspections:

The depth to bottom of MW-3S was 4.05 feet shallower than the depth to bottom measured in 1987 during the well installation. This well could not be sampled due to insufficient water depth.

A three-inch length of unattached threaded polyvinyl chloride (PVC) riser was noted atop of the riser of MW-4D. The integrity of the well did not appear to have been compromised and therefore the well was sampled.

The depth to bottom MW-9S was 3.46 feet shallower than the depth to bottom measured in 2000 during the well installation. The integrity of the well did not appear to have been compromised and therefore the well was sampled.

The rubber gasket was removed from the protective “j-plug” on MW-14D1. The integrity of the well did not appear to have been compromised and therefore the well was sampled.

3.4.2 Performance and Effectiveness Monitoring

NYSDEC DER-10 defines performance monitoring as the regular assessment of physical and chemical parameters, to determine whether the remedy is performing as designed. Performance monitoring is typically associated with remedies with active treatment systems. No active treatment systems are present at the Spectrum Finishing Site. However, water level depths were measured in site monitoring wells for the determination of groundwater elevations.

NYSDEC DER-10 defines effectiveness monitoring as the periodic chemical and physical analysis of media of concern to determine and/or confirm that the remedial action objectives are being achieved when compared to data obtained from the investigation, implementation and previous monitoring of the remedy. Effectiveness monitoring activities completed at the Spectrum Finishing Site include sampling and analysis of groundwater.

Details of the performance and effectiveness monitoring activities for each of the above-noted items are provided in the sections below.

3.4.2.1 Water Level Monitoring

Water levels were measured in twenty of twenty-one groundwater monitoring wells, including MW-01D1, MW-01S, MW-02D, MW-02S, MW-03D, MW-04D, MW-04S, MW-05D1, MW-06D1, MW-06S, MW-07D1, MW-07S, MW-09S, MW-11S, MW-12D1, MW-12S, MW-14D1, MW-14S, MW-16D1, and MW-16S, one time during the reporting period. Water levels were measured using a hand-held electronic water level indicator. The indicator probe was gradually lowered into the well until the point at which the audible alarm indicated that the probe reached water. The water level was then obtained by measuring the depth from this point to the top of the well's inner casing or surveyed reference mark. Water level measurements are presented in Table 3-1.

Water level monitoring indicates that the groundwater elevation in the shallow wells averages 43.53 feet above mean sea level (amsl) and the average groundwater elevation in the deep wells averages 43.59 feet amsl.

Depth to water level measurements and topographic survey data were used to calculate groundwater elevations and prepare a contour map. Tabulated groundwater elevation data and a representative contour map are presented in Appendix C. Based on a review of the water level elevation data collected from the shallow wells, the direction of the horizontal component of groundwater flow in the shallow wells is predominantly east.

Groundwater elevations were compared in well couplets which are screened in different zones. Vertical gradients are present when water elevations in shallow wells are compared to water elevations in deep wells. The data suggest that there is a very slight vertical component to groundwater flow on-site. Generally, vertical flow is slightly downward in the southern portion of the site and slightly upward in the northern portion of the site.

The results of the water level monitoring performed this reporting period are consistent with previous monitoring events.

**TABLE 3-1
SPECTRUM FINISHING SITE
PERIODIC REVIEW REPORT
WATER LEVEL MEASUREMENT SUMMARY**

WELL	GROUND SURFACE ELEVATION* (ft MSL)	REFERENCE ELEVATION* (ft MSL)	DATE	
			8/3/2011	
			DTW	ELEV
MW-1S	63.5	63.13	19.25	43.88
MW-1D1	63.5	63.05	19.13	43.92
MW-2S	63.6	63.11	19.35	43.76
MW-2D	63.6	63.10	19.30	43.80
MW-3S	63.4	62.82	--	--
MW-3D	63.4	62.87	19.09	43.78
MW-4S	62.3	61.99	18.38	43.61
MW-4D	62.3	62.02	18.50	43.52
MW-5D1	62.6	62.41	18.69	43.72
MW-6S	61.8	61.35	17.92	43.43
MW-6D1	61.7	61.33	17.92	43.41
MW-7S	63.3	62.92	19.97	42.95
MW-7D1	63.3	63.10	19.15	43.95
MW-9S	64.8	63.78	19.59	44.19
MW-11S	63.2	62.58	18.86	43.72
MW-12S	62.4	62.00	18.87	43.13
MW-12D1	62.4	61.89	18.78	43.11
MW-14S	61.8	61.48	18.36	43.12
MW-14D1	61.8	61.64	18.52	43.12
MW-16S	--	--	13.51	--
MW-16D1	--	--	13.35	--

NOTES:

ft MSL - feet above mean sea level (NAVD 88).

ft BGS - feet below ground.

DTW - depth to water in feet relative to reference elevation.

ELEV - groundwater elevation in feet above mean sea level.

--- - indicates information not available

* - Elevations obtained from CDM's Site Management Plan dated August 2010

3.4.2.2 Groundwater Sampling and Analysis

VOCs and metals were analyzed in one round of groundwater samples collected from on- and off-site wells during the August 2011 sampling event.

Field forms completed as part of the 2011 groundwater sampling activities are included in Appendix D. Tabulated groundwater results are presented in Appendix E.

Current and historic groundwater analytical results were compared to NYSDEC TOGS 1.1.1, “Ambient Water Quality Standards and Guidance Values” dated June 1998. Analytical results obtained for groundwater samples were compared to Class GA groundwater standards and guidance values. Due to the limited amount of data (i.e., this is the first annual groundwater sampling event), trend analysis and data plots are premature. However, some observations regarding the data are presented below.

Groundwater Sampling Results and Trend Monitoring

Based on a review of groundwater sample results, only one of the 20 samples exceeded the Class GA groundwater standards for VOCs. Tetrachloroethene was detected in the sample collected from MW-06S above the standard of 5 µg/L at a concentration of 7.4 µg/L.

Several metals including cadmium, chromium, iron, total iron and manganese, nickel and sodium were detected above Class GA groundwater standards in the groundwater samples. Cadmium was detected above its standard of 5 µg/L in 4 of the 20 wells at concentrations ranging from 42.3 µg/L (MW-14S) to 182 µg/L (MW-12S). Iron was detected above its standard of 300 µg/L in 9 wells at concentrations ranging from 351 µg/L (MW-06S) to 833 µg/L (MW-07D1). Total iron and manganese was detected above its standard of 500 µg/L in six wells at concentrations ranging from 506 µg/L (MW-05D1) to 865.3 µg/L (MW-07D1). Chromium was detected above its standard of 50 µg/L at a concentration of 50.8 µg/L in MW-04S. Nickel was detected above its standard of 100 µg/L at a concentration of 251 µg/L in MW-12S. Sodium was detected above its standard of 20,000 µg/L at a concentration of 21,400 µg/L in MW-01S.

The most recent groundwater sampling performed at the Site prior to the 2011 groundwater sampling event was in 2007. In 2007, eleven groundwater samples were collected from the shallow groundwater zone. Samples were analyzed for VOCs and total metals. MW-9S was not analyzed for metals. Comparison of the August 2011 sampling results to the April 2007 sampling results shows that the concentration of tetrachloroethene has decreased in all seven of the wells that had concentrations above the standard in 2007. With the exception of MW-6S, all seven wells in which concentrations exceeded standards now have concentrations below the standards. The concentration of tetrachloroethene in MW-6S has decreased in concentration from April 2007 (140 µg/L) to August 2011 (7.4 µg/L), which exceeds the standard of 5 µg/L.

With regard to the metals, concentrations were generally lower during the 2011 sampling than the concentrations reported during the 2007 sampling event with the exception of the concentration of chromium increasing in MW-04S and MW-06S. MW-12S also exhibited higher concentrations of cadmium, iron, manganese and magnesium in the 2011 sampling than in the 2007 sampling.

The presence of iron, manganese, sodium, and nickel at concentrations exceeding standards in groundwater samples collected from groundwater monitoring wells are not considered a significant trend since these concentrations may be attributable to natural groundwater quality (e.g., background).

While it is premature to assess groundwater quality trends due to the limited data set, contaminant concentrations appear to be lower likely as a result of the implementation of the remedy at the Site. It is recommended that groundwater quality data continue to be collected and analyzed in accordance with the SMP until residual groundwater contaminant concentrations are found to be consistently below standards.

Section 4

4.0 COST EVALUATION

Engineering costs associated with periodic site inspections, collection of groundwater samples, and report preparation are organized into three categories, which consist of labor, expenses, and subcontractor costs. The total project cost incurred during the 2011 period was \$24,430. Of this amount, \$18,249 is related to labor charges and \$2,753 is related to expenses and \$3,428 is related to subcontractor costs. At this time, there are no recommendations for a more cost effective method for the operation and maintenance at the Spectrum Finishing Site.

Section 5

5.0 FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Based on the data collected as part of the site management activities, the following findings have been established:

5.1 Findings

General

- The Spectrum Finishing Site is an inactive industrial facility. The Site was remediated by the NYSDEC in several phases between phases between October 2008 and June 2009 and is in the site management phase;
- After completion of the work described in the remedial design, ROD and ESD, some contamination was left in the subsurface at the Site;
- A SMP was prepared for the Site by CDM on behalf of the NYSDEC in August 2010 to manage remaining contamination;
- Site management activities consist of periodic site inspections, annual groundwater sampling, and report preparation;
- This is the first Periodic Review Report for the Site;
- Current Institutional Controls at the Site consist of a Deed Restriction and listing on the New York State Inactive Hazardous Waste Site Registry. Current Engineering Controls at the Site consist of a final cover system and perimeter fencing;
- No unauthorized excavation activities were performed at the Site during the reporting period. No unauthorized use of groundwater has occurred at the Site during the reporting period; and,
- Site usage is consistent with restrictions placed on the Site.

Site Inspections

- Monitoring wells are in fair condition, with the exception of possible obstructions or sizeable amounts of silting in MW-3S and MW-9S, missing gasket on the protective “j-plug” at MW-14D1, and additional PVC riser attached to top of casing at MW-4;

Groundwater

- Water level monitoring indicates that the groundwater elevation in the shallow wells averages 43.53 feet amsl and the groundwater elevation in the deep wells averages 43.59 feet amsl;
- Horizontal flow in shallow wells at the Site is predominantly to the east;
- Vertical gradients are present when water elevations in shallow wells are compared to water elevations in deep wells. Differences in elevation indicate a very slight vertical component to groundwater flow on-site. Generally, vertical flow at the Site is slightly downward in the southern portion of the Site and slightly upward in the northern portion of the Site;
- With the exception of MW-6S, all seven wells which historically exhibit VOCs in excess of SCGs now have concentrations of VOCs below the SCGs. The concentration of tetrachloroethene in MW-6S has also decreased from 140 µg/L (April 2007) to 7.4 µg/L (August 2011); and,
- With the exception of MW-04S, MW-06S and MW-12S groundwater samples collected from all of the wells exhibited lower concentrations of metals than the 2007 sampling event. Monitoring well MW-12S also indicated higher levels of cadmium, iron, manganese and magnesium in the 2011 sampling than in the 2007 sampling event. The concentration of chromium has increased in MW-04S from April 2007 (14.4 µg/L) to August 2011 (50.8µg/L).

5.2 Conclusions

Based on the data collected as part of the Spectrum Finishing Site monitoring activities, the following conclusions have been made:

- Based on a review of the site records, the Institutional Controls for the Spectrum Finishing Site are in-place and effective;
- Based on the results of the site inspections, the Engineering Controls for the Spectrum Finishing Site are in-place and effective;
- Based on the results of the site inspections, soil and groundwater management activities at the Site are consistent with the Excavation Work Plan;
- Site usage is consistent with restrictions;
- The results of the water level monitoring performed this reporting period are consistent with previous monitoring events; and,
- While it is premature to assess groundwater contaminant trends due to the limited data set, contaminant concentrations appear to be lower likely as a result of the implementation of the remedy at the Site.

5.3 Recommendations

Based on an evaluation of the remedy performance, effectiveness, and protectiveness for the Spectrum Finishing Site, the following recommendations have been established to improve the remedy:

- Due to the variation in well depth at MW-3S and MW-9S from their original measurements, the possibility exists that the wells have accumulated a significant amount of silt or that other obstructions are present in the wells. It is D&B's recommendation to try to restore the wells back to their original states through redevelopment; and,
- Groundwater sampling and monitoring should continue in monitoring wells until residual groundwater contaminant concentrations are found to be consistently below standards.

Section 6

6.0 REFERENCES

CDM, 2010, Site Management Plan – Spectrum Finishing Site. August 2010.

CDM, 2010, Final Engineering Report – Spectrum Finishing Site. March 2010.

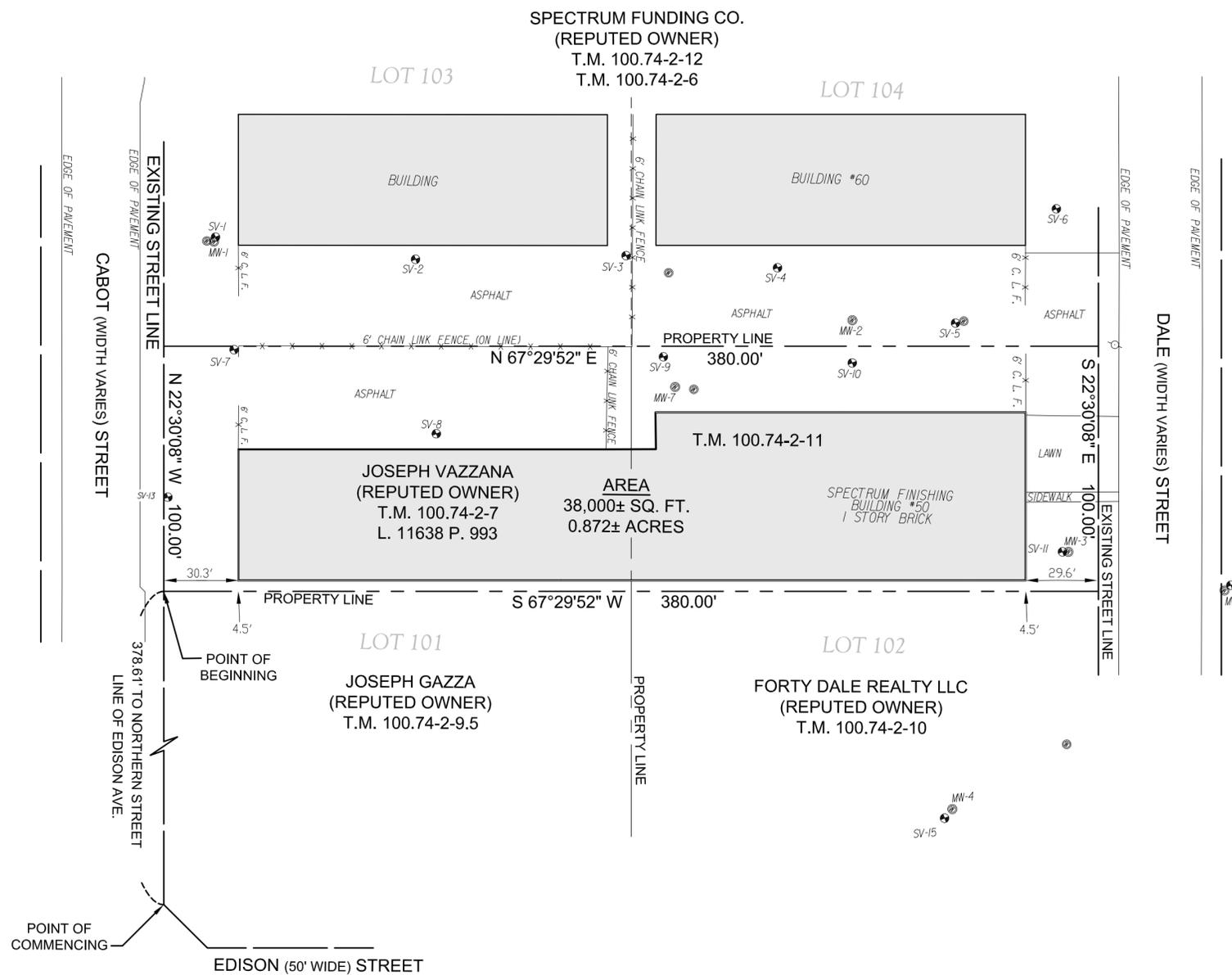
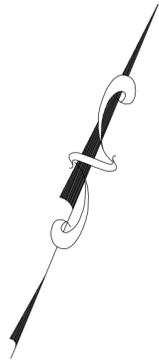
NYSDEC, 2008, Limited Site Data Document – Spectrum Finishing Site, April 2008.

NYSDEC, 1998. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1. June 1998 (April 2000 addendum).

Appendix A

APPENDIX A

FIGURES



SURVEY NOTES

1. HORIZONTAL LOCATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN DAUM 1983 / 96 - UTM ZONE 18.
2. PROJECT UNITS ARE U.S. SURVEY FEET.
3. VERTICAL LOCATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
4. DISTANCES SHOWN HEREON ARE GROUND DISTANCES.

LEGAL DESCRIPTION

All that piece or parcel of land being a portion of Lots 101 & 102 as shown on a map titled "Map of City of Breslau, Sheet 9" and filed with the Suffolk County Clerk April 22, 1881 as File No. 330; also known as Tax Map Number 100.74, Block 2, Parcels 7 and 11, situate in the Town of Babylon, County of Suffolk and State of New York and being more particularly described as follows:

COMMENCING at a point formed by the intersection of the northerly street line of Edison Avenue, an existing town road and the easterly street line, as widened, of Cabot Street an existing town road, thence; Northwesterly along the easterly line of Cabot Street a distance of 378.61 feet to the point of BEGINNING, said point being on the division line between the property of Joseph Vazzana (reputed owner) on the north and the property of Joseph Gazza (reputed owner) on the south, thence; North 22°30'08" West continuing along the easterly street line of Cabot Street a distance of 100.00 feet to a point, said point being on the division line between the property of Joseph Vazzana (reputed owner) on the south and the property of Spectrum Funding Co. (reputed owner) on the north, thence; North 67°29'52" East along the last mentioned division line a distance of 380.00 feet to a point on the westerly street line, as widened, of Dale Street an existing town road, thence; South 22°30'08" East along the westerly line of said street a distance of 100.00 feet to point, said point being on the division line between the property of Joseph Vazzana (reputed owner) on the north and the property of Forty Dale Realty LLC (reputed owner) on the south, thence; South 67°29'52" West along the last mentioned division line and continuing along the first mentioned division line a total distance of 380.00 feet to the point of beginning, being 38,000± square feet or 0.872 acres, more or less.

REFERENCES

1. MAP ENTITLED, "CITY OF BRESLAU, SUFFOLK CO. N.Y., COMPRISING SHEET 9", SURVEYED BY R.B. WHEELER, DATED OCTOBER 1880, FILED AS FILE NO. 330 & DATED APRIL 22, 1881.
2. DEED, FILED IN LIBER 8807 AT PAGE 482.
3. DEED, FILED IN LIBER 11638 AT PAGE 993.
4. DEED, FILED IN LIBER 12184 AT PAGE 124.

VICINITY MAP



LEGEND

- T.M. TAX MAP
- ⊕ MONITORING WELL
- ⊗ GEODETIC DRILL HOLE
- UTILITY POLE

CERTIFICATION

WE, POPLI ARCHITECTURE + ENGINEERING & L.S., P.C., HEREBY CERTIFY THAT THIS SURVEY AND MAP WAS PREPARED UNDER THE DIRECTION OF A LICENSED LAND SURVEYOR AND FROM THE NOTES OF AN INSTRUMENT SURVEY COMPLETED MAY 2, 2007 AND THE REFERENCES LISTED HEREON. THIS SURVEY IS SUBJECT TO ANY EASEMENTS AND/OR ENCUMBRANCES AN UP-TO-DATE ABSTRACT OF TITLE MAY REVEAL.



MICHAEL A. VENTURO, L.S. 50079
FOR: POPLI DESIGN GROUP
PHONE: 585-388-2060

SURVEY BY:		PREPARED FOR:	
 <small>ARCHITECTURE ENGINEERING 585 Penbrooke Drive Penfield NY 14626</small>			
		JOB NUMBER:	
		SURVEY CREW:	J. PHILLIPS, W. STRATTON
DRAWN BY:	J. PHILLIPS	REVISIONS	
CHECKED BY:	M. VENTURO	6/30/10	REVISED LOGO, ADDED LEGAL DESCRIPTION, REMOVED SAMPLE TABLE

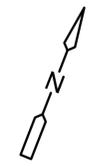
BOUNDARY SURVEY & MAP

OF
SPECTRUM FINISHING CORPORATION SITE

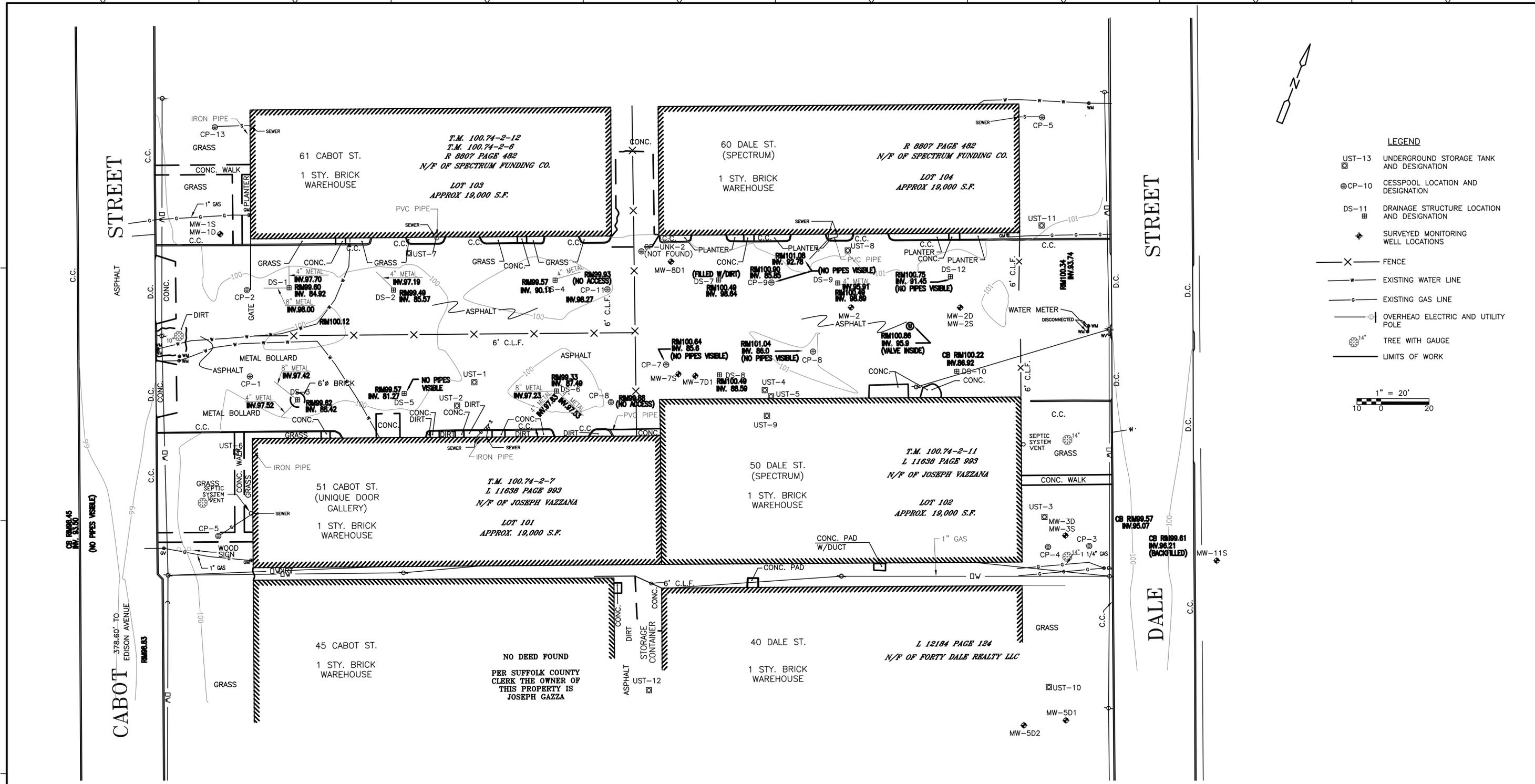
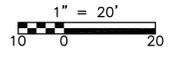
N.Y.S. D.E.C. SITE I.D. NO. 1-52-0209

Being a portion of the Western Division of the Squaw Pit Purchase
Town of Babylon, County of Suffolk, State of New York

DATE: JUNE, 2007 SCALE: 1" = 40'



- LEGEND**
- UST-13 UNDERGROUND STORAGE TANK AND DESIGNATION
 - CP-10 CESSPOOL LOCATION AND DESIGNATION
 - DS-11 DRAINAGE STRUCTURE LOCATION AND DESIGNATION
 - SM SURVEY MONITORING WELL LOCATIONS
 - X FENCE
 - EXISTING WATER LINE
 - EXISTING GAS LINE
 - ⊕ OVERHEAD ELECTRIC AND UTILITY POLE
 - ⊙ TREE WITH GAUGE
 - LIMITS OF WORK



PLAN
1" = 20'

WARNING
IT IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATES OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR HAS BEEN ATTACHED.

REV. NO.	DATE	DRWN	CHKD	REMARKS
1	1-29-09	AK	JPB	REVISIONS BASED ON COUNTY COMMENTS

CDM
Camp Dresser & McKee
11 British American Boulevard
Latham, NY 12110
Tel: (518) 782-4500
consulting • engineering • construction • operations

NYSDEC
SPECTRUM FINISHING CORPORATION
BABYLON, NEW YORK

PRE-REMEDIAL CONSTRUCTION
EXISTING CONDITIONS

FIGURE 3.dwg
SHEET NO.
Figure 3

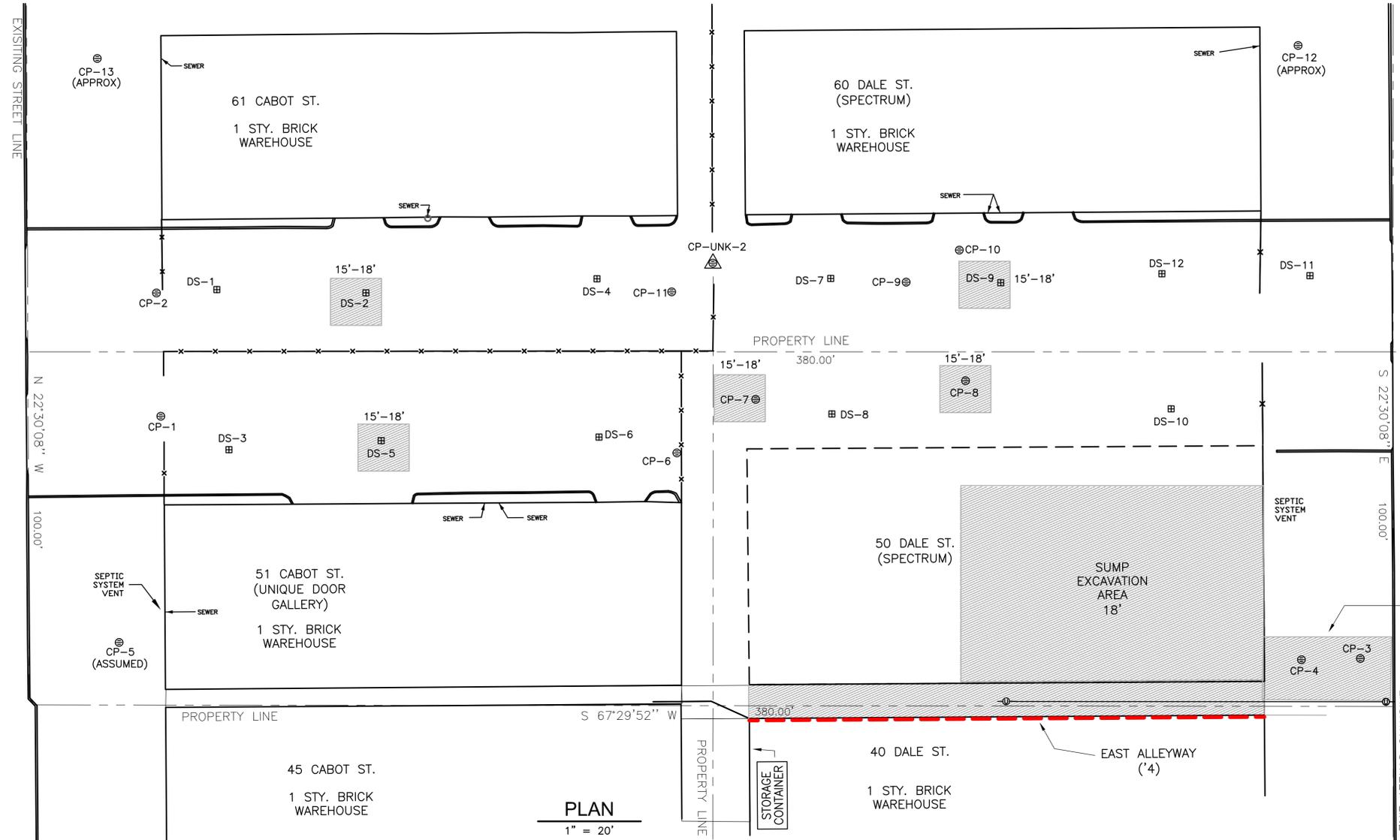
C:\Projects\0897\58505\CIVIL\G1-A1 03/24/08 11:17 Koskior XREES: CDM_2234

STREET

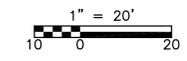
CABOT

STREET

DALE



- LEGEND:**
- x— FENCE TO BE REMOVED AND REPLACED IN KIND (SEE DETAIL SHEET G-10)
 - o— OVERHEAD ELECTRIC AND UTILITY POLE
 - ⊙ CP-10 CESSPOOL LOCATION AND DESIGNATION
 - DS-11 DRAINAGE STRUCTURE LOCATION AND DESIGNATION
 - ⊙ CP-UNK-2 CESSPOOL LOCATION UNKNOWN
 - LIMIT OF CONTAMINATION NOT DEFINED (OFFSITE)
 - ▨ RESTRICTED EXCAVATION LOCATION
 - PROPERTY AND EXISTING STREET LINE



PLAN
1" = 20'

NOTES:

1. THE DEPTHS AT WHICH CONTAMINATED SOILS MAY BE ENCOUNTERED SHOWN ON THE FIGURE ARE APPROXIMATE DEPTHS OF WHERE CONTAMINATION BEGINS
2. THE LIMITS AND DEPTHS OF CONTAMINATED SOILS ARE BASED ON CURRENT INFORMATION. CONTAMINATION MAY EXIST OUTSIDE OF THESE AREAS AND AT SHALLOWER DEPTHS THAN INDICATED.
3. THE SITE IS RESTRICTED TO COMMERCIAL/INDUSTRIAL USE AND SHALL NOT BE USED FOR ANY OTHER PURPOSE SUCH AS RESIDENTIAL.
4. THE GROUNDWATER TABLE BENEATH THE SITE IS CONTAMINATED AND NOT ACCEPTABLE FOR USE AS A POTABLE WATER SUPPLY OR FOR IRRIGATION.
5. ONLY PORTION OF BUILDING FLOOR SLAB REMAINS AT 50 DALE. BUILDING WAS DEMOLISHED AS PART OF REMEDIATION.

WARNING
IT IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATES OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR HAS BEEN ATTACHED.

REV. NO.	DATE	DRWN	CHKD	REMARKS
1	1-29-09	AK	JPB	REVISIONS BASED ON COUNTY COMMENTS

CDM
Camp Dresser & McKee
11 British American Boulevard
Latham, NY 12110
Tel: (518) 782-4500
consulting • engineering • construction • operations

NYSDEC
CONTRACT NO. D006356
SPECTRUM FINISHING CORPORATION
BABYLON, NEW YORK

EXCAVATION RESTRICTION AREAS

PROJECT NO. 0897-58505
FILE NAME: FIGURE 4.dwg
SHEET NO.
FIGURE 4

C:\Projects\0897\58505\CIVIL\G4-A1 03/24/08 11:24 Koskior XREES: CDM_2234

Appendix B

APPENDIX B

DAILY FIELD ACTIVITY REPORTS



DATE: 07/27/11 **DAY:** Wednesday
REPORT NO. 110727
PAGE NO. 1 OF 3
PROJECT NO. 3153
LOGBOOK NO. 1 PAGES 001

DAILY FIELD ACTIVITY REPORT

PROJECT	Spectrum Analytical Finishing	WEATHER	TIME	TEMP.	PRECIP.	WIND (MPH)	WIND (DIR)
LOCATION	Town of Babylon, New York	Sunny	12:00	80-85 F	None	0-5	SW
ATTACHMENTS	Photo Log and Photos	Sunny	14:30	80-85 F	None	0-5	SW

SITE CONDITIONS: Dry site grounds.

WORK GOAL FOR DAY: Site inspection, locate all monitoring wells to be sampled.

PERSONNEL ON SITE:

NAME	AFFILIATION	ARRIVAL TIME	DEPART TIME
Paul Barusich	Dvirka and Bartilucci Consulting Engineers	12:00	14:30

EQUIPMENT ON SITE:

TYPE	MODEL	TYPE	MODEL

HEALTH & SAFETY:

PPE REQUIRED: LEVEL D LEVEL C LEVEL B LEVEL A **HASP?** Yes

SITE SAFETY OFFICER: Stephen Tauss

H & S NOTES: Site work performed in Level D PPE.



DATE: 07/27/11

REPORT NO. 110727

PAGE NO. 3 OF 3

PROJECT NO. 3153

DAILY FIELD ACTIVITY REPORT

DESCRIPTION OF WORK PERFORMED AND OBSERVED

Paul Barusich of Dvirka and Bartilucci Consulting Engineers (D&B) arrived on-site to inspect the general condition of the Spectrum Finishing site, and to locate the monitoring wells to be sampled. During the subsequent low-flow groundwater sampling, D&B documented the condition of the monitoring wells.

No disturbances or incidental damage to the soil, concrete and asphalt covers were noted. Site usage appears consistent with the Site Management Plan.

All the wells to be sampled were successfully located during the site inspection. Well cluster 3S and 3D were under several inches of soil, and had to be located utilizing a Schonstedt GA-52 metal detector.

The monitoring wells appeared to be in good condition with the exception of MW-9S, MW-3S, MW-14D1 and MW-4D. D&B observed the following issues with these monitoring wells:

- The depth to bottom of MW-9S was 3.46' shallower than the depth to bottom noted in 2000, when the well was installed.
- The depth to bottom of MW-3S was 4.05' shallower than the depth to bottom noted in 1987, when the well was installed. This well was unable to be sampled due to insufficient water depth.
- The rubber j-plug gasket was removed from the j-plug on MW-14D1.
- A 3" tall piece of unattached threaded PVC riser was noted atop the riser of MW-4D

During the subsequent groundwater monitoring and sampling event, D&B utilized low-flow sample techniques to sample 20 of the 21 wells. As noted above, MW-3S could not be sampled due to insufficient water depth.

Concerns: No dumping, drums or other signs of contamination were noted around the site during the site visit. No free NAPL, sheens, odors or other signs of contamination were noted during the subsequent low-flow groundwater monitoring event.

PREPARED BY (OBSERVER)	REVIEWED BY
PRINT NAME: Paul Barusich	PRINT NAME: James Magda
SIGNATURE:	SIGNATURE:
<input checked="" type="checkbox"/> ADDITIONAL SHEETS USED	
<input checked="" type="checkbox"/> emailed draft / final to NYSDEC – date:	<input type="checkbox"/> hardcopy to NYSDEC – date:

PHOTOGRAPHIC LOG
July 27, 2011
D&B JOB NO. 3153
SPECTRUM FINISHING
TOWN OF BABYLON, NEW YORK

PHOTO	DATE	DESCRIPTION
50 Dale St	7/27/2011	View of 50 Dale St. (formerly Spectrum Finishing), from Dale St. facing southwest.
50 Dale St Pad(1)	7/27/2011	View of 50 Dale St. concrete pad (formerly Spectrum Finishing), from Dale St. facing south.
50 Dale St Pad(2)	7/27/2011	View of 50 Dale St. concrete pad (formerly Spectrum Finishing) and 60 Dale St., from Dale St. facing west
50 Dale St Pad(3)	7/27/2011	View of 50 Dale St. concrete pad (formerly Spectrum Finishing), from Dale St. facing west.
50 Dale St Pad(4)	7/27/2011	View of 50 Dale St. concrete pad (formerly Spectrum Finishing), from Dale St. facing southwest.
50 Dale St Pad(5)	7/27/2011	View of 50 Dale St. concrete pad (formerly Spectrum Finishing) and 40 Dale St., from Dale St. facing south.
60+50 Dale St	7/27/2011	View of parking area between 60 and 50 Dale St (note concrete pad on upper left side of picture).
mw-1S+1D	7/27/2011	View of wells 1S and 1D in front of 61 Cabot St., from Cabot St. facing northeast.
mw-3D+3S area	7/27/2011	View of area in front of 50 Dale St (formerly Spectrum Finishing), where wells 3S and 3D are located.
mw-3D+3S(1)	7/27/2011	View of located wells 3S and 3D under several inches of soil, from Dale St. facing southeast.
mw-3D+3S(2)	7/27/2011	View of located wells 3S and 3D under several inches of soil, from Dale St. facing southwest.
mw-4(1)	7/27/2011	View of parking area southeast of 40 Dale St (note wells 4S and 4D in background).
mw-4(2)	7/27/2011	View of 40 Dale St. and wells 4S and 4D, facing northwest.
mw-4D+4S	7/27/2011	View of opened cover of 4S and 4D, note 3" unattached, askew threaded riser section where tubing is entering well 3D.
mw-5D2	7/27/2011	View of well 5D2 and front of 40 Dale St., facing west. Well 5D1 is located a few feet southwest.
mw-6	7/27/2011	View of wells 6S and 6D1, facing northeast, Dale St. in background.
mw-7S+7D1	7/27/2011	View of wells 7S and 7D1, and 50 Dale St. concrete pad in background, facing southeast.
mw-9(1)	7/27/2011	View of well 9, facing southwest. 60 Dale St. is to the left of the picture.
mw-9(2)	7/27/2011	View of well 9, facing northeast. 60 Dale St. is to the right in the background.
mw-11s	7/27/2011	View of well 11S facing southwest. 50 Dale St. is across the road.
mw-12(1)	7/27/2011	View of wells 12S and 12D1, facing south. Edison Ave. is in background.
mw-12(2)	7/27/2011	View of wells 12S and 12D1, facing east. Intersection of Edison Ave. and Dale St. is in the background.
mw-14	7/27/2011	View of wells 14S and 14D1, facing southwest. Edison Ave. is in background.
mw-2D+2S(2)	7/27/2011	View of wells 2S and 2D, facing northwest. 60 Dale St. to the right side of the picture.
mw-2D+2S(1)	7/27/2011	View of wells 2S and 2D, facing southwest. 60 Dale St. to the right side of the picture.
Sentinel Wells (16S+16D1)(1)	7/27/2011	View of sentinel wells 16S and 16D1, facing northwest. 7th Ave. to the left side of the picture.
Sentinel Wells (16S+16D1)(2)	7/27/2011	View of sentinel wells 16S and 16D1, facing south. Intersection of 7th Ave. and 17th St. in background.



50 Dale St.jpeg



50 Dale St Pad(1).jpeg



50 Dale St Pad(2).jpeg



50 Dale St Pad(3).jpeg



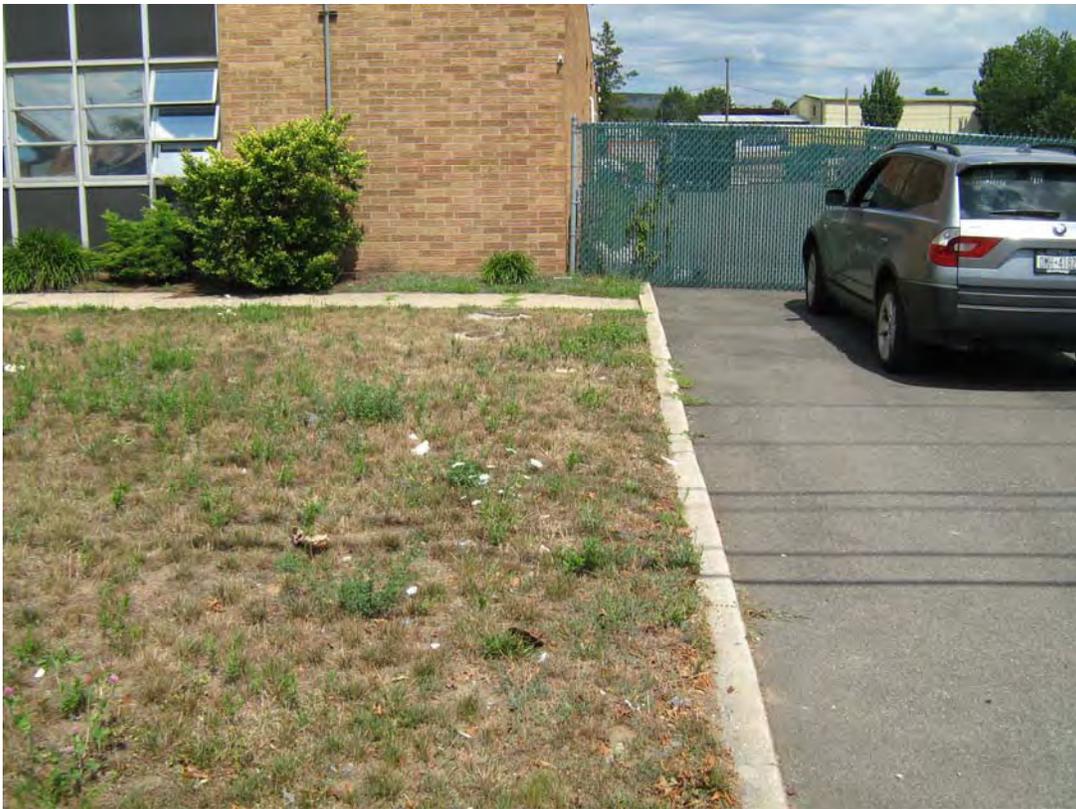
50 Dale St Pad(4).jpeg



50 Dale St Pad(5).jpeg



60+50 Dale St.jpeg



mw-1S+1D.jpeg



mw-3D+3S area.jpeg



mw-3D+3S(1).jpeg



mw3D+3S(2).jpeg



mw-4(1).jpeg



mw-4(2).jpeg



mw-4D+4S.jpeg



mw-5D2.jpeg



mw-6.jpeg



mw-7S+7D1.jpeg



mw-9(1).jpeg



mw-9(2).jpeg



mw-11s.jpeg



mw-12(1).jpeg



mw-12(2).jpeg



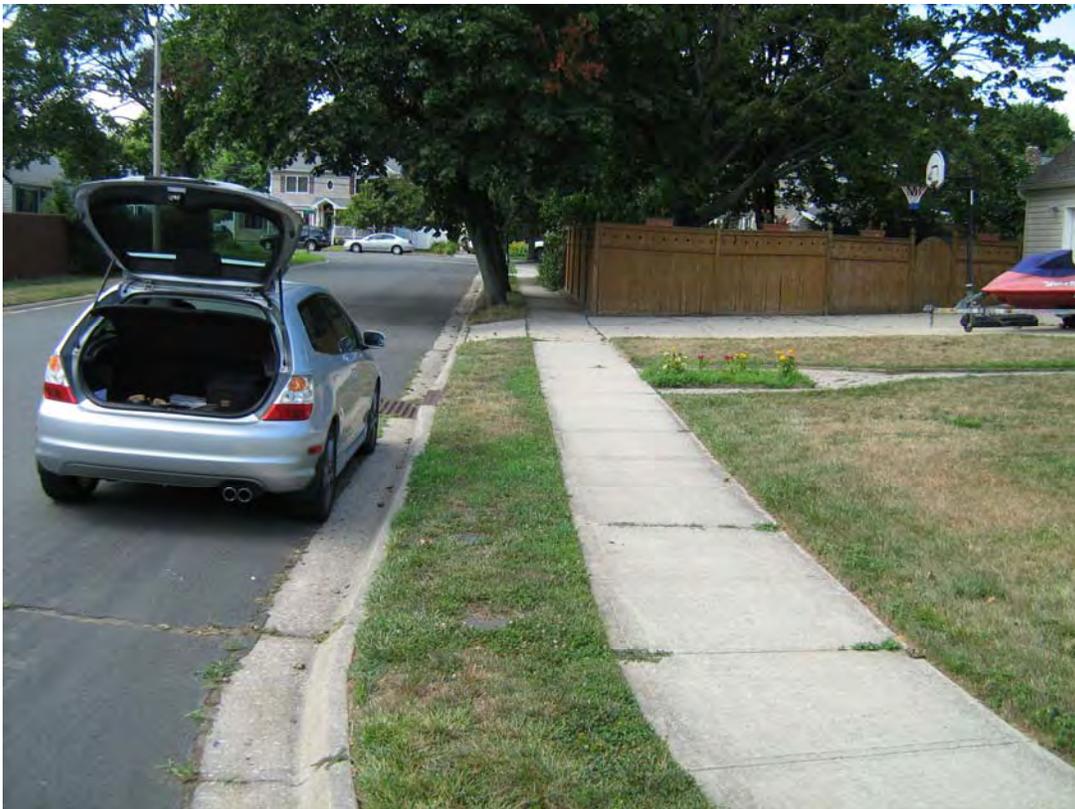
mw-14.jpeg



mw-2D+2S(2).jpeg



mw-2D+2S(1).jpeg



Sentinel Wells (16S+16D1)(1).jpeg



Sentinel Wells (16S+16D1)(2).jpeg

Appendix C

APPENDIX C

GROUNDWATER ELEVATION DATA

**TABLE C-1
SPECTRUM FINISHING SITE
PERIODIC REVIEW REPORT
WATER LEVEL MEASUREMENT SUMMARY**

WELL	GROUND SURFACE ELEVATION* (ft MSL)	REFERENCE ELEVATION* (ft MSL)	DATE	
			8/3/2011	
			DTW	ELEV
MW-1S	63.5	63.13	19.25	43.88
MW-1D1	63.5	63.05	19.13	43.92
MW-2S	63.6	63.11	19.35	43.76
MW-2D	63.6	63.10	19.30	43.80
MW-3S	63.4	62.82	--	--
MW-3D	63.4	62.87	19.09	43.78
MW-4S	62.3	61.99	18.38	43.61
MW-4D	62.3	62.02	18.50	43.52
MW-5D1	62.6	62.41	18.69	43.72
MW-6S	61.8	61.35	17.92	43.43
MW-6D1	61.7	61.33	17.92	43.41
MW-7S	63.3	62.92	19.97	42.95
MW-7D1	63.3	63.10	19.15	43.95
MW-9S	64.8	63.78	19.59	44.19
MW-11S	63.2	62.58	18.86	43.72
MW-12S	62.4	62.00	18.87	43.13
MW-12D1	62.4	61.89	18.78	43.11
MW-14S	61.8	61.48	18.36	43.12
MW-14D1	61.8	61.64	18.52	43.12
MW-16S	--	--	13.51	--
MW-16D1	--	--	13.35	--

NOTES:

ft MSL - feet above mean sea level (NAVD 88).

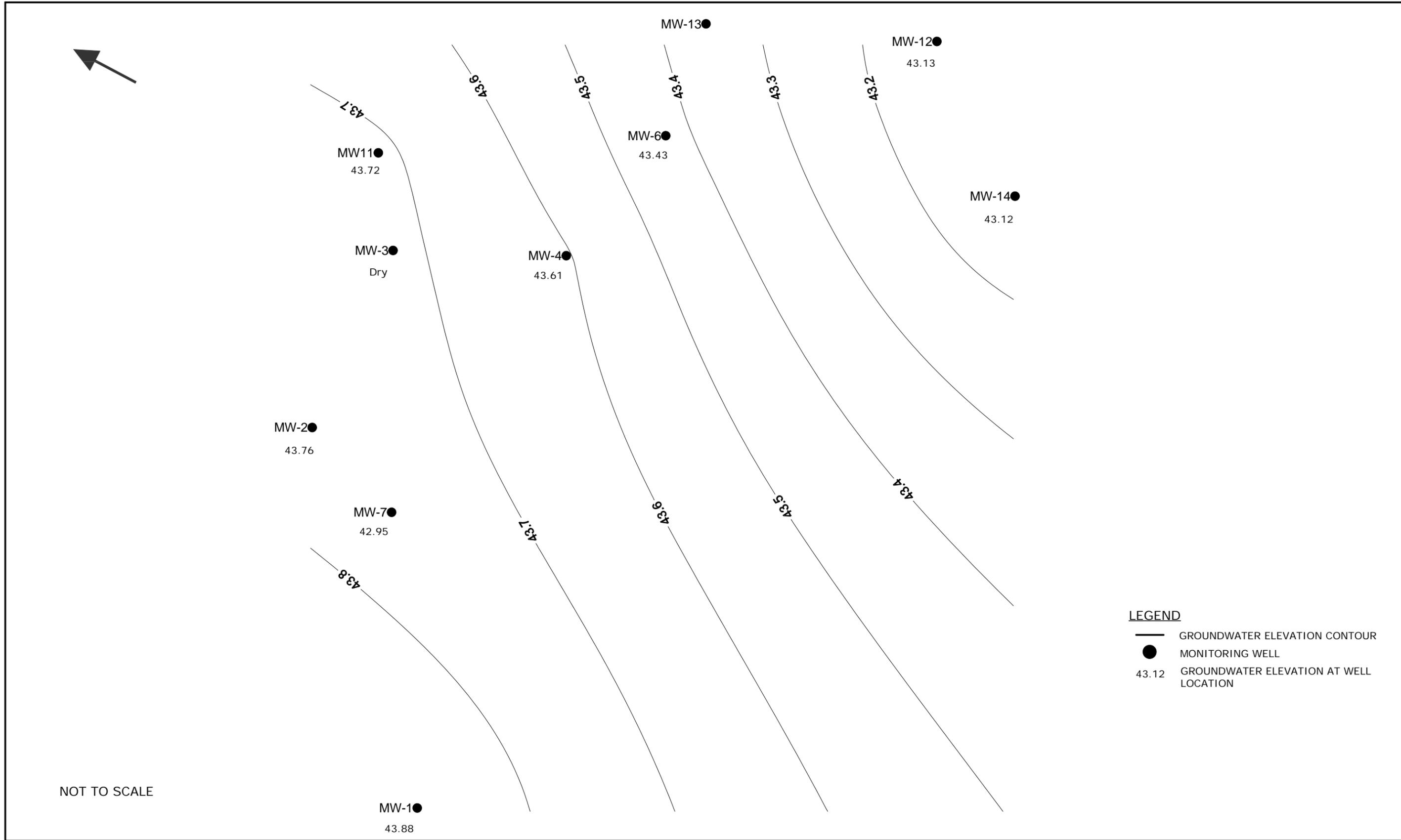
ft BGS - feet below ground.

DTW - depth to water in feet relative to reference elevation.

ELEV - groundwater elevation in feet above mean sea level.

--- - indicates information not available

* - Elevations obtained from CDM's Site Management Plan dated August 2010



Appendix D

APPENDIX D
FIELD FORMS

SAMPLE INFORMATION RECORD

Site: Spectrum Finishing, Babylon, NY Sample Crew: P. Barusich/ K. Green

Sample Location/Well No. MW-1d1

Field Sample I.D. Number MW-1d1_8/3/11 Time 10:05

Weather Clear, Wind: west, 0-5mph Temperature 80°s F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 19.13 Measurement Method Interface probe

Depth of Well 49.41 Measurement Method Interface probe

Volume Removed 20 L Removal Method Low-Flow Methods (Grundfos Redi-Flo2 Submersible Pump)

Field Test Results

pH 5.43 Spec Cond (mS/cm) 0.174 Turbidity (NTUs) 4.2
 Diss. Oxygen (mg/l) 5.43 Temperature °C 15.93 Salinity (%) NM
 ORP (mV) 320 Color Clear Odor None

Other: _____

Laboratory Analyses Requested

VOCs – EPA 8260B _____
 Metals – EPA SOW _____
 OLM 4.2 _____

Remarks:

NM – Not Measured

Well Casing Volumes

GAL/FT	<u>1¼" = 0.077</u>	<u>2" = 0.16</u>	<u>3" = 0.37</u>	<u>4" = 0.65</u>
	<u>1½" = 0.10</u>	<u>2½" = 0.24</u>	<u>3½" = 0.50</u>	<u>6" = 1.46</u>

SAMPLE INFORMATION RECORD

Site: Spectrum Finishing, Babylon, NY Sample Crew: P. Barusich/ K. Green

Sample Location/Well No. MW-1s

Field Sample I.D. Number MW-1s_8/3/11 Time 10:00

Weather Clear, Wind: west, 0-5mph Temperature 80°s F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 19.25 Measurement Method Interface probe

Depth of Well 24.75 Measurement Method Interface probe

Volume Removed 17.5 L Removal Method Low-Flow Methods (Grundfos Redi-Flo2 Submersible Pump)

Field Test Results

pH 5.67 Spec Cond (mS/cm) 0.300 Turbidity (NTUs) 0.0
 Diss. Oxygen (mg/l) 6.10 Temperature °C 16.00 Salinity (%) NM
 ORP (mV) 279 Color Clear Odor None

Other: _____

Laboratory Analyses Requested

VOCs – EPA 8260B _____
 Metals – EPA SOW _____
 OLM 4.2 _____

Remarks:

NM – Not Measured

Well Casing Volumes

GAL/FT	<u>1¼" = 0.077</u>	<u>2" = 0.16</u>	<u>3" = 0.37</u>	<u>4" = 0.65</u>
	<u>1½" = 0.10</u>	<u>2½" = 0.24</u>	<u>3½" = 0.50</u>	<u>6" = 1.46</u>

SAMPLE INFORMATION RECORD

Site: Spectrum Finishing, Babylon, NY Sample Crew: P. Barusich/ L. Peppe

Sample Location/Well No. MW-2d

Field Sample I.D. Number MW-2d_8/2/11 Time 10:50

Weather Clear, Wind: west, 0-5mph Temperature 90°s F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 19.30 Measurement Method Interface probe

Depth of Well 48.50 Measurement Method Interface probe

Volume Removed 25 L Removal Method Low-Flow Methods (Grundfos Redi-Flo2 Submersible Pump)

Field Test Results

pH 5.34 Spec Cond (mS/cm) 0.236 Turbidity (NTUs) 3.7
 Diss. Oxygen (mg/l) 6.62 Temperature °C 16.24 Salinity (%) NM
 ORP (mV) 314 Color Clear Odor None

Other: _____

Laboratory Analyses Requested

VOCs – EPA 8260B _____
 Metals – EPA SOW _____
 OLM 4.2 _____

Remarks:

NM – Not Measured

Well Casing Volumes

GAL/FT	<u>1¼" = 0.077</u>	<u>2" = 0.16</u>	<u>3" = 0.37</u>	<u>4" = 0.65</u>
	<u>1½" = 0.10</u>	<u>2½" = 0.24</u>	<u>3½" = 0.50</u>	<u>6" = 1.46</u>

SAMPLE INFORMATION RECORD

Site: Spectrum Finishing, Babylon, NY Sample Crew: P. Barusich/ L. Peppe

Sample Location/Well No. MW-2s

Field Sample I.D. Number MW-2s_8/2/11 Time 10:40

Weather Clear, Wind: west, 0-5mph Temperature 90°s F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 19.35 Measurement Method Interface probe

Depth of Well 24.10 Measurement Method Interface probe

Volume Removed 20 L Removal Method Low-Flow Methods (Grundfos Redi-Flo2 Submersible Pump)

Field Test Results

pH 5.44 Spec Cond (mS/cm) 0.176 Turbidity (NTUs) 2.1
 Diss. Oxygen (mg/l) 5.98 Temperature °C 17.01 Salinity (%) NM
 ORP (mV) 286 Color Clear Odor None

Other: _____

Laboratory Analyses Requested

VOCs – EPA 8260B _____
 Metals – EPA SOW _____
 OLM 4.2 _____

Remarks:

NM – Not Measured

Well Casing Volumes

GAL/FT	<u>1¼" = 0.077</u>	<u>2" = 0.16</u>	<u>3" = 0.37</u>	<u>4" = 0.65</u>
	<u>1½" = 0.10</u>	<u>2½" = 0.24</u>	<u>3½" = 0.50</u>	<u>6" = 1.46</u>

SAMPLE INFORMATION RECORD

Site: Spectrum Finishing, Babylon, NY Sample Crew: P. Barusich/ L. Peppe

Sample Location/Well No. MW-3d

Field Sample I.D. Number MW-3d_8/1/11 Time 13:00

Weather Clear, no wind. Temperature 90°s F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 19.09 Measurement Method Interface probe

Depth of Well 48.71 Measurement Method Interface probe

Volume Removed 20 L Removal Method Low-Flow Methods (Grundfos Redi-Flo2 Submersible Pump)

Field Test Results

pH 5.12 Spec Cond (mS/cm) 0.216 Turbidity (NTUs) 9.5
 Diss. Oxygen (mg/l) 3.30 Temperature °C 15.15 Salinity (%) NM
 ORP (mV) 329 Color Clear Odor None

Other: _____

Laboratory Analyses Requested

VOCs – EPA 8260B _____
 Metals – EPA SOW _____
 OLM 4.2 _____

Remarks:

NM – Not Measured

Well Casing Volumes

GAL/FT	<u>1¼" = 0.077</u>	<u>2" = 0.16</u>	<u>3" = 0.37</u>	<u>4" = 0.65</u>
	<u>1½" = 0.10</u>	<u>2½" = 0.24</u>	<u>3½" = 0.50</u>	<u>6" = 1.46</u>

SAMPLE INFORMATION RECORD

Site: Spectrum Finishing, Babylon, NY Sample Crew: P. Barusich/ L. Peppe

Sample Location/Well No. MW-4s

Field Sample I.D. Number MW-4s_8/1/11 Time 14:00

Weather Clear, no wind. Temperature 90°s F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 18.38 Measurement Method Interface probe

Depth of Well 23.50 Measurement Method Interface probe

Volume Removed 17.5 L Removal Method Low-Flow Methods (Grundfos Redi-Flo2 Submersible Pump)

Field Test Results

pH 5.80 Spec Cond (mS/cm) 0.258 Turbidity (NTUs) 1.3
 Diss. Oxygen (mg/l) 3.23 Temperature °C 18.28 Salinity (%) NM
 ORP (mV) 275 Color Clear Odor None

Other: _____

Laboratory Analyses Requested

VOCs – EPA 8260B _____
 Metals – EPA SOW _____
 OLM 4.2 _____

Remarks:

NM – Not Measured

Well Casing Volumes

GAL/FT	<u>1¼" = 0.077</u>	<u>2" = 0.16</u>	<u>3" = 0.37</u>	<u>4" = 0.65</u>
	<u>1½" = 0.10</u>	<u>2½" = 0.24</u>	<u>3½" = 0.50</u>	<u>6" = 1.46</u>

SAMPLE INFORMATION RECORD

Site: Spectrum Finishing, Babylon, NY Sample Crew: P. Barusich/ L. Peppe

Sample Location/Well No. MW-4d

Field Sample I.D. Number MW-4d_8/2/11 Time 9:35

Weather Clear, Wind: west, 0-5mph Temperature 90°s F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 18.50 Measurement Method Interface probe

Depth of Well 48.38 Measurement Method Interface probe

Volume Removed 30 L Removal Method Low-Flow Methods (Grundfos Redi-Flo2 Submersible Pump)

Field Test Results

pH 5.72 Spec Cond (mS/cm) 0.202 Turbidity (NTUs) 1.5
 Diss. Oxygen (mg/l) 5.44 Temperature °C 15.28 Salinity (%) NM
 ORP (mV) 248 Color Clear Odor None

Other: _____

Laboratory Analyses Requested

VOCs – EPA 8260B _____
 Metals – EPA SOW _____
 OLM 4.2 _____

Remarks:

NM – Not Measured

Well Casing Volumes

GAL/FT	<u>1¼" = 0.077</u>	<u>2" = 0.16</u>	<u>3" = 0.37</u>	<u>4" = 0.65</u>
	<u>1½" = 0.10</u>	<u>2½" = 0.24</u>	<u>3½" = 0.50</u>	<u>6" = 1.46</u>

SAMPLE INFORMATION RECORD

Site: Spectrum Finishing, Babylon, NY Sample Crew: P. Barusich/ L. Peppe

Sample Location/Well No. MW-5d1

Field Sample I.D. Number MW-5d1_8/2/11 Time 8:15

Weather Clear, Wind: west, 0-5mph Temperature 90°s F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 18.69 Measurement Method Interface probe

Depth of Well 49.74 Measurement Method Interface probe

Volume Removed 20 L Removal Method Low-Flow Methods (Grundfos Redi-Flo2 Submersible Pump)

Field Test Results

pH 5.19 Spec Cond (mS/cm) 0.227 Turbidity (NTUs) 17.8
 Diss. Oxygen (mg/l) 1.79 Temperature °C 14.99 Salinity (%) NM
 ORP (mV) 312 Color Clear Odor None

Other: _____

Laboratory Analyses Requested

VOCs – EPA 8260B _____
 Metals – EPA SOW _____
 OLM 4.2 _____

Remarks:

NM – Not Measured

Well Casing Volumes

GAL/FT	<u>1¼" = 0.077</u>	<u>2" = 0.16</u>	<u>3" = 0.37</u>	<u>4" = 0.65</u>
	<u>1½" = 0.10</u>	<u>2½" = 0.24</u>	<u>3½" = 0.50</u>	<u>6" = 1.46</u>

SAMPLE INFORMATION RECORD

Site: Spectrum Finishing, Babylon, NY Sample Crew: P. Barusich/ L. Peppe

Sample Location/Well No. MW-6s

Field Sample I.D. Number MW-6s_8/2/11 Time 12:15

Weather Clear, Wind: west, 0-5mph Temperature 90°s F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 17.92 Measurement Method Interface probe

Depth of Well 26.60 Measurement Method Interface probe

Volume Removed 22.5 L Removal Method Low-Flow Methods (Grundfos Redi-Flo2 Submersible Pump)

Field Test Results

pH 5.44 Spec Cond (mS/cm) 0.200 Turbidity (NTUs) 0.0
 Diss. Oxygen (mg/l) 1.20 Temperature °C 21.07 Salinity (%) NM
 ORP (mV) 257 Color Clear Odor None

Other: _____

Laboratory Analyses Requested

VOCs – EPA 8260B _____
 Metals – EPA SOW _____
 OLM 4.2 _____

Remarks:

NM – Not Measured

Well Casing Volumes

GAL/FT	<u>1¼" = 0.077</u>	<u>2" = 0.16</u>	<u>3" = 0.37</u>	<u>4" = 0.65</u>
	<u>1½" = 0.10</u>	<u>2½" = 0.24</u>	<u>3½" = 0.50</u>	<u>6" = 1.46</u>

SAMPLE INFORMATION RECORD

Site: Spectrum Finishing, Babylon, NY Sample Crew: P. Barusich/ L. Peppe

Sample Location/Well No. MW-6d1

Field Sample I.D. Number MW-6d1_8/2/11 Time 12:15

Weather Clear, Wind: west, 0-5mph Temperature 90°s F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 17.92 Measurement Method Interface probe

Depth of Well 49.05 Measurement Method Interface probe

Volume Removed 17.5 L Removal Method Low-Flow Methods (Grundfos Redi-Flo2 Submersible Pump)

Field Test Results

pH 5.48 Spec Cond (mS/cm) 0.216 Turbidity (NTUs) 4.3
 Diss. Oxygen (mg/l) 3.85 Temperature °C 15.08 Salinity (%) NM
 ORP (mV) 310 Color Clear Odor None

Other: _____

Laboratory Analyses Requested

VOCs – EPA 8260B _____
 Metals – EPA SOW _____
 OLM 4.2 _____

Remarks:

NM – Not Measured

Well Casing Volumes

GAL/FT	<u>1¼" = 0.077</u>	<u>2" = 0.16</u>	<u>3" = 0.37</u>	<u>4" = 0.65</u>
	<u>1½" = 0.10</u>	<u>2½" = 0.24</u>	<u>3½" = 0.50</u>	<u>6" = 1.46</u>

SAMPLE INFORMATION RECORD

Site: Spectrum Finishing, Babylon, NY Sample Crew: P. Barusich/ L. Peppe

Sample Location/Well No. MW-7d1

Field Sample I.D. Number MW-7d1_8/1/11 Time 11:45

Weather Clear, no wind. Temperature 90°s F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 19.15 Measurement Method Interface probe

Depth of Well 49.36 Measurement Method Interface probe

Volume Removed 17.5 L Removal Method Low-Flow Methods (Grundfos Redi-Flo2 Submersible Pump)

Field Test Results

pH 5.47 Spec Cond (mS/cm) 0.201 Turbidity (NTUs) 16.9
 Diss. Oxygen (mg/l) 3.57 Temperature °C 19.99 Salinity (%) NM
 ORP (mV) 266 Color Clear Odor None

Other: _____

Laboratory Analyses Requested

VOCs – EPA 8260B _____
 Metals – EPA SOW _____
 OLM 4.2 _____

Remarks:

NM – Not Measured

Well Casing Volumes

GAL/FT	1¼" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1½" = 0.10	2½" = 0.24	3½" = 0.50	6" = 1.46

SAMPLE INFORMATION RECORD

Site: Spectrum Finishing, Babylon, NY Sample Crew: P. Barusich/ L. Peppe

Sample Location/Well No. MW-7s

Field Sample I.D. Number MW-7s_8/1/11 Time 10:45

Weather Clear, no wind. Temperature 90°s F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 19.97 Measurement Method Interface probe

Depth of Well 26.25 Measurement Method Interface probe

Volume Removed 17.5 L Removal Method Low-Flow Methods (Grundfos Redi-Flo2 Submersible Pump)

Field Test Results

pH 5.79 Spec Cond (mS/cm) 0.179 Turbidity (NTUs) 22.9
 Diss. Oxygen (mg/l) 3.39 Temperature °C 19.80 Salinity (%) NM
 ORP (mV) 209 Color Clear Odor None

Other: _____

Laboratory Analyses Requested

VOCs – EPA 8260B _____
 Metals – EPA SOW _____
 OLM 4.2 _____

Remarks:

NM – Not Measured

Well Casing Volumes

GAL/FT	<u>1¼" = 0.077</u>	<u>2" = 0.16</u>	<u>3" = 0.37</u>	<u>4" = 0.65</u>
	<u>1½ = 0.10</u>	<u>2½ " = 0.24</u>	<u>3½ = 0.50</u>	<u>6" = 1.46</u>

SAMPLE INFORMATION RECORD

Site: Spectrum Finishing, Babylon, NY Sample Crew: P. Barusich/ L. Peppe

Sample Location/Well No. MW-9s

Field Sample I.D. Number MW-9s_8/1/11 Time 9:40

Weather Clear, no wind. Temperature 90°s F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 19.59 Measurement Method Interface probe

Depth of Well 23.54 Measurement Method Interface probe

Volume Removed 15 L Removal Method Low-Flow Methods (Grundfos Redi-Flo2 Submersible Pump)

Field Test Results

pH 5.64 Spec Cond (mS/cm) 0.281 Turbidity (NTUs) 1.5
 Diss. Oxygen (mg/l) 3.53 Temperature °C 14.63 Salinity (%) NM
 ORP (mV) 247 Color Clear Odor None

Other: _____

Laboratory Analyses Requested

VOCs – EPA 8260B _____
 Metals – EPA SOW _____
 OLM 4.2 _____

Remarks:

NM – Not Measured

Well Casing Volumes

GAL/FT	1¼" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1½" = 0.10	2½" = 0.24	3½" = 0.50	6" = 1.46

SAMPLE INFORMATION RECORD

Site: Spectrum Finishing, Babylon, NY Sample Crew: P. Barusich/ L. Peppe

Sample Location/Well No. MW-11s

Field Sample I.D. Number MW-11s_8/1/11 Time 8:22

Weather Clear, no wind. Temperature 90°s F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 18.86 Measurement Method Interface probe

Depth of Well 25.70 Measurement Method Interface probe

Volume Removed 20 L Removal Method Low-Flow Methods (Grundfos Redi-Flo2 Submersible Pump)

Field Test Results

pH 5.75 Spec Cond (mS/cm) 0.229 Turbidity (NTUs) 7.4
 Diss. Oxygen (mg/l) 6.34 Temperature °C 15.98 Salinity (%) NM
 ORP (mV) 245 Color Clear Odor None

Other: _____

Laboratory Analyses Requested

VOCs – EPA 8260B _____
 Metals – EPA SOW _____
 OLM 4.2 _____

Remarks:

NM – Not Measured

Well Casing Volumes

GAL/FT	<u>1¼" = 0.077</u>	<u>2" = 0.16</u>	<u>3" = 0.37</u>	<u>4" = 0.65</u>
	<u>1½" = 0.10</u>	<u>2½" = 0.24</u>	<u>3½" = 0.50</u>	<u>6" = 1.46</u>

SAMPLE INFORMATION RECORD

Site: Spectrum Finishing, Babylon, NY Sample Crew: P. Barusich/ L. Peppe

Sample Location/Well No. MW-12d1

Field Sample I.D. Number MW-12d1_8/2/11 Time 14:10

Weather Clear, Wind: west, 0-5mph Temperature 90°s F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 18.78 Measurement Method Interface probe

Depth of Well 49.59 Measurement Method Interface probe

Volume Removed 25 L Removal Method Low-Flow Methods (Grundfos Redi-Flo2 Submersible Pump)

Field Test Results

pH 5.36 Spec Cond (mS/cm) 0.180 Turbidity (NTUs) 0.0
 Diss. Oxygen (mg/l) 2.39 Temperature °C 15.39 Salinity (%) NM
 ORP (mV) 268 Color Clear Odor None

Other: _____

Laboratory Analyses Requested

VOCs – EPA 8260B _____
 Metals – EPA SOW _____
 OLM 4.2 _____

Remarks:

NM – Not Measured

Well Casing Volumes

GAL/FT	<u>1¼" = 0.077</u>	<u>2" = 0.16</u>	<u>3" = 0.37</u>	<u>4" = 0.65</u>
	<u>1½" = 0.10</u>	<u>2½" = 0.24</u>	<u>3½" = 0.50</u>	<u>6" = 1.46</u>

SAMPLE INFORMATION RECORD

Site: Spectrum Finishing, Babylon, NY Sample Crew: P. Barusich/ L. Peppe

Sample Location/Well No. MW-12s

Field Sample I.D. Number MW-12s_8/2/11 Time 14:15

Weather Clear, Wind: west, 0-5mph Temperature 90°s F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 18.87 Measurement Method Interface probe

Depth of Well 26.9 Measurement Method Interface probe

Volume Removed 27.5 L Removal Method Low-Flow Methods (Grundfos Redi-Flo2 Submersible Pump)

Field Test Results

pH 5.67 Spec Cond (mS/cm) 0.221 Turbidity (NTUs) 24.9
 Diss. Oxygen (mg/l) 4.29 Temperature °C 15.71 Salinity (%) NM
 ORP (mV) 276 Color Clear Odor None

Other: _____

Laboratory Analyses Requested

VOCs – EPA 8260B _____
 Metals – EPA SOW _____
 OLM 4.2 _____

Remarks:

NM – Not Measured

Well Casing Volumes

GAL/FT	<u>1¼" = 0.077</u>	<u>2" = 0.16</u>	<u>3" = 0.37</u>	<u>4" = 0.65</u>
	<u>1½" = 0.10</u>	<u>2½" = 0.24</u>	<u>3½" = 0.50</u>	<u>6" = 1.46</u>

SAMPLE INFORMATION RECORD

Site: Spectrum Finishing, Babylon, NY Sample Crew: P. Barusich/ K. Green

Sample Location/Well No. MW-14d1

Field Sample I.D. Number MW-14d1_8/3/11 Time 8:40

Weather Clear, Wind: west, 0-5mph Temperature 80°s F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 18.52 Measurement Method Interface probe

Depth of Well 49.39 Measurement Method Interface probe

Volume Removed 25 L Removal Method Low-Flow Methods (Grundfos Redi-Flo2 Submersible Pump)

Field Test Results

pH 5.12 Spec Cond (mS/cm) 0.207 Turbidity (NTUs) 9.2
 Diss. Oxygen (mg/l) 3.83 Temperature °C 15.03 Salinity (%) NM
 ORP (mV) 304 Color Clear Odor None

Other: _____

Laboratory Analyses Requested

VOCs – EPA 8260B _____
 Metals – EPA SOW _____
 OLM 4.2 _____

Remarks:

NM – Not Measured

Well Casing Volumes

GAL/FT	<u>1¼" = 0.077</u>	<u>2" = 0.16</u>	<u>3" = 0.37</u>	<u>4" = 0.65</u>
	<u>1½" = 0.10</u>	<u>2½" = 0.24</u>	<u>3½" = 0.50</u>	<u>6" = 1.46</u>

SAMPLE INFORMATION RECORD

Site: Spectrum Finishing, Babylon, NY Sample Crew: P. Barusich/ K. Green

Sample Location/Well No. MW-14s

Field Sample I.D. Number MW-14s_8/3/11 Time 8:45

Weather Clear, Wind: west, 0-5mph Temperature 80°s F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 18.36 Measurement Method Interface probe

Depth of Well 23.80 Measurement Method Interface probe

Volume Removed 27.5 L Removal Method Low-Flow Methods (Grundfos Redi-Flo2 Submersible Pump)

Field Test Results

pH 5.82 Spec Cond (mS/cm) 0.266 Turbidity (NTUs) 0.0
 Diss. Oxygen (mg/l) 2.92 Temperature °C 15.77 Salinity (%) NM
 ORP (mV) 285 Color Clear Odor None

Other: _____

Laboratory Analyses Requested

VOCs – EPA 8260B _____
 Metals – EPA SOW _____
 OLM 4.2 _____

Remarks:

NM – Not Measured

Well Casing Volumes

GAL/FT	<u>1¼" = 0.077</u>	<u>2" = 0.16</u>	<u>3" = 0.37</u>	<u>4" = 0.65</u>
	<u>1½" = 0.10</u>	<u>2½" = 0.24</u>	<u>3½" = 0.50</u>	<u>6" = 1.46</u>

SAMPLE INFORMATION RECORD

Site: Spectrum Finishing, Babylon, NY Sample Crew: P. Barusich/ K. Green

Sample Location/Well No. MW-16d1

Field Sample I.D. Number MW-16d1_8/3/11 Time 12:40

Weather Clear, Wind: west, 0-5mph Temperature 80°s F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 13.35 Measurement Method Interface probe

Depth of Well 89.90 Measurement Method Interface probe

Volume Removed 52.5 L Removal Method Low-Flow Methods (Grundfos Redi-Flo2 Submersible Pump)

Field Test Results

pH 5.57 Spec Cond (mS/cm) 0.190 Turbidity (NTUs) 6.9
 Diss. Oxygen (mg/l) 5.14 Temperature °C 16.54 Salinity (%) NM
 ORP (mV) 271 Color Clear Odor None

Other: _____

Laboratory Analyses Requested

VOCs – EPA 8260B _____
 Metals – EPA SOW _____
 OLM 4.2 _____

Remarks:

NM – Not Measured

Well Casing Volumes

GAL/FT	1¼" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1½" = 0.10	2½" = 0.24	3½" = 0.50	6" = 1.46

SAMPLE INFORMATION RECORD

Site: Spectrum Finishing, Babylon, NY Sample Crew: P. Barusich/ K. Green

Sample Location/Well No. MW-16s

Field Sample I.D. Number MW-16s_8/3/11 Time 11:40

Weather Clear, Wind: west, 0-5mph Temperature 80°s F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 13.51 Measurement Method Interface probe

Depth of Well 50.09 Measurement Method Interface probe

Volume Removed 25 L Removal Method Low-Flow Methods (Grundfos Redi-Flo2 Submersible Pump)

Field Test Results

pH 5.60 Spec Cond (mS/cm) 0.189 Turbidity (NTUs) 12.0
 Diss. Oxygen (mg/l) 4.62 Temperature °C 16.61 Salinity (%) NM
 ORP (mV) 300 Color Clear Odor None

Other: _____

Laboratory Analyses Requested

VOCs – EPA 8260B _____
 Metals – EPA SOW _____
 OLM 4.2 _____

Remarks:

NM – Not Measured

Well Casing Volumes

GAL/FT	<u>1¼" = 0.077</u>	<u>2" = 0.16</u>	<u>3" = 0.37</u>	<u>4" = 0.65</u>
	<u>1½" = 0.10</u>	<u>2½" = 0.24</u>	<u>3½" = 0.50</u>	<u>6" = 1.46</u>



A DIVISION OF SPECTRUM ANALYTICAL, INC. FEATURING HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 2

Special Handling:

TAT- Indicate Date Needed: _____
 All TATs subject to laboratory approval.
 Min. 24-hour notification needed for rushes.
 Samples disposed of after 30 days unless otherwise instructed.

Report To: Jim Magda
Durham Bar-Nickel
330 freestates park DR
5879 Fisher RA, PO Box 56
East Syracuse, NY 13057
 Project Mgr.: Jim Magda

Invoice To: _____
SAME
 P.O. No.: _____ RQN: _____

Project No.: 3153-03DS
 Site Name: Spectrum
 Location: Babylon State: NY
 Sampler(s): PA, LP

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
 8= NaHSO₄ 9= _____ 10= _____ 11= _____

List preservative code below:

Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
 O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
 X1= _____ X2= _____ X3= _____

Containers:

of VOA Vials _____
 # of Amber Glass _____
 # of Clear Glass _____
 # of Plastic _____

Analyses:

Metals-EMASW/AMHA
VOA-EM 6260B

QA/QC Reporting Level
 Level I Level II
 Level III Level IV
 Other _____

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix
	MW-115-8/1/11	8/1/11	822	G	GW
	trip blank				
	MW-ds-8/1/11	8/1/11	940	G	GW
	MW-7S-8/1/11	8/1/11	1045	G	GW
	MW-7DL-8/1/11	8/1/11	1145	G	GW
	MW-3D-8/1/11	8/1/11	1300	G	GW
	MW-4S-8/1/11	8/1/11	1400	G	GW
	MW-5DL-8/1/11	8/1/11	815	G	GW
	MW-4D-8/1/11	8/1/11	935	G	GW

State specific reporting standards:
Includes MS/MSD

E-mail to Jim Magda @dbsynapse.com
 XEDD Format EDITS, NYSDEL format
 Condition upon receipt: Iced Ambient 3°C

Relinquished by: [Signature]
 Received by: [Signature]
 Date: 8-2-11 Time: 1530
Sub out [Signature]
Denim mcken 8-3-11 1840
11:42



A DIVISION OF SPECTRUM ANALYTICAL, INC. FEATURING HANDBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 2 of 2

Special Handling:

TAT- Indicate Date Needed: _____
 All TATs subject to laboratory approval.
 Min. 24-hour notification needed for rushes.
 Samples disposed of after 60 days unless otherwise instructed.

Report To: Jim Magda
Dimitra + Barilucci
5879 Fisher Rd PO Box 56
East Syracuse, NY, 13057

Invoice To: SAME

Project No.: 3153-03DS
 Site Name: Spectrum
 Location: Babylon State: NY
 Sampler(s): PE, LP

Project Mgr.: Jim Magda P.O. No.: _____ RQN: _____

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
 8= NaHSO₄ 9= _____ 10= _____ 11= _____

List preservative code below:

Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
 O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
 X1= _____ X2= _____ X3= _____

Containers:

of VOA Vials _____
 # of Amber Glass _____
 # of Clear Glass _____
 # of Plastic _____

Analyses:

QA/QC Reporting Level
 Level I Level II
 Level III Level IV
 Other _____

Matrix

Type

Lab Id:	Sample Id:	Date:	Time:
MW-2D-8/2/11	8/2/11	8/2/11	1050
MW-2S-8/2/11	8/2/11	8/2/11	1040
MW-6S-8/2/11	8/2/11	8/2/11	1215
MW-6DL-8/2/11	8/2/11	8/2/11	1215
MW-12S-8/2/11	8/2/11	8/2/11	1215
MW-12DL-8/2/11	8/2/11	8/2/11	1410

~~MW-5FPA-6/2/11~~
~~MW-5FPA-6/2/11~~
~~MW-5FPA-6/2/11~~
~~MW-5FPA-6/2/11~~
~~MW-5FPA-6/2/11~~
~~MW-5FPA-6/2/11~~

E-mail to Jim Magda @ obsyracuse.com
 EDD Format EDUES, NYS DEC format

Relinquished by: [Signature]

Revised by: [Signature]

Date: 8-2-11 Time: 1530

Date: 8-2-11 Time: 1840

Date: 8-3-11 Time: 1142

Condition upon receipt: Iced Ambient 3°C

Relinquished by: [Signature]

Sub [Signature]
 Review [Signature]

Date: 8-2-11 Time: 1530

Date: 8-2-11 Time: 1840

Date: 8-3-11 Time: 1142

SPECTRUM ANALYTICAL, INC. RI DIVISION
Sample Condition Form

Received By: <u>Daniel Miller</u>		Reviewed By: <u>[Signature]</u>		Date: <u>8-3-11</u>		Spectrum RI Work Order #: <u>1370</u>			
Client Project: <u>SPECTRUM</u>				Client: <u>DV, Koc & Bertucci</u>				Soil Headspace or Air Bubble ≥ 1/4"	
		Lab Sample ID		Preservation (pH)					VOA Matrix
				HNO ₃	H ₂ SO ₄	HCl	NaOH	H ₃ PO ₄	
1) Cooler Sealed	Yes / No	<u>K1370</u>	<u>01</u>	<u>✓</u>					<u>H</u>
			<u>02</u>						
2) Custody Seal(s)	Present / Absent		<u>03</u>	<u>✓</u>					
	Coolers / Bottles		<u>04</u>						
	Intact / Broken		<u>05</u>						
			<u>06</u>						
3) Custody Seal Number(s)	<u>N/A</u>		<u>07</u>						
			<u>08</u>						
			<u>09</u>						
			<u>10</u>						
			<u>11</u>						
4) Chain-of-Custody	Present / Absent		<u>12</u>						
			<u>13</u>						
5) Cooler Temperature	<u>3°C</u>		<u>14</u>	<u>✓</u>					<u>✓</u>
IR Temp Gun ID	<u>M7-1</u>	<u>K1370</u>	<u>15</u>	<u>✓</u>					<u>H</u>
Coolant Condition	<u>iced</u>								
6) Airbill(s)	Present / Absent								
Airbill Number(s)	<u>courier</u>								
7) Samples Bottles	Intact / Broken / Leaking								
8) Date Received	<u>8-3-11</u>								
9) Time Received	<u>11:42</u>								
Preservative Name/Lot No.:									

OPEN
8-3-11

VOA Matrix Key:
 US = Unpreserved Soil A = Air
 UA = Unpreserved Aqueous H = HCl
 M = MeOH E = Encore
 N = NaHSO4 F = Freeze

Appendix E

APPENDIX E
ANALYTICAL RESULTS

TABLE 1a.
FORMER SPECTRUM FINISHING SITE
PERIODIC REVIEW REPORT NO. 1
GROUNDWATER SAMPLE RESULTS - AUGUST 2011
VOLATILE ORGANIC COMPOUNDS

Sample Identification	MW-01DI	MW-01S	MW-02D	MW-02S	MW-03D	MW-04D	MW-04S	MW-05D1	Contract Required Detection Limit (ug/L)	NYSDEC Class GA Groundwater Standard or Guidance Value (ug/l)
Date of Collection	8/3/2011	8/3/2011	8/2/2011	8/2/2011	8/1/2011	8/2/2011	8/1/2011	8/2/2011		
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
Units	ug/l									
Dichlorodifluoromethane	U	U	U	U	U	U	U	U	1	5 ST
Chloromethane	U	U	U	U	U	U	U	U	1	5 ST
Vinyl Chloride	U	U	U	U	U	U	U	U	1	2 ST
Bromomethane	U	U	U	U	U	U	U	U	1	5 ST
Chloroethane	U	U	U	U	U	U	U	U	1	5 ST
Trichlorofluoromethane	U	U	U	U	U	U	U	U	1	5 ST
1,1-Dichloroethene	U	U	U	U	U	U	U	U	1	5 ST
Acetone	U	U	U	U	U	3.4 J	U	U	5	50GV
Carbon Disulfide	U	U	U	U	U	U	U	U	1	60GV
Methylene Chloride	U	U	U	U	U	U	U	U	1	5 ST
trans-1,2-dichloroethene	U	U	U	U	U	U	U	U	1	5 ST
Methyl tert-Butyl Ether	U	U	U	U	U	U	U	U	1	10GV
1,1-Dichloroethane	U	U	U	U	U	U	U	U	1	5 ST
cis-1,2-Dichloroethene	U	U	U	U	U	U	U	U	1	5 ST
2-Butanone	U	U	U	U	U	U	U	U	5	50GV
Chloroform	U	U	U	U	U	U	U	U	1	7 ST
1,1,1-Trichloroethane	U	U	U	U	U	U	U	U	1	5 ST
Carbon Tetrachloride	U	U	U	U	U	U	U	U	1	5 ST
Benzene	U	U	U	U	U	U	U	U	1	1 ST
1,2-Dichloroethane	U	U	U	U	U	U	U	U	1	0.6 ST
Trichloroethene	U	U	U	U	U	U	U	U	1	5 ST
1,2-Dichloropropane	U	U	U	U	U	U	U	U	1	1 ST
Bromodichloromethane	U	U	U	U	U	U	U	U	1	50GV
cis-1,3-Dichloropropene	U	U	U	U	U	U	U	U	1	0.4 ST *
4-Methyl-2-Pentanone	U	U	U	U	U	U	U	U	5	----
Toluene	U	U	U	U	U	U	U	U	1	5 ST
Trans-1,3-Dichloropropene	U	U	U	U	U	U	U	U	1	0.4 ST *
1,1,2-Trichloroethane	U	U	U	U	U	U	U	U	1	1 ST
Tetrachloroethene	U	U	0.7 J	3.3	U	U	3.1	U	1	5 ST
2-Hexanone	U	U	U	U	U	U	U	U	5	50GV
Dibromochloromethane	U	U	U	U	U	U	U	U	1	50GV
1,2-Dibromoethane	U	U	U	U	U	U	U	U	1	0.0006
Chlorobenzene	U	U	U	U	U	U	U	U	1	5 ST
Ethylbenzene	U	U	U	U	U	U	U	U	1	5 ST
Total Xylenes	U	U	U	U	U	U	U	U	1	5 ST
Styrene	U	U	U	U	U	U	U	U	1	5 ST

TABLE 1a. (CONTINUED)
FORMER SPECTRUM FINISHING SITE
PERIODIC REVIEW REPORT NO. 1
GROUNDWATER SAMPLE RESULTS - AUGUST 2011
VOLATILE ORGANIC COMPOUNDS

Sample Identification	MW-01DI	MW-01S	MW-02D	MW-02S	MW-03D	MW-04D	MW-04S	MW-05D1	Contract Required Detection Limit (ug/l)	NYSDEC Class GA Groundwater Standard or Guidance Value (ug/l)
Date of Collection	8/3/2011	8/3/2011	8/2/2011	8/2/2011	8/1/2011	8/2/2011	8/1/2011	8/2/2011		
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
Units	ug/l									
Bromoform	U	U	U	U	U	U	U	U	1	50GV
Isopropylbenzene	U	U	U	U	U	U	U	U	1	5 ST
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	U	U	1	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U	1	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	U	U	U	1	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	U	U	U	1	3 ST
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	U	U	1	0.04 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	U	1	5 ST
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	U	U	1	5 ST
1,1-Dichloropropene	U	U	U	U	U	U	U	U	1	5 ST
1,2,3-Trichlorobenzene	U	U	U	U	U	U	U	U	1	5 ST
1,2,3-Trichloropropane	U	U	U	U	U	U	U	U	1	0.04 ST
1,2,4-Trimethylbenzene	U	U	U	U	U	U	U	U	1	5 ST
1,3,5-Trimethylbenzene (Mesitylene)	U	U	U	U	U	U	U	U	1	5 ST
1,3-Dichloropropane	U	U	U	U	U	U	U	U	1	5 ST
2,2-Dichloropropane	U	U	U	U	U	U	U	U	1	5 ST
2-Chlorotoluene	U	U	U	U	U	U	U	U	1	50 GV
4-Chlorotoluene	U	U	U	U	U	U	U	U	1	5 ST
Bromobenzene	U	U	U	U	U	U	U	U	1	5 ST
Bromochloromethane	U	U	U	U	U	U	U	U	1	5 ST
Cymene	U	U	U	U	U	U	U	U	1	5 ST
Dibromomethane	U	U	U	U	U	U	U	U	1	5 ST
M&P-Xylene (Dimethyl Benzene)	U	U	U	U	U	U	U	U	1	5 ST
Hexachlorobutadiene	U	U	U	U	U	U	U	U	1	0.5 ST
Iodomethane (Methyl Iodide)	U	U	U	U	U	U	U	U	1	5 ST
Naphthalene	U	U	U	U	U	U	U	U	1	10 GV
N-Butylbenzene	U	U	U	U	U	U	U	U	1	5 ST
N-Propylbenzene	U	U	U	U	U	U	U	U	1	5 ST
O-Xylene (1,2-Dimethylbenzene)	U	U	U	U	U	U	U	U	1	5 ST
Sec-Butylbenzene	U	U	U	U	U	U	U	U	1	5 ST
T-Butylbenzene	U	U	U	U	U	U	U	U	1	5 ST
Vinyl Acetate	U	U	U	U	U	U	U	U	1	----
Total VOCs	0	0	0.7	3.3	0	3.4	3.1	0		----

QUALIFIERS:

U: Compound analyzed for but not detected

J: Estimated value

NOTES:

*: Value pertains to the sum of the isomers

GV: Guidance Value

ST: Standard

----: Not established

Indicates value exceeds NYSDEC Class GA groundwater standard

TABLE 1a. (CONTINUED)
FORMER SPECTRUM FINISHING SITE
PERIODIC REVIEW REPORT NO. 1
GROUNDWATER SAMPLE RESULTS - AUGUST 2011
VOLATILE ORGANIC COMPOUNDS

Sample Identification	MW-06DI	MW-06S	MW-07D1	MW-07S	MW-09S	MW-11S	MW-12DI	MW-12S	Contract Required Detection Limit (ug/L)	NYSDEC Class GA Groundwater Standard or Guidance Value (ug/l)
Date of Collection	8/2/2011	8/2/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/2/2011	8/2/2011		
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
Units	ug/l									
Dichlorodifluoromethane	U	U	U	U	U	U	U	U	1	5 ST
Chloromethane	U	U	U	U	U	U	U	U	1	5 ST
Vinyl Chloride	U	U	U	U	U	U	U	U	1	2 ST
Bromomethane	U	U	U	U	U	U	U	U	1	5 ST
Chloroethane	U	U	U	U	U	U	U	U	1	5 ST
Trichlorofluoromethane	U	U	U	U	U	U	U	U	1	5 ST
1,1-Dichloroethene	U	U	U	U	U	U	U	U	1	5 ST
Acetone	U	U	U	U	U	U	U	U	5	50GV
Carbon Disulfide	U	U	U	U	U	U	U	U	1	60GV
Methylene Chloride	U	U	U	U	U	U	U	U	1	5 ST
trans-1,2-dichloroethene	U	U	U	U	U	U	U	U	1	5 ST
Methyl tert-Butyl Ether	U	U	U	U	U	U	U	U	1	10GV
1,1-Dichloroethane	U	U	U	U	U	U	U	U	1	5 ST
cis-1,2-Dichloroethene	U	U	U	U	U	U	U	U	1	5 ST
2-Butanone	U	U	U	U	U	U	U	U	5	50GV
Chloroform	U	U	U	U	U	U	U	U	1	7 ST
1,1,1-Trichloroethane	U	U	U	U	U	U	U	U	1	5 ST
Carbon Tetrachloride	U	U	U	U	U	U	U	U	1	5 ST
Benzene	U	U	U	U	U	U	U	U	1	1 ST
1,2-Dichloroethane	U	U	U	U	U	U	U	U	1	0.6 ST
Trichloroethene	U	U	U	U	U	U	U	U	1	5 ST
1,2-Dichloropropane	U	U	U	U	U	U	U	U	1	1 ST
Bromodichloromethane	U	U	U	U	U	U	U	U	1	50GV
cis-1,3-Dichloropropene	U	U	U	U	U	U	U	U	1	0.4 ST *
4-Methyl-2-Pentanone	U	U	U	U	U	U	U	U	5	----
Toluene	U	U	U	U	U	U	U	U	1	5 ST
Trans-1,3-Dichloropropene	U	U	U	U	U	U	U	U	1	0.4 ST *
1,1,2-Trichloroethane	U	U	U	U	U	U	U	U	1	1 ST
Tetrachloroethene	U	7.4	U	1.1	2.6	1.3	0.72 J	1.8	1	5 ST
2-Hexanone	U	U	U	U	U	U	U	U	5	50GV
Dibromochloromethane	U	U	U	U	U	U	U	U	1	50GV
1,2-Dibromoethane	U	U	U	U	U	U	U	U	1	0.0006
Chlorobenzene	U	U	U	U	U	U	U	U	1	5 ST
Ethylbenzene	U	U	U	U	U	U	U	U	1	5 ST
Total Xylenes	U	U	U	U	U	U	U	U	1	5 ST
Styrene	U	U	U	U	U	U	U	U	1	5 ST

TABLE 1a. (CONTINUED)
FORMER SPECTRUM FINISHING SITE
PERIODIC REVIEW REPORT NO. 1
GROUNDWATER SAMPLE RESULTS - AUGUST 2011
VOLATILE ORGANIC COMPOUNDS

Sample Identification	MW-06DI	MW-06S	MW-07D1	MW-07S	MW-09S	MW-11S	MW-12DI	MW-12S	Contract Required Detection Limit (ug/l)	NYSDEC Class GA Groundwater Standard or Guidance Value (ug/l)
Date of Collection	8/2/2011	8/2/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/2/2011	8/2/2011		
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
Units	ug/l									
Bromoform	U	U	U	U	U	U	U	U	1	50GV
Isopropylbenzene	U	U	U	U	U	U	U	U	1	5 ST
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	U	U	1	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U	1	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	U	U	U	1	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	U	U	U	1	3 ST
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	U	U	1	0.04 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	U	1	5 ST
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	U	U	1	5 ST
1,1-Dichloropropene	U	U	U	U	U	U	U	U	1	5 ST
1,2,3-Trichlorobenzene	U	U	U	U	U	U	U	U	1	5 ST
1,2,3-Trichloropropane	U	U	U	U	U	U	U	U	1	0.04 ST
1,2,4-Trimethylbenzene	U	U	U	U	U	U	U	U	1	5 ST
1,3,5-Trimethylbenzene (Mesitylene)	U	U	U	U	U	U	U	U	1	5 ST
1,3-Dichloropropane	U	U	U	U	U	U	U	U	1	5 ST
2,2-Dichloropropane	U	U	U	U	U	U	U	U	1	5 ST
2-Chlorotoluene	U	U	U	U	U	U	U	U	1	50 GV
4-Chlorotoluene	U	U	U	U	U	U	U	U	1	5 ST
Bromobenzene	U	U	U	U	U	U	U	U	1	5 ST
Bromochloromethane	U	U	U	U	U	U	U	U	1	5 ST
Cymene	U	U	U	U	U	U	U	U	1	5 ST
Dibromomethane	U	U	U	U	U	U	U	U	1	5 ST
M&P-Xylene (Dimethyl Benzene)	U	U	U	U	U	U	U	U	1	5 ST
Hexachlorobutadiene	U	U	U	U	U	U	U	U	1	0.5 ST
Iodomethane (Methyl Iodide)	U	U	U	U	U	U	U	U	1	5 ST
Naphthalene	U	U	U	U	U	U	U	U	1	10 GV
N-Butylbenzene	U	U	U	U	U	U	U	U	1	5 ST
N-Propylbenzene	U	U	U	U	U	U	U	U	1	5 ST
O-Xylene (1,2-Dimethylbenzene)	U	U	U	U	U	U	U	U	1	5 ST
Sec-Butylbenzene	U	U	U	U	U	U	U	U	1	5 ST
T-Butylbenzene	U	U	U	U	U	U	U	U	1	5 ST
Vinyl Acetate	U	U	U	U	U	U	U	U	1	----
Total VOCs	0	7.4	0	1.1	2.6	1.3	0.72	1.8		----

QUALIFIERS:

U: Compound analyzed for but not detected
J: Estimated value

NOTES:

*: Value pertains to the sum of the isomers
GV: Guidance Value
ST: Standard
----: Not established

Indicates value exceeds NYSDEC Class GA groundwater standard

TABLE 1a. (CONTINUED)
FORMER SPECTRUM FINISHING SITE
PERIODIC REVIEW REPORT NO. 1
GROUNDWATER SAMPLE RESULTS - AUGUST 2011
VOLATILE ORGANIC COMPOUNDS

Sample Identification	MW-14DI	MW-14S	MW-16DI	MW-16S	Contract	NYSDEC Class GA
					Required	Groundwater
Date of Collection	8/3/2011	8/3/2011	8/3/2011	8/3/2011	Detection	Standard or
Dilution Factor	1.0	1.0	1.0	1.0	Limit	Guidance Value
Units	ug/l	ug/l	ug/l	ug/l	(ug/L)	(ug/l)
Dichlorodifluoromethane	U	U	U	U	1	5 ST
Chloromethane	U	U	U	U	1	5 ST
Vinyl Chloride	U	U	U	U	1	2 ST
Bromomethane	U	U	U	U	1	5 ST
Chloroethane	U	U	U	U	1	5 ST
Trichlorofluoromethane	U	U	U	U	1	5 ST
1,1-Dichloroethene	U	U	U	U	1	5 ST
Acetone	U	U	U	U	5	50GV
Carbon Disulfide	U	U	U	U	1	60GV
Methylene Chloride	U	U	U	U	1	5 ST
trans-1,2-dichloroethene	U	U	U	U	1	5 ST
Methyl tert-Butyl Ether	U	U	U	U	1	10GV
1,1-Dichloroethane	U	U	U	U	1	5 ST
cis-1,2-Dichloroethene	U	U	U	U	1	5 ST
2-Butanone	U	U	U	U	5	50GV
Chloroform	U	U	U	U	1	7 ST
1,1,1-Trichloroethane	U	U	0.63 J	U	1	5 ST
Carbon Tetrachloride	U	U	U	U	1	5 ST
Benzene	U	U	U	U	1	1 ST
1,2-Dichloroethane	U	U	U	U	1	0.6 ST
Trichloroethene	U	U	2.5	U	1	5 ST
1,2-Dichloropropane	U	U	U	U	1	1 ST
Bromodichloromethane	U	U	U	U	1	50GV
cis-1,3-Dichloropropene	U	U	U	U	1	0.4 ST *
4-Methyl-2-Pentanone	U	U	U	U	5	----
Toluene	U	U	U	U	1	5 ST
Trans-1,3-Dichloropropene	U	U	U	U	1	0.4 ST *
1,1,2-Trichloroethane	U	U	U	U	1	1 ST
Tetrachloroethene	U	0.67 J	U	U	1	5 ST
2-Hexanone	U	U	U	U	5	50GV
Dibromochloromethane	U	U	U	U	1	50GV
1,2-Dibromoethane	U	U	U	U	1	0.0006
Chlorobenzene	U	U	U	U	1	5 ST
Ethylbenzene	U	U	U	U	1	5 ST
Total Xylenes	U	U	U	U	1	5 ST
Styrene	U	U	U	U	1	5 ST

TABLE 1a. (CONTINUED)
FORMER SPECTRUM FINISHING SITE
PERIODIC REVIEW REPORT NO. 1
GROUNDWATER SAMPLE RESULTS - AUGUST 2011
VOLATILE ORGANIC COMPOUNDS

Sample Identification	MW-14DI	MW-14S	MW-16DI	MW-16S	Contract	NYSDEC Class GA
					Required	Groundwater
Date of Collection	8/3/2011	8/3/2011	8/3/2011	8/3/2011	Detection	Standard or
Dilution Factor	1.0	1.0	1.0	1.0	Limit	Guidance Value
Units	ug/l	ug/l	ug/l	ug/l	(ug/l)	(ug/l)
Bromoform	U	U	U	U	1	50GV
Isopropylbenzene	U	U	U	U	1	5 ST
1,1,2,2-Tetrachloroethane	U	U	U	U	1	5 ST
1,3-Dichlorobenzene	U	U	U	U	1	3 ST
1,4-Dichlorobenzene	U	U	U	U	1	3 ST
1,2-Dichlorobenzene	U	U	U	U	1	3 ST
1,2-Dibromo-3-chloropropane	U	U	U	U	1	0.04 ST
1,2,4-Trichlorobenzene	U	U	U	U	1	5 ST
1,1,1,2-Tetrachloroethane	U	U	U	U	1	5 ST
1,1-Dichloropropene	U	U	U	U	1	5 ST
1,2,3-Trichlorobenzene	U	U	U	U	1	5 ST
1,2,3-Trichloropropane	U	U	U	U	1	0.04 ST
1,2,4-Trimethylbenzene	U	U	U	U	1	5 ST
1,3,5-Trimethylbenzene (Mesitylene)	U	U	U	U	1	5 ST
1,3-Dichloropropane	U	U	U	U	1	5 ST
2,2-Dichloropropane	U	U	U	U	1	5 ST
2-Chlorotoluene	U	U	U	U	1	50 GV
4-Chlorotoluene	U	U	U	U	1	5 ST
Bromobenzene	U	U	U	U	1	5 ST
Bromochloromethane	U	U	U	U	1	5 ST
Cymene	U	U	U	U	1	5 ST
Dibromomethane	U	U	U	U	1	5 ST
M&P-Xylene (Dimethyl Benzene)	U	U	U	U	1	5 ST
Hexachlorobutadiene	U	U	U	U	1	0.5 ST
Iodomethane (Methyl Iodide)	U	U	U	U	1	5 ST
Naphthalene	U	U	U	U	1	10 GV
N-Butylbenzene	U	U	U	U	1	5 ST
N-Propylbenzene	U	U	U	U	1	5 ST
O-Xylene (1,2-Dimethylbenzene)	U	U	U	U	1	5 ST
Sec-Butylbenzene	U	U	U	U	1	5 ST
T-Butylbenzene	U	U	U	U	1	5 ST
Vinyl Acetate	U	U	U	U	1	----
Total VOCs	0	0.67	3.1	0		----

QUALIFIERS:

U: Compound analyzed for but not detected
J: Estimated value

NOTES:

*: Value pertains to the sum of the isomers
GV: Guidance Value
ST: Standard
----: Not established



Indicates value exceeds NYSDEC Class GA groundwater standard

TABLE 2b.
FORMER SPECTRUM FINISHING SITE
PERIODIC REVIEW REPORT NO. 1
GROUNDWATER SAMPLE RESULTS - AUGUST 2011
INORGANIC PARAMETERS - UNFILTERED

Sample Identification	MW-01DI	MW-01S	MW-02D	MW-02S	MW-03D	MW-04D	MW-04S	MW-05D1	Instrument Detection Limit (ug/l)	NYSDEC Class GA Groundwater Standard or Guidance Value (ug/l)
	Date of Collection	8/3/2011	8/3/2011	8/2/2011	8/2/2011	8/1/2011	8/2/2011	8/1/2011		
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l		
Aluminum	386	324	221	190 B	211	66.1 B	90.1 B	218	200	----
Antimony	U	U	U	U	U	U	U	U	20	3 ST
Arsenic	U	U	U	U	U	U	U	U	20	25 ST
Barium	49.3 B	18.3 B	103 B	31.1 B	111 B	51.6 B	29.8 B	114 B	200	1,000 ST
Beryllium	U	U	U	U	U	U	U	U	5	3 GV
Cadmium	U	1.1 B	U	U	U	1.4 B	143	2.5 B	5	5 ST
Calcium	10500	23800	14700	17500	13800	14300	20500	14600	800	----
Chromium	0.89 B	U	1.8 B	1.4 B	1 B	14.7 B	50.8	8.3 B	20	50 ST
Cobalt	U	U	U	U	U	U	1.5 B	U	50	----
Copper	7.2 B	4.3 B	4.9 B	30.3	U	14.8 B	96.6	U	30	200 ST
Iron	272	57.3 B	489	212	254	129 B	73.9 B	300	200	300 ST ^
Lead	U	U	U	10.8	U	U	U	U	10	25 ST
Magnesium	2610 J	4550 J	3560 J	3990 J	3190 J	3150 J	4890 J	3300 J	500	35,000 GV
Manganese	18.9 B	U	140	U	203	36.4 B	256	206	50	300 ST ^
Nickel	U	U	1.4 B	U	0.88 B	1.7 B	62.8	0.91 B	50	100 ST
Potassium	2640	3580	4010	2260	4150	3070	3400	4320	1000	----
Selenium	U	U	U	U	U	U	U	U	30	10 ST
Silver	U	U	U	U	U	U	U	U	30	50 ST
Sodium	15500	21400	19700	8620	15900	16100	15200	17700	1000	20,000 ST
Thallium	U	U	U	U	U	U	U	U	20	0.5 GV
Vanadium	U	U	U	U	U	U	U	U	50	----
Zinc	21.8 B	16.3 B	18.4 B	16.9 B	23.3 B	34.8 B	29.9 B	17.6 B	50	2,000 GV
Mercury	U	U	0.033 B	U	U	U	U	U	0.20	0.7 ST

QUALIFIERS:

U: Compound analyzed for but not detected
 B: Compound concentration is less than the CRDL
 but greater than the IDL.
 J: Estimated value

NOTES:

^: The combined standard for iron and manganese is 500 ug/l
 Indicates value exceeds NYSDEC Class GA groundwater standard
 or guidance value
 : Indicates total iron and manganese exceed the 500 ug/l standard

TABLE 2b. (CONTINUED)
FORMER SPECTRUM FINISHING SITE
PERIODIC REVIEW REPORT NO. 1
GROUNDWATER SAMPLE RESULTS - AUGUST 2011
INORGANIC PARAMETERS - UNFILTERED

Sample Identification	MW-06DI	MW-06S	MW-07D1	MW-07S	MW-09S	MW-11S	MW-12DI	MW-12S	Instrument Detection Limit (ug/l)	NYSDEC Class GA Groundwater Standard or Guidance Value (ug/l)
	Date of Collection	8/2/2011	8/2/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/2/2011		
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	(ug/l)	(ug/l)
Aluminum	120 B	226	591	274	U	88.8 B	158 B	397	200	----
Antimony	U	U	U	U	U	U	U	U	20	3 ST
Arsenic	U	U	U	U	U	U	U	U	20	25 ST
Barium	59.2 B	52.4 B	71.5 B	65.4 B	25.4 B	35.8 B	40.2 B	40.9 B	200	1,000 ST
Beryllium	U	U	U	U	U	U	U	U	5	3 GV
Cadmium	U	97.5	U	1.6 B	U	U	12.3	182	5	5 ST
Calcium	15000	15800	15000	18800	23900	22000	13500	14300	800	----
Chromium	1.2 B	20.1	3.7 B	23.4	0.71 B	U	37.2	10.3 B	20	50 ST
Cobalt	U	U	U	U	U	U	U	1.1 B	50	----
Copper	U	61	U	26.3 B	U	U	20.2 B	6.7 B	30	200 ST
Iron	257	351	833	587	U	110 B	249	540	200	300 ST ^
Lead	U	U	U	U	U	U	U	U	10	25 ST
Magnesium	2990 J	2940 J	3800 J	2490 J	3680 J	3830 J	3010 J	3120 J	500	35,000 GV
Manganese	27.9 B	49.7 B	32.3 B	59.5	20.8 B	14.7 B	132	20.1 B	50	300 ST ^
Nickel	U	25.8 B	U	5.5 B	U	U	13.2 B	251	50	100 ST
Potassium	3560	3050	3250	3190	4660	3260	2450	2770	1000	----
Selenium	U	U	U	U	U	U	U	U	30	10 ST
Silver	U	U	U	U	U	U	U	U	30	50 ST
Sodium	17200	16000	13700	8290	14800	11300	14600	18400	1000	20,000 ST
Thallium	U	U	U	U	U	U	U	U	20	0.5 GV
Vanadium	U	U	U	U	U	U	U	U	50	----
Zinc	19.3 B	38 B	16.8 B	22.1 B	17 B	14.9 B	23 B	57.3	50	2,000 GV
Mercury	U	U	U	U	U	U	U	U	0.20	0.7 ST

QUALIFIERS:

U: Compound analyzed for but not detected
 B: Compound concentration is less than the CRDL but greater than the IDL.
 J: Estimated value

NOTES:

^: The combined standard for iron and manganese is 500 ug/l
 Indicates value exceeds NYSDEC Class GA groundwater standard or guidance value
 : Indicates total iron and manganese exceed the 500 ug/l standard

TABLE 2b. (CONTINUED)
FORMER SPECTRUM FINISHING SITE
PERIODIC REVIEW REPORT NO. 1
GROUNDWATER SAMPLE RESULTS - AUGUST 2011
INORGANIC PARAMETERS - UNFILTERED

Sample Identification	MW-14DI	MW-14S	MW-16DI	MW-16S	Instrument Detection Limit	NYSDEC Class GA
						Groundwater Standard or Guidance Value
Date of Collection	8/3/2011	8/3/2011	8/3/2011	8/3/2011		
Dilution Factor	1.0	1.0	1.0	1.0		
Units	ug/l	ug/l	ug/l	ug/l	(ug/l)	(ug/l)
Aluminum	115 B	U	452	232	200	----
Antimony	U	U	U	U	20	3 ST
Arsenic	U	U	U	U	20	25 ST
Barium	60.7 B	47.7 B	32.4 B	35 B	200	1,000 ST
Beryllium	U	U	U	U	5	3 GV
Cadmium	U	42.3	U	U	5	5 ST
Calcium	15700	22000	12400	19100	800	----
Chromium	1.1 B	9.5 B	1.5 B	1.6 B	20	50 ST
Cobalt	U	U	U	U	50	----
Copper	U	U	U	U	30	200 ST
Iron	702	139 B	460	347	200	300 ST ^
Lead	U	U	U	U	10	25 ST
Magnesium	3510 J	3550 J	3830 J	3430 J	500	35,000 GV
Manganese	30.4 B	U	14.3 B	25.3 B	50	300 ST ^
Nickel	U	6.5 B	U	U	50	100 ST
Potassium	2940	4420	1330	2440	1000	----
Selenium	U	U	U	U	30	10 ST
Silver	U	U	U	U	30	50 ST
Sodium	15000	17600	16600	9150	1000	20,000 ST
Thallium	U	U	U	U	20	0.5 GV
Vanadium	U	U	U	U	50	----
Zinc	13.7 B	11.6 B	14.6 B	14 B	50	2,000 GV
Mercury	U	U	U	U	0.20	0.7 ST

QUALIFIERS:

U: Compound analyzed for but not detected
 B: Compound concentration is less than the CRDL
 but greater than the IDL.
 J: Estimated value

NOTES:

^: The combined standard for iron and manganese is 500 ug/l
 Indicates value exceeds NYSDEC Class GA groundwater standard
 or guidance value
 : Indicates total iron and manganese exceed the 500 ug/l standard

Data Usability Summary Report (DUSR)

Twenty groundwater samples were collected as part of the site management activities at the Spectrum Finishing Site, from August 1 through 3, 2011. The groundwater samples were analyzed for VOCs and metals including mercury.

Spectrum Analytical, Inc., a subcontractor to D&B, analyzed all samples in accordance with the USEPA SW-846 methods as stipulated in the work plan. The data packages submitted by Spectrum and the data have been reviewed by Ms. Donna Brown, D&B's Quality Assurance/Quality Control (QA/QC) Officer. Ms. Brown meets the NYSDEC requirements of a data validator as listed in the DER-10 Technical Guidance for Site Investigation and Remediation.

The data packages have been reviewed for completeness and compliance with NYSDEC QA/QC requirements, as well as the requirements for development of Data Usability Summary Reports as listed in Appendix 2B of the DER-10 Technical Guidance for Site Investigations and Remediation. Each data package was reviewed for the following:

- Was a NYSDEC Category B deliverable data package submitted?
- Have all holding times been met?
- Does all QA/QC data fall within QA/QC limits and specifications?
- Were appropriate methods followed?
- Does the raw data conform to that reported on the data summary sheets?
- Have the correct data qualifiers been utilized?

NYSDEC ASP Category B deliverable data package have been submitted for sample delivery groups (SDG) K1370. The findings of the data review process are summarized below.

All samples were analyzed using the proper methods and within the method-specified holding times. All internal standard area counts and spike recoveries were within QC limits.

Initial and continuing calibrations were analyzed at the method specified frequency and were within QC limits. Raw data confirmed sample reported sample results.

The following samples results were qualified based on the review process:

- The percent difference was above QC limits in the serial dilution for magnesium and was qualified as estimated (J) in all samples.

No other problems were found with the sample results. All results have been deemed valid and usable, as qualified above, for environmental assessment purposes.