PERIODIC REVIEW REPORT NO. 1
2011
REPORTING PERIOD

SPECTRUM FINISHING SITE
SITE NO 152029

West Babylon, Suffolk County, New York

WORK ASSIGNMENT NO. D004446-8

Prepared For

New York State Department of Environmental Conservation

JUNE 2012

DVIRKA AND BARTILUCCI CONSULTING ENGINEERS
A DIVISION OF D&B ENGINEERS AND ARCHITECTS, P.C.

PERIODIC REVIEW REPORT NO. 1
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SITE REGISTRY NO. 152029
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ENVIRONMENTAL CONSERVATION

Prepared by:

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SYRACUSE, NEW YORK

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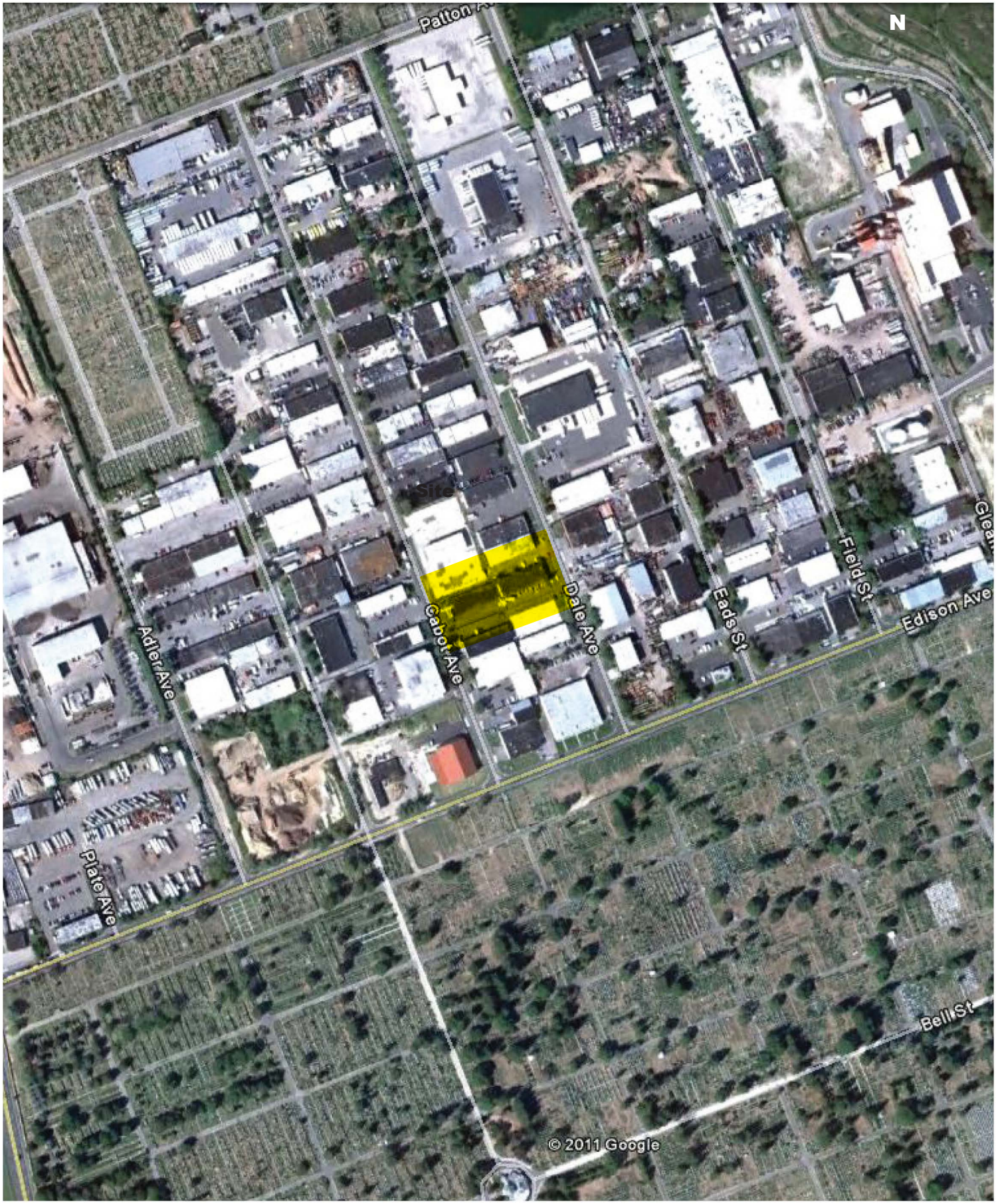
1.0 INTRODUCTION

The Spectrum Finishing Corporation Site (the Site), located in West Babylon, Suffolk County, New York (Figure 1-1), is a New York State Class 4 Inactive Hazardous Waste Disposal Site, Site Registry Number 152029. The New York State Department of Environmental Conservation (NYSDEC) issued a site management work assignment for the 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.

By way of background, a Record of Decision (ROD) for the Site was signed in March 2003, which selected a remedy generally consisting of excavation and off-site disposal of contaminated soil within identified source areas and groundwater monitoring. In March 2008, the ROD remedy was changed by way of an Explanation of Significant Difference (ESD) issued by the NYSDEC. The purpose of the ESD was to require demolition of the building at 50 Dale Street before the contaminated soil below and adjacent to a sump within the building was excavated.

After completion of the remedial work in July 2009, subsurface soil and groundwater 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 Camp, Dresser and McKee, Inc. (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/or Institutional Controls (ICs);
- Media monitoring;
- Performance of periodic inspections, certification of results; and,
- Submittal of Periodic Review Reports (PRRs).



SCALE: Not to Scale

Source: Googlearth.com

Spectrum Finishing Site
Periodic Review Report

Site Location Map

Figure 1-1

In addition to the SMP and in accordance with the ROD, a Deed Restriction was prepared for the Site and recorded with the Suffolk County Clerk's office on March 1, 2011. The purpose of the Deed Restriction is to notify future property owners of the residual contamination and limit the use of the Site, including the manner in which soil and groundwater are managed.

This report represents the first PRR for the Spectrum Finishing Corporation Site since completion of the remedial work in July 2009. 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"* (DER-10), dated May 2010, as well as the Site Management Pilot Program Work Plan, dated January 2011, and includes the following:

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

2.0 SITE OVERVIEW

D&B was not involved in the investigation and remediation phases of work at the Spectrum Finishing Corporation 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 Corporation 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, within the shared parking lots of 60 Dale Street and 51 and 61 Cabot Street, in West 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 in 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. Several other Inactive Hazardous Waste Disposal Sites, including Babylon Landfill, U.S. Electroplating Corporation, Pride Solvents and Chemical Co., and Fairchild Republic Main Plant are also located in the Pinelawn Industrial Area. 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.

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.

2.2.2 Record of Decision

Based on the result of the RI/FS, the 2003 ROD selected a remedy generally consisting of excavation and off-site disposal of contaminated soil within identified source areas and long-term groundwater monitoring. Specific components of the remedy as identified in the ROD are as follows:

- Soil excavation and off-site disposal of contaminated soils within source areas. Shallow soil excavation within the alleyways and hot-spot areas inside the building. Clean and properly close all cesspools and drainage structures. Seal excavated areas with asphalt or concrete to prevent surface soil exposure.
- A soils management plan will be developed to address residual contaminated soils that may be excavated from the site during future redevelopment.
- A deed restriction will be imposed that will require compliance with the soils management plan to address subsurface soil contamination two feet below ground surface which exceeds cleanup objectives.
- Since the metals- and tetrachloroethene-contaminated groundwater plumes have migrated off-site, a monitoring program will be instituted. Three outpost wells for the Suffolk County Water District Wells at Tenth Street will be installed. Samples will be analyzed for metals and VOCs. The sampling frequency and monitoring duration will be determined by the remedial design.
- Since there is existing groundwater contamination, institutional controls will be imposed in the form of existing use and development restrictions preventing the use of groundwater as a source of potable or process water without necessary water quality treatment as determined by the SCDHS.

- A notification would be sent to the county clerk for filing, to notify future owners of the residual contaminants remaining in the groundwater on the site.

In March 2008, the ROD remedy was changed by way of an ESD issued by the NYSDEC. The purpose of the ESD was to require demolition of the building at 50 Dale Street before the contaminated soil below and adjacent to a sump within the building was excavated.

2.2.3 Remedial Activities

Following completion of the engineering design in April 2008 and contract award in September 2008, the remedial construction was conducted in several phases between October 2008 and June 2009 by the NYSDEC under the State Superfund Program. 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, which was prepared on behalf of the NYSDEC by CDM in March 2010.

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.

Building Sump Soil Excavations

Three building sumps and associated contaminated soil were excavated and disposed of at an approved off-site disposal facility. Initial 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.

Shallow groundwater underlying the Site is contaminated with VOCs and metals. Although other compounds and analytes have been detected in groundwater samples collected from the Site, tetrachloroethene, cadmium, chromium, copper, and nickel are considered the primary groundwater contaminants of concern. Historically, these contaminants have been detected most frequently and at the highest concentrations in groundwater samples. Figure 3-1 in Section 3.0 identifies exceedances of SCGs in groundwater for VOCs and metals based on historic data.

3.0 EVALUATION OF REMEDY PERFORMANCE, EFFECTIVENESS AND PROTECTIVENESS

3.1 Remedial Action Objectives

As described in the March 2003 ROD, the overall remedial goal was to meet all standards, criteria and guidance (SCG) values and be protective of human health and the environment. At a minimum, the remedy selected was to eliminate or mitigate all significant threats to public health and/or the environment presented by the hazardous waste disposed at the Site through proper application of scientific and engineering principles.

The specific goals selected for the Site are as follows:

- Eliminate, to the extent practicable, the leaching of contaminants into groundwater;
- Clean and/or closeout all of the cesspools, drainage structures, and sump pit within the building interior in accordance to the USEPA's Underground Injection Control Program and any other Suffolk County regulations;
- Eliminate soils, to the extent practicable, in exceedance of applicable environmental quality cleanup objectives;
- Eliminate, to the extent practicable, surface soil exposure;
- Protect public 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 included in the SMP 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 result in unacceptable exposure of contamination to the public and the environment.

3.2.1 Description of Institutional Control

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 and/or 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 Excavation Work Plan;
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for its intended use; and,
- 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.

In addition, the Spectrum Finishing Corporation 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 Site. The Site has gone through a process of investigation, evaluation, cleanup, and monitoring in distinct stages. As a result, the NYSDEC maintains detailed assessment files for the Site. These files are used as the basis for listing and classifying the Site in the registry. Site records may be accessed through the West Babylon Public Library, NYSDEC's website or NYSDEC's Central Office. Site records contain information such as site name, identification number, site 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

Engineering controls for the Spectrum Finishing Corporation Site include a final cover system as well as perimeter fencing. The cover system is generally comprised of a clean soil fill varying in depths from a minimum of 4-feet to a maximum of 18-feet, asphalt pavement, and remaining concrete building floor slabs and sidewalks. The Excavation Work Plan included in the SMP outlines the procedures to be implemented in the event the remaining contamination is disturbed.

Drawings from the Final Engineering Report and SMP, which identify the location of the final cover system, are included in Appendix A.

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 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 Work Plan Compliance

Development of the Site for commercial and/or industrial uses is currently permitted. As a result, any future work that will encounter or disturb the remaining contamination must be handled in accordance with the Excavation Work Plan.

3.3.1 Description of Excavation Work Plan

In general, the Excavation Work Plan specifies that the NYSDEC must be notified a minimum of 15 days prior to the initiation of any intrusive work that will encounter or disturb the remaining contamination. The notification must include information such as a detailed description of the work, summary of environmental conditions anticipated in the work area, schedule of activities, Site-Specific Health and Safety Plan (HASP), Community Air Monitoring Program (CAMP), identification of waste streams and disposal facilities, etc. The Excavation Work Plan specifies all 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 Work Plan requires off-site management of all liquids generated as a result of excavation dewatering activities.

3.3.3 Excavation Work Plan Compliance Status

Excavation Work Plan

Based on the result of the site inspections, no excavation activities were performed at the Site during the 2011 reporting period. 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 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 Corporation 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 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 ICs for the Site. One site inspection was performed during the reporting period for the Spectrum Finishing Corporation Site. The site

inspection included observations of the condition of the Site, including features such as the asphalt and concrete covers 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. The DFAR for 2011 is included in Appendix B.

General Site Condition

No disturbances to the soil, asphalt and concrete covers were noted. No changes in site use have occurred.

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 having active treatment systems. No active treatment systems are present at the Spectrum Finishing Corporation Site. However, water level depths were measured in site monitoring wells to determine groundwater elevations and flow paths. Although the groundwater level measurements were not collected for the purpose of assessing the performance of a treatment system, these measurements are considered performance monitoring activities for ease of discussion in this report.

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 Corporation 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 on-site wells 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, and off-site "sentinel" wells 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.

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 southeast.

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

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. Although other compounds and analytes have been detected in groundwater samples collected from the Site, the VOC tetrachloroethene and the metals cadmium, chromium, copper, and nickel are considered the primary groundwater contaminants of concern. Historically, these contaminants have been detected most frequently and at the highest concentrations in groundwater samples. Tetrachloroethene, cadmium, chromium, and nickel were also detected in the samples collected from the Site in August 2011.

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

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

WELL	GROUND SURFACE ELEVATION* (ft MSL)	REFERENCE ELEVATION* (ft MSL)	DATE 8/3/2011 DTW	DATE 8/3/2011 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	50.6	50.39	13.51	36.88
MW-16D1	50.6	50.24	13.35	36.89

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 avaliable

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

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. Some observations regarding the data are presented below.

Groundwater Sampling Results and Trend Monitoring

Based on a review of the 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. No VOCs were detected at concentrations above Class GA groundwater standards in off-site "sentinel" monitoring wells MW-16S and MW-16D1. However, the VOCs 1,1,1-trichloroethane and trichloroethene, which were also detected in on-site wells during the RI, were detected in MW-16D1at concentrations (0.63 µg/L and 2.5 µg/L, respectively) below Class GA groundwater standards. Reportedly, trichloroethene was also detected in MW-16D1 at a concentration of 5 ug/L following installation of the off-site "sentinel" monitoring wells in February 2009.

Prior to 2011, the most recent side-wide sampling event was performed in April 2007. In 2007, eleven groundwater samples were collected from the shallow groundwater zone. Samples were analyzed for VOCs and total metals with the exception of MW-9S, which 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).

Several metals including cadmium, chromium, iron, manganese, total iron and manganese, nickel and sodium were detected above Class GA groundwater standards in the August 2011groundwater 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. Cadmium, copper and nickel were not detected in off-site "sentinel" monitoring wells MW-16S and MW-16D1. Chromium was detected in MW-16S and MW-16D1at low concentrations (1.6 µg/L and 5.5 µg/L, respectively) below Class GA groundwater standards.

With regard to the metals, concentrations were generally lower during the 2011 sampling than the concentrations reported during the April 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.

Figure 3-1 identifies exceedances of SCGs in groundwater for VOCs and metals based on recent and historic sampling data. In addition, data plots showing the concentrations of primary site contaminants of concern overtime have been developed for ease of reference. The data plots are presented in Appendix F.

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.

SAMPLE ID	MW-7S		
DATE	4/25/01	4/24/07	8/2/11
VOCs	NO EXCEEDANCES		
CADMIUM	16.2	4.08	1.6
IRON	77.1	341	587
MANGANESE	10.2	4.03	59.5

SAMPLE ID	MW-7D1			
DATE	1999	2000	2001	8/2/11
PCE	ND	ND	8	ND
IRON	--	--	--	833
MANGANESE	--	--	--	32.3

SAMPLE ID	MW-9S	
DATE	8/01/01	8/01/11
TCE	12	ND
PCE	65	2.6
METALS	--	ND

SAMPLE ID	MW-2S		
DATE	4/27/01	4/24/07	8/2/11
PCE	20	12	3.3
CADMIUM	6	4.61	ND
COPPER	348	35	30.3
IRON	7,000	666	212

SAMPLE ID	MW-2D			
DATE	1999	2000	2001	8/3/11
PCE	13	4	13	0.7
IRON	--	--	--	489
MANGANESE	--	--	--	140

SAMPLE ID	MW-3S		
DATE	4/24/01	4/27/07	8/3/11
MTBE	14	ND	NS
PCE	7	16	NS
ANTIMONY	ND	9.94	NS
CADMIUM	2.5	12.4	NS
CHROMIUM	87.7	63.2	NS
IRON	30.1	2,760	NS

SAMPLE ID	MW-3D			
DATE	1999	2000	2001	8/3/11
PCE	140	5	10	ND
METALS	--	--	--	ND

SAMPLE ID	MW-1S		
DATE	4/30/01	4/27/07	8/3/11
VOCs	NO EXCEEDANCES		
CADMIUM	0.75	22.9	1.1
IRON	31.4	1,240	57.3
LEAD	ND	27.8	ND
SODIUM	19,100	20,900	21,400

SAMPLE ID	MW-11S		
DATE	4/24/01	4/24/07	8/1/11
VOCs	NO EXCEEDANCES		
ANTIMONY	4.7	5.67	ND
IRON	126	371	110
THALLIUM	4.8	ND	ND

SAMPLE ID	MW-5D1			
DATE	1999	2000	2001	8/2/11
PCE	88	19	10	ND
IRON	--	--	--	300
MANGANESE	--	--	--	203

SAMPLE ID	MW-6S		
DATE	4/25/01	4/24/07	8/2/11
PCE	160	140	7.4
ANTIMONY	3.4	ND	ND
CADMIUM	1,940	311	97.5
CHROMIUM	824	186	20.1
IRON	18.4	201	351
NICKEL	981	199	25.8
SODIUM	27,700	13,500	16,000

SAMPLE ID	MW-6D1			
DATE	1999	2000	2001	8/2/11
PCE	20	74	87	ND
METALS	--	--	--	ND

SAMPLE ID	MW-4S		
DATE	4/24/01	4/27/07	8/3/11
PCE	13	30	3.1
CADMIUM	70.5	1,270	143
COPPER	834	536	96.6
CHROMIUM	ND	ND	50.8
IRON	57.7	774	73.9
NICKEL	249	292	62.8
SODIUM	120,000	13,500	15,200

SAMPLE ID	MW-4D			
DATE	1999	2000	2001	8/2/11
PCE	6	400	390	ND
METALS	--	--	--	ND

SAMPLE ID	MW-14S		
DATE	4/24/01	4/24/07	8/3/11
VOCs	NO EXCEEDANCES		
CADMIUM	103	63.8	42.3

SAMPLE ID	MW-14D1			
DATE	1999	2000	2001	8/2/11
PCE	NI	NI	1	ND
IRON	--	--	--	702
MANGANESE	--	--	--	30.4

SAMPLE ID	MW-12S		
DATE	4/23/01	4/24/07	8/2/11
PCE	80	9.4	1.8
CADMIUM	339	381	182
IRON	143	121	540
NICKEL	543	431	251
MANGANESE	97.6	122	20.1

SAMPLE ID	MW-12D1			
DATE	1999	2000	2001	8/2/11
PCE	NI	NI	680	0.72
METALS	--	--	--	ND

COMPOUND/ ANALYTE	STANDARD OR GUIDANCE VALUE
MTBE	10 GV
TCE	5 ST
PCE	5 ST
ANTIMONY	3 ST
CADMIUM	5 ST
CHROMIUM	50 ST
COPPER	200 ST
IRON	300 ST
LEAD	25 ST
MANGANESE	300 ST
NICKEL	100 ST
SODIUM	20,000 ST
THALLIUM	0.5 GV

NOTES:

ALL MONITORING WELL LOCATIONS ARE APPROXIMATE

ALL CONCENTRATIONS IN MICROGRAMS PER LITER (UG/L)

1999,2000 AND 2001 PCE CONCENTRATIONS FOR INTERMEDIATE ZONE WELLS OBTAINED FROM FIGURE 5B OF RECORD OF DECISION - SPECTRUM FINISHING CORPORATION SITE, DATED MARCH 2003

APRIL 2001 MTBE, TCE, PCE AND TARGET ANALYTE LIST (TAL) METALS CONCENTRATIONS FOR SHALLOW ZONE WELLS OBTAINED FROM TABLE 5 OF FINAL LETTER REPORT - SOIL VAPOR AND GROUNDWATER SAMPLING, DATED SEPTEMBER 2007

APRIL 2007 TARGET COMPOUND LIST (TCL) VOC AND TAL METALS CONCENTRATIONS FOR SHALLOW ZONE WELLS OBTAINED FROM TABLE 3 AND TABLE 4 OF FINAL LETTER REPORT - SOIL VAPOR AND GROUNDWATER SAMPLING, DATED SEPTEMBER 2007

AUGUST 2011 TCL VOC AND TAL METALS CONCENTRATIONS FOR SHALLOW AND INTERMEDIATE ZONE WELLS OBTAINED FROM TABLE 1A. AND TABLE 2B. OF PERIODIC REVIEW REPORT NO.1 - SPECTRUM FINISHING SITE, DATED JUNE 2012.

SCG EXCEEDANCES IN GROUNDWATER FIGURE WAS PREPARED USING THE DATA IDENTIFIED ABOVE, ADDITIONAL DATA MAY EXIST

MTBE: METHYL TERT-BUTYL ETHER
PCE: TETRACHLOROETHENE
TCE: TRICHLOROETHENE
NI: NOT INSTALLED
ND: COMPOUND WAS NOT DETECTED
NS: NOT SAMPLED
--: UNKNOWN

LEGEND

● MONITORING WELL LOCATION

DVIRKA AND BARTILUCCI CONSULTING ENGINEERS
A DIVISION OF D&B ENGINEERS AND ARCHITECTS, P.C.

SPECTRUM FINISHING CORPORATION SITE
WEST BABYLON, NEW YORK

SCG EXCEEDANCES IN GROUNDWATER - VOCs AND METALS

APPROXIMATE SCALE: 1"=80'

FIGURE 3-1

P:\31153\31153-04E Exceedances.dwg, 6/21/2012 3:22:53 PM, Adobe PDF

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 $30,551. Of this amount, $24,370 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 site management activities at the Spectrum Finishing Corporation Site.

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 Corporation Site is an inactive industrial facility. The Site was remediated by the NYSDEC in several phases between October 2008 and June 2009 and is in the site management phase;
- After completion of the work described in the ROD, ESD and remedial design, 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;
- 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;
- Site management activities consist of periodic site inspections, annual groundwater sampling, and report preparation; and,
- This is the first Periodic Review Report for 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;
- No excavation activities were performed at the Site during the reporting period. No use of groundwater has occurred at the Site during the reporting period; and,
- Site usage is consistent with restrictions placed on the Site.

Groundwater

- Horizontal flow in shallow wells at the Site is predominantly to the southeast;
- With the exception of MW-6S, all seven wells which historically exhibited 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);
- The VOCs 1,1,1-trichloroethane and trichloroethene were detected in off-site sentinel monitoring well MW-16D1 below SCGs at concentrations of 0.63 µg/L and 2.5 µg/L, respectively, 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 indicated higher levels of cadmium, iron, manganese and magnesium in the 2011 sampling than in the 2007 sampling event. The concentration of chromium 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 Corporation Site monitoring activities, the following conclusions have been made:

- Based on a review of the site records, the Institutional Controls for the Spectrum Finishing Corporation Site are in-place and effective;
- Based on the results of the site inspections, the Engineering Controls for the Spectrum Finishing Corporation 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;
- Contaminant concentrations appear to be lower likely as a result of the implementation of the remedy at the Site.
- While it may be possible that the Site is contributing to the VOC concentrations that were detected in off-site "sentinel" groundwater monitoring well MW-16D1, the source(s) of the VOCs is unclear given the current understanding of the groundwater and contaminant migration patterns at the Site as well as the number of other contaminated sites in the vicinity.

5.3 Recommendations

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

- Continue to implement site management activities in accordance with the SMP; and,
- 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 are present in the wells. It is D&B's recommendation to try to restore the wells back to their original states through redevelopment.

6.0 REPORT CERTIFICATION

For each institutional and/or engineering control identified for the Site, I certify that all of the following statements are true:

- The institutional and/or engineering control employed at this Site is unchanged from the date the control was put in place, or last approved by DER;
- Nothing has occurred that would impair the ability of such control to protect public health and the environment;
- Nothing has occurred that would constitute a violation or failure to comply with any Site Management Plan for this control;
- The PRR and all attachments (or the inspections/evaluations necessary to make this certification) were prepared under the direction of, and reviewed by, the person making the certification;
- The information presented in this report is accurate and complete; and,
- To the best of my knowledge and belief, the work and conclusions described in the certification are in accordance with the requirements of the site remedial program.

Project Director: _____ _____

Richard M. Walka **Date**
Senior Vice President

Project Manger: _____ _____

James J. Magda **Date**
Project Manager

7.0 REFERENCES

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

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

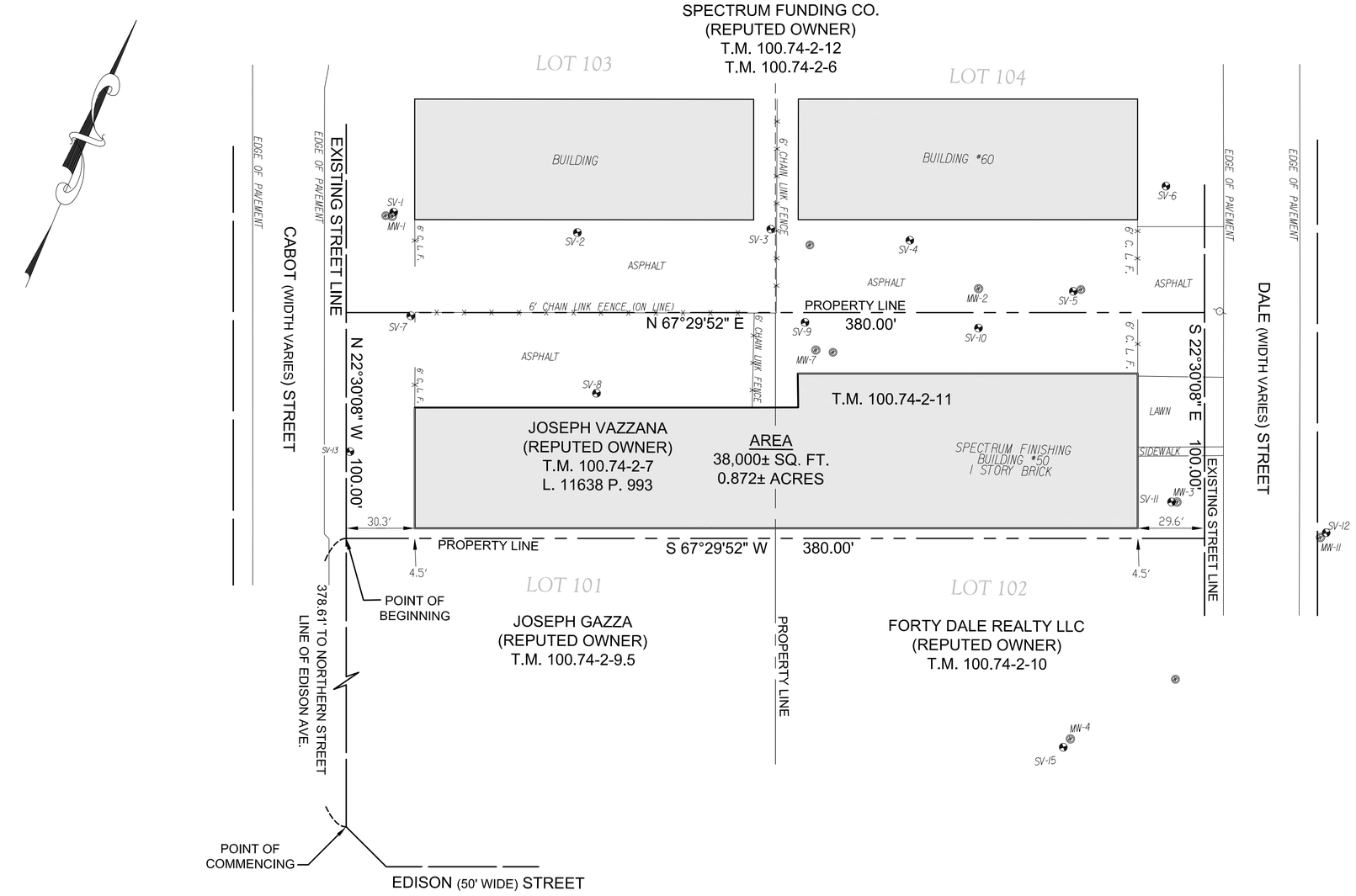
NYSDEC, 2008, Limited Site Data Document – Spectrum Finishing Site, April 2008.

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
(W)	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.

STATE OF NEW YORK · MICHAEL ANTHONY VENTURO · 50079 · LICENSED LAND SURVEYOR

6/30/2010

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

SURVEY BY:

POPLI DESIGN GROUP
ARCHITECTURE + ENGINEERING
555 Penbrooke Drive
Penfield NY 14526

PREPARED FOR: CDM

SURVEYOR JOB NUMBER:	3277.01
SURVEY CREW:	J. PHILLIPS, W. STRATTON
DRAWN BY:	J. PHILLIPS
CHECKED BY:	M. VENTURO

REVISIONS

6/30/10	REVISED LOGO, ADDED LEGAL DESCRIPTION, REMOVED SAMPLE TABLE

BOUNDARY SURVEY & MAP

OF

SPECTRUM FINISHING CORPORATION SITE

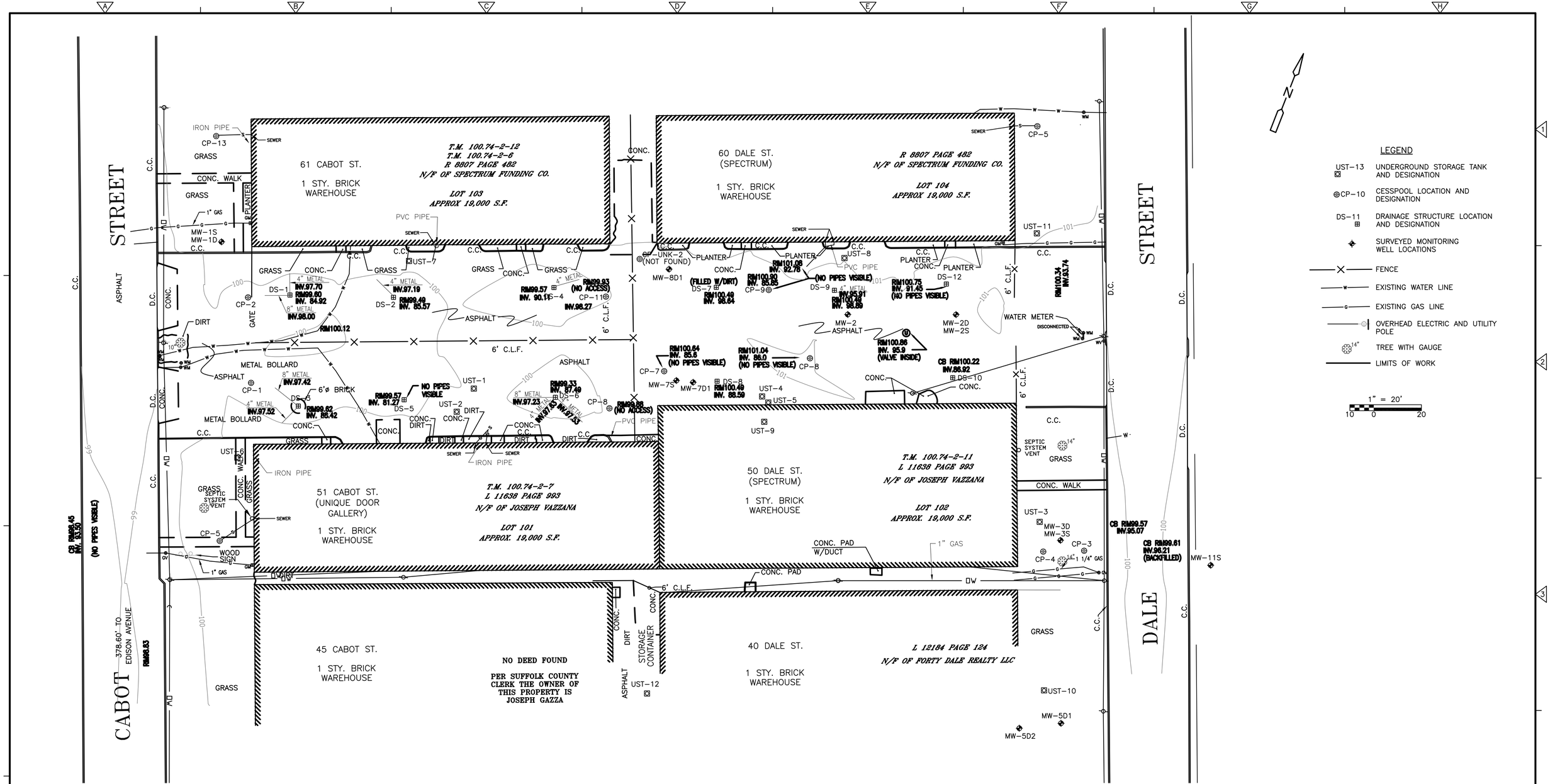
N.Y.S. D.E.C. SITE I.D. NO. 1-52-0209

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'



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

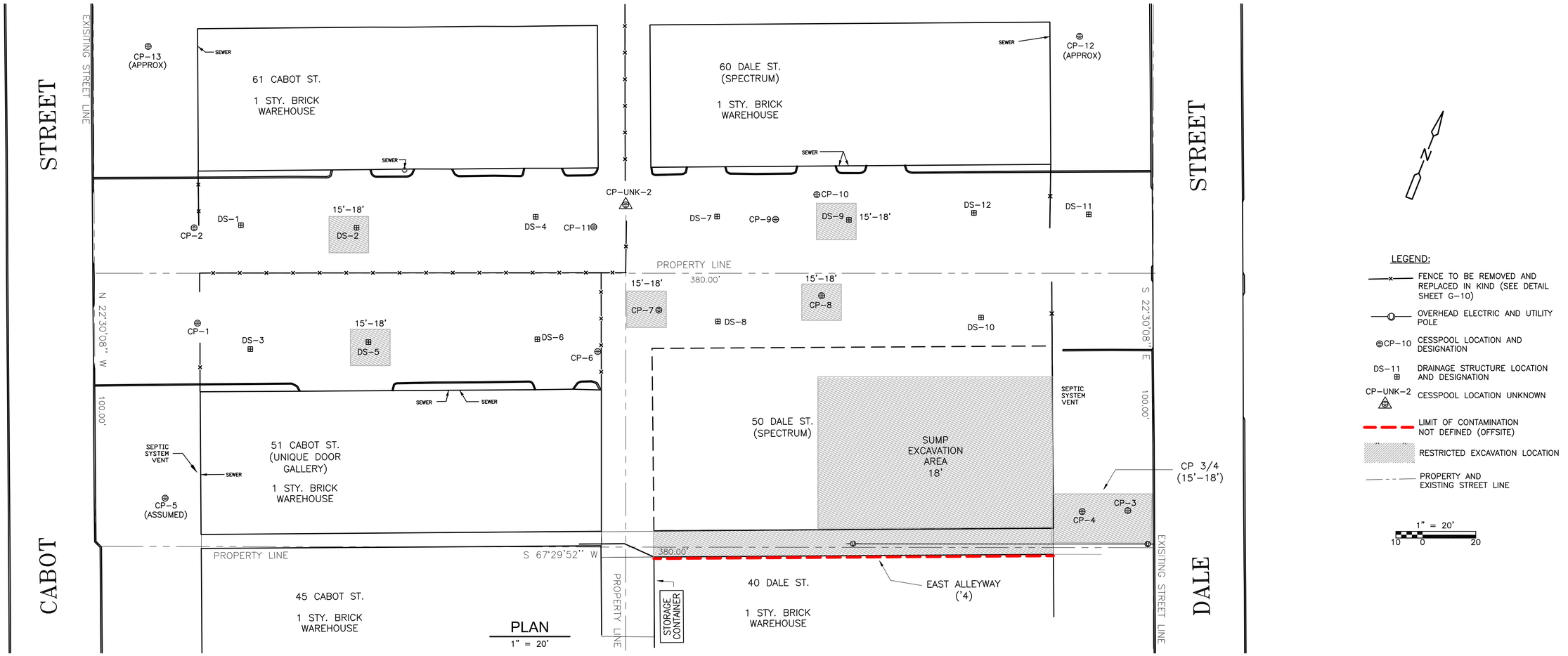
CDM
Camp Dresser & McKee
11 British American Boulevard
Latham, NY 12110
Tel: (518) 782-4500
consulting • engineering • construction • operations

NYSDEC

SPECTRUM FINISHING CORPORATION
BABYLON, NEW YORK

PRE-REMEDIAL CONSTRUCTION EXISTING CONDITIONS

FIGURE 3.dwg
SHEET NO.
Figure 3



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.

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

Appendix B

APPENDIX B

DAILY FIELD ACTIVITY REPORTS

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

DATE: 07/27/11 **DAY: Wednesday**

REPORT NO. 110727

PROJECT NO. 3153

LOGBOOK NO. 1 PAGES 001

DAILY FIELD ACTIVITY REPORT

PROJECT	**Spectrum Analytical Finishing**
LOCATION	**Town of Babylon, New York**
ATTACHMENTS	**Photo Log and Photos**

WEATHER	TIME	TEMP.	PRECIP.	WIND (MPH)	WIND (DIR)
Sunny	12:00	80-85 F	None	0-5	SW
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.

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

DATE: 07/27/11
REPORT NO. 11727

PROJECT NO. 3153

DAILY FIELD ACTIVITY REPORT

DESCRIPTION OF MATERIALS UTILIZED

DESCRIPTION	UNIT	QUANTITY
NONE		

Dvirka and Bartilucci CONSULTING ENGINEERS A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.		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:
☒ **ADDITIONAL SHEETS USED**	
☒ emailed draft / final to NYSDEC – date:	☐ 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 pictutre).
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 sentinal 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 sentinal 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

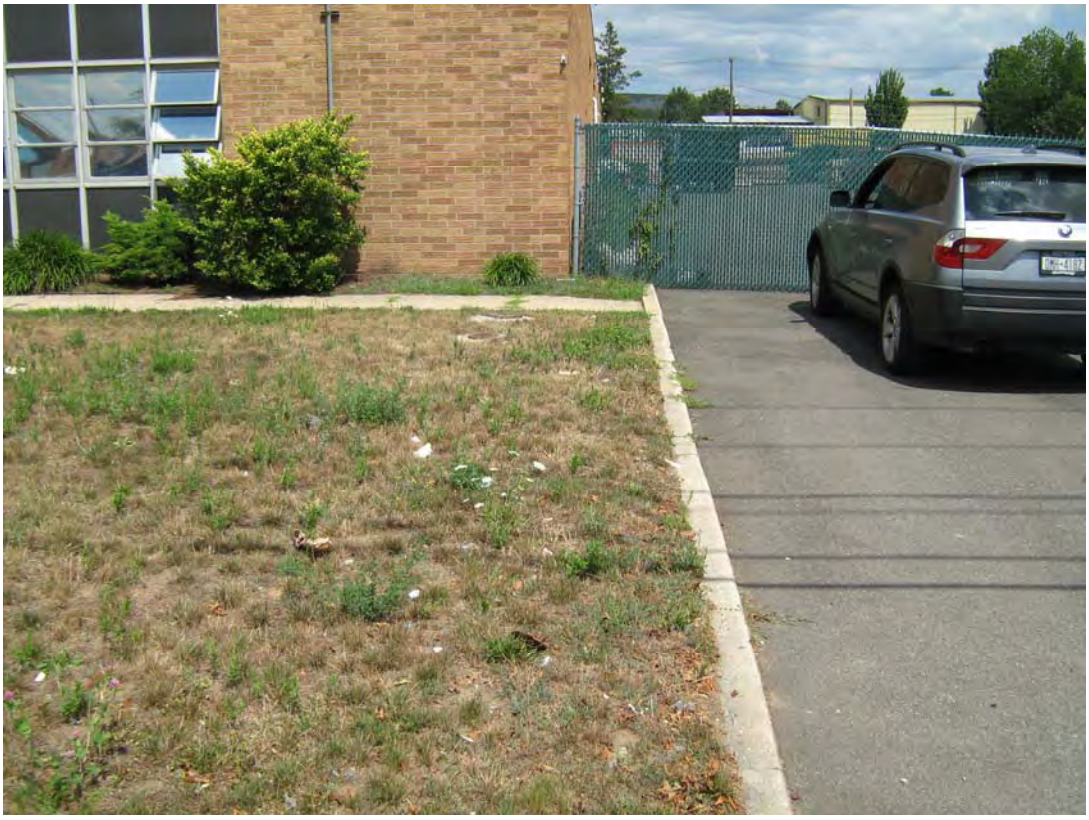
50 Dale St Pad(2).jpeg

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

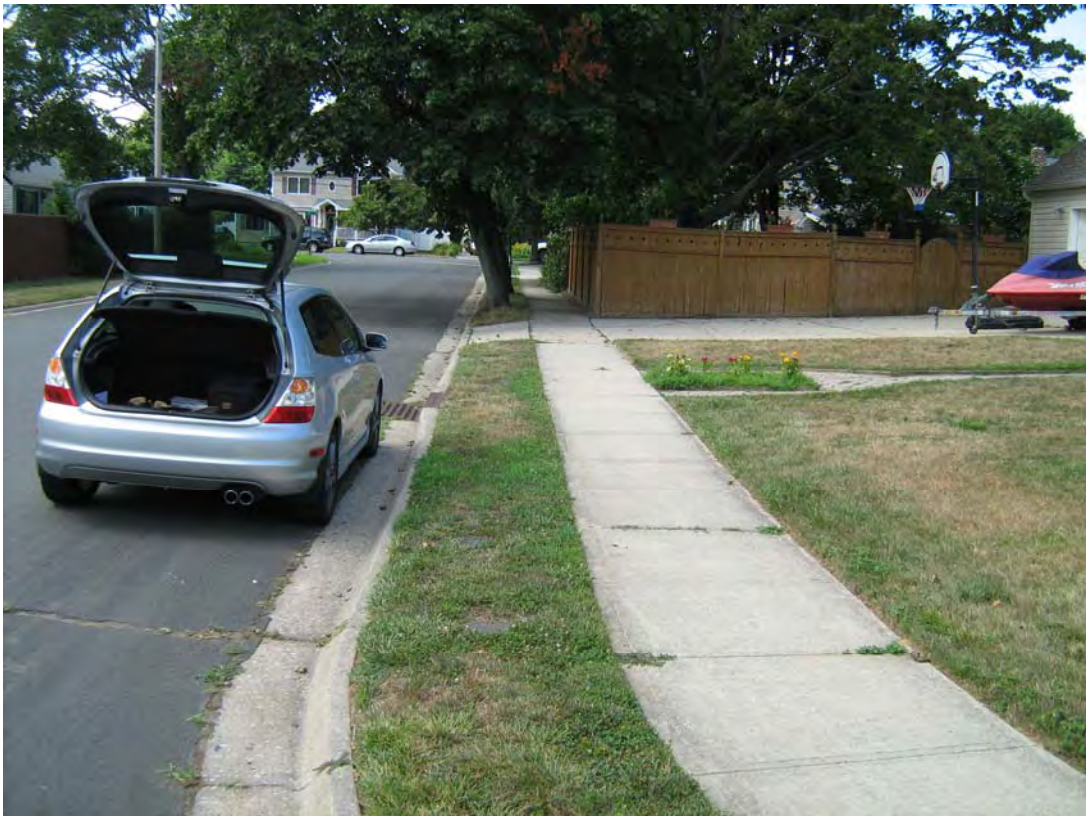
mw-12(1).jpeg

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 CORPORATION SITE
PERIODIC REVIEW REPORT
WATER LEVEL MEASUREMENT SUMMARY

WELL	GROUND SURFACE ELEVATION* (ft MSL)	REFERENCE ELEVATION* (ft MSL)	DATE 8/3/2011 DTW	DATE 8/3/2011 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	50.6	50.39	13.51	36.88
MW-16D1	50.6	50.24	13.35	36.89

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 avaliable

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

MW-9

MW-2
43.76

MW-7
42.95

MW-1
43.88

MW-8
DRY

MW-11
43.72

MW-5

MW-4
43.61

MW-6
43.43

MW-12
43.13

MW-14
43.12

43.8

43.7

43.6

43.5

43.4

43.3

43.2

LEGEND:

GROUNDWATER ELEVATION CONTOUR

APPROXIMATE MONITORING WELL LOCATION

43.12 GROUNDWATER ELEVATION AT WELL LOCATION

NOTE:

GROUNDWATER CONTOURS ARE INFERRED DUE TO SPACING AND FREQUENCY OF MONITORING WELLS

"SENTINEL" MONITORING WELL MW-16 IS LOCATED APPROXIMATELY 3,650 FEET SOUTHEAST OF THE SITE AT 457 17TH STREET, NEAR THE INTERSECTION OF 7TH AVENUE AND 17TH STREET.

DVIRKA AND BARTILUCCI CONSULTING ENGINEERS
A DIVISION OF D&B ENGINEERS AND ARCHITECTS, P.C.

SPECTRUM FINISHING CORPORATION SITE
WEST BABYLON, NEW YORK

GROUNDWATER ELEVATION CONTOUR MAP

APPROXIMATE SCALE: 1"=80'

FIGURE C-1

Appendix D

APPENDIX D

FIELD FORMS

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: August 3, 2011

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

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: August 3, 2011

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

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: August 2, 2011

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

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: August 2, 2011

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

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: August 1, 2011

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 ^{o}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	**1¼" = 0.077**	**2" = 0.16**	**3" = 0.37**	**4" = 0.65**
	1½ =0.10	**2½ " = 0.24**	**3½ = 0.50**	**6" = 1.46**

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: August 1, 2011

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 ^{o}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	**1¼" = 0.077**	**2" = 0.16**	**3" = 0.37**	**4" = 0.65**
	1½ =0.10	**2½ " = 0.24**	**3½ = 0.50**	**6" = 1.46**

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: August 2, 2011

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

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: August 2, 2011

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

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: August 2, 2011

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 ^{o}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	**1¼" = 0.077**	**2" = 0.16**	**3" = 0.37**	**4" = 0.65**
	1½ =0.10	**2½ " = 0.24**	**3½ = 0.50**	**6" = 1.46**

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: August 2, 2011

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

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: August 1, 2011

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 ^{o}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**

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: August 1, 2011

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 ^{o}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	**1¼" = 0.077**	**2" = 0.16**	**3" = 0.37**	**4" = 0.65**
	1½ =0.10	**2½ " = 0.24**	**3½ = 0.50**	**6" = 1.46**

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: August 1, 2011

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 ^{o}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**

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: August 1, 2011

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

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: August 2, 2011

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 ^{o}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	**1¼" = 0.077**	**2" = 0.16**	**3" = 0.37**	**4" = 0.65**
	1½ =0.10	**2½ " = 0.24**	**3½ = 0.50**	**6" = 1.46**

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: August 2, 2011

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 ^{o}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	**1¼" = 0.077**	**2" = 0.16**	**3" = 0.37**	**4" = 0.65**
	1½ =0.10	**2½ " = 0.24**	**3½ = 0.50**	**6" = 1.46**

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: August 3, 2011

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

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: August 3, 2011

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

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: August 3, 2011

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**

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: August 3, 2011

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 ^{o}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	**1¼" = 0.077**	**2" = 0.16**	**3" = 0.37**	**4" = 0.65**
	1½ =0.10	**2½ " = 0.24**	**3½ = 0.50**	**6" = 1.46**

MITKEM LABORATORIES

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
Dvirtzat Bartilucci
~~330 Crossways Park Dr~~
5879 Fisher Rd, 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=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 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=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: VOCs-EPA 6260B	Metals EPA SW 6010B	QA/QC Reporting Level
	MW-11s_8/1/11	8/1/11	822	G	GW	6			3	X	X	*Includes MS/MSD*
	trip blank	—	—	—	—	2				X		
	MW-9s_8/1/11	8/1/11	940	G	GW	2			1	X	X	
	MW-7s_8/1/11	8/1/11	1045	G	GW	2			1	X	X	
	MW-7D1_8/1/11	8/1/11	1145	G	GW	2			1	X	X	
	MW-3D_8/1/11	8/1/11	1300	G	GW	2			1	X	X	
	MW-4S_8/1/11	8/1/11	1400	G	GW	2			1	X	X	
	MW-5D1_8/2/11	8/2/11	815	G	GW	2			1	X	X	
	MW-4D_8/2/11	8/2/11	935	G	GW	2			1	X	X	

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____
State specific reporting standards:
_____

X E-mail to Jmagda@dbsyracuse.com
X EDD Format EQUIS, NYSDEC format

Condition upon receipt: ☑ Iced ☐ Ambient ☐ °C 3°C

Relinquished by:	Received by:	Date:	Time:	
		8-2-11	1530	5.0
	Solo out	8-2-11	1840	2.0
	Dennis Mitchell	8-3-11	11:42	

MITKEM LABORATORIES

A DIVISION OF SPECTRUM ANALYTICAL, INC. Featuring HANIBAL 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
Dvirka + Bartilucci
5879 Fisher Rd, 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): PB, LP

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 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=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: VOCs EPA 6200B	Metals EPA 6010B Lim-D
	MW-2D_8/2/11	8/2/11	1050	G	GW	2			1	X	X
	MW-2S_8/2/11	8/2/11	1040	G	GW	2			1	X	X
	MW-6S_8/2/11	8/2/11	1215	G	GW	2			1	X	X
	MW-6D_8/2/11	8/2/11	1215	G	GW	2			1	X	X
	MW-12S_8/2/11	8/2/11	1415	G	GW	2			1	X	X
	MW-12D_8/2/11	8/2/11	1410	G	GW	2			1	X	X

QA/QC Reporting Level

☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____

State specific reporting standards:

☒ E-mail to Jmagda@dbsyracuse.com
☒ EDD Format EQUIS, NYSDEC format

Condition upon receipt: ☑ Iced ☐ Ambient ☑ °C 3°C

Relinquished by:	Received by:	Date:	Time:	
		8-2-11	1530	5.0
	Sub	8-2-11	1840	2.0
		8-3-11	11:42	

MITKEM LABORATORIES

A DIVISION OF SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

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
Durtsa + Bartilucci
5879 Fisher Rd, PO Box 56
East Syracuse, NY, 13057

Project Mgr.: Jim Magda

Invoice To: SAME

P.O. No.: _____ RQN: _____

Project No.: 3153-0305
Site Name: Spectrum
Location: Babylon State: NY
Sampler(s): PB, KG

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 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=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: VOCs-EPA 8260B	Metals-EPA 6010B
	trip blank	—	—	—	—	2				X	
	MW-14S_8/3/11	8/3/11	845	G	GW	2			1	X	X
	MW-14DL_8/3/11	8/3/11	840	G	GW	2			1	X	X
	MW-1DL_8/3/11	8/3/11	1005	G	GW	2			1	X	X
	MW-1S_8/3/11	8/3/11	1000	G	GW	2			1	X	X
	MW-16S_8/3/11	8/3/11	1140	G	GW	2			1	X	X
	MW-16DL_8/3/11	8/3/11	1240	G	GW	2			1	X	X

QA/QC Reporting Level

☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____

State specific reporting standards:

☒ E-mail to Jmagda@dbsyracuse.com
☒ EDD Format EQUIS, NYSDEC format

Condition upon receipt: ☒ Iced ☐ Ambient ☒ °C 4

Relinquished by:	Received by:	Date:	Time:
		8-4-11	1400
		8-5-11	13:50

SPECTRUM ANALYTICAL, INC. RI DIVISION

Sample Condition Form

Received By: Daniel Nilsen | Reviewed By: | Date: 8-3-11 | Spectrum RI Work Order #: 1370

Client Project: SPECTRUM | Client: Driver & Bertucci

1) Cooler Sealed — Yes / No

2) Custody Seal(s) — Present / Absent
Coolers / Bottles
Intact / Broken

3) Custody Seal Number(s) N/A

4) Chain-of-Custody — Present / Absent

5) Cooler Temperature 3°C
IR Temp Gun ID MT-1
Coolant Condition iced

6) Airbill(s) — Present / Absent
Airbill Number(s) courier

7) Samples Bottles — Intact / Broken / Leaking

8) Date Received 8-3-11

9) Time Received 11:42

Preservative Name/Lot No.:

Lab Sample ID		Preservation (pH) HNO_3	H_2SO_4	HCl	NaOH	H_3PO_4	VOA Matrix	Soil Headspace or Air Bubble ≥ 1/4"
K1370	01	<2					H	
	02							
	03	<2						
	04							
	05							
	06							
	07							
	08							
	09							
	10							
	11							
	12							
	13							
	14							
K1370	15	<2					H	

DRM 8-3-11

VOA Matrix Key:

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

See Sample Condition Notification/Corrective Action Form yes / no

Form ID: QAF.0006

Rad OK yes / no

SPECTRUM ANALYTICAL, INC. RI DIVISION

Sample Condition Form

Received By: Daniel Miller	Reviewed By: BB	Date: 8-5-11	Spectrum RI Work Order #: K1370
Client Project: Spectrum		Client: Cubellia	

		Lab Sample ID		Preservation (pH) HNO_3	H_2SO_4	HCl	NaOH	H_3PO_4	VOA Matrix	Soil Headspace or Air Bubble ≥ 1/4"
1) Cooler Sealed	Yes / No	K1370	16						H	
			17	<2						
2) Custody Seal(s)	Present / Absent		18							
	Coolers / Bottles		19							
	Intact / Broken		21							
		K1370	22	<2					H	
3) Custody Seal Number(s)	NA									
4) Chain-of-Custody	Present / Absent									
5) Cooler Temperature	4.0 C									
IR Temp Gun ID	MT-1									
Coolant Condition	Ice									
6) Airbill(s)	Present / Absent									
Airbill Number(s)	Courier									
7) Samples Bottles	Intact / Broken / Leaking									
8) Date Received	8-5-11									
9) Time Received	8/5/11 13:50									

Preservative Name/Lot No.:

VOA Matrix Key:

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

See Sample Condition Notification/Corrective Action Form yes / no

Form ID: QAF.0006

Rad OK yes / no

Appendix E

APPENDIX E

ANALYTICAL RESULTS

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

Sample Identification	**MW-01D1**	**MW-01S**	**MW-02D**	**MW-02S**	**MW-03D**	**MW-04D**	**MW-04S**	**MW-05D1**	Contract Required Detection Limit	NYSDEC Class GA Groundwater Standard or Guidance Value
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	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	(ug/L)	(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)
SPECTRUM FINISHING CORPORATION SITE
PERIODIC REVIEW REPORT NO. 1
GROUNDWATER SAMPLE RESULTS - AUGUST 2011
VOLATILE ORGANIC COMPOUNDS

Sample Identification	**MW-01D1**	**MW-01S**	**MW-02D**	**MW-02S**	**MW-03D**	**MW-04D**	**MW-04S**	**MW-05D1**	Contract Required Detection Limit	NYSDEC Class GA Groundwater Standard or Guidance Value
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	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	(ug/l)	(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)
SPECTRUM FINISHING CORPORATION SITE
PERIODIC REVIEW REPORT NO. 1
GROUNDWATER SAMPLE RESULTS - AUGUST 2011
VOLATILE ORGANIC COMPOUNDS

Sample Identification	**MW-06D1**	**MW-06S**	**MW-07D1**	**MW-07S**	**MW-09S**	**MW-11S**	**MW-12D1**	**MW-12S**	Contract Required Detection Limit	NYSDEC Class GA Groundwater Standard or Guidance Value
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	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	(ug/L)	(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)
SPECTRUM FINISHING CORPORATION SITE
PERIODIC REVIEW REPORT NO. 1
GROUNDWATER SAMPLE RESULTS - AUGUST 2011
VOLATILE ORGANIC COMPOUNDS

Sample Identification	**MW-06D1**	**MW-06S**	**MW-07D1**	**MW-07S**	**MW-09S**	**MW-11S**	**MW-12D1**	**MW-12S**	Contract Required Detection Limit	NYSDEC Class GA Groundwater Standard or Guidance Value
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	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	(ug/l)	(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)
SPECTRUM FINISHING CORPORATION SITE
PERIODIC REVIEW REPORT NO. 1
GROUNDWATER SAMPLE RESULTS - AUGUST 2011
VOLATILE ORGANIC COMPOUNDS

Sample Identification	**MW-14D1**	**MW-14S**	**MW-16D1**	**MW-16S**	Contract Required 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)
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)
SPECTRUM FINISHING CORPORATION SITE
PERIODIC REVIEW REPORT NO. 1
GROUNDWATER SAMPLE RESULTS - AUGUST 2011
VOLATILE ORGANIC COMPOUNDS

Sample Identification	**MW-14D1**	**MW-14S**	**MW-16D1**	**MW-16S**	Contract Required 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)
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.
SPECTRUM FINISHING CORPORATION SITE
PERIODIC REVIEW REPORT NO. 1
GROUNDWATER SAMPLE RESULTS - AUGUST 2011
INORGANIC PARAMETERS - UNFILTERED

Sample Identification	MW-01D1	MW-01S	MW-02D	MW-02S	MW-03D	MW-04D	MW-04S	MW-05D1	Instrument Detection Limit	NYSDEC Class GA Groundwater Standard or Guidance Value
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	ug/l	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)
SPECTRUM FINISHING CORPORATION SITE
PERIODIC REVIEW REPORT NO. 1
GROUNDWATER SAMPLE RESULTS - AUGUST 2011
INORGANIC PARAMETERS - UNFILTERED

Sample Identification	MW-06D1	MW-06S	MW-07D1	MW-07S	MW-09S	MW-11S	MW-12D1	MW-12S	Instrument	NYSDEC Class GA Groundwater
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	Detection	Standard or
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	Limit	Guidance Value
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)
SPECTRUM FINISHING CORPORATION SITE
PERIODIC REVIEW REPORT NO. 1
GROUNDWATER SAMPLE RESULTS - AUGUST 2011
INORGANIC PARAMETERS - UNFILTERED

Sample Identification	**MW-14D1**	**MW-14S**	**MW-16D1**	**MW-16S**	Instrument	NYSDEC Class GA 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)
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:

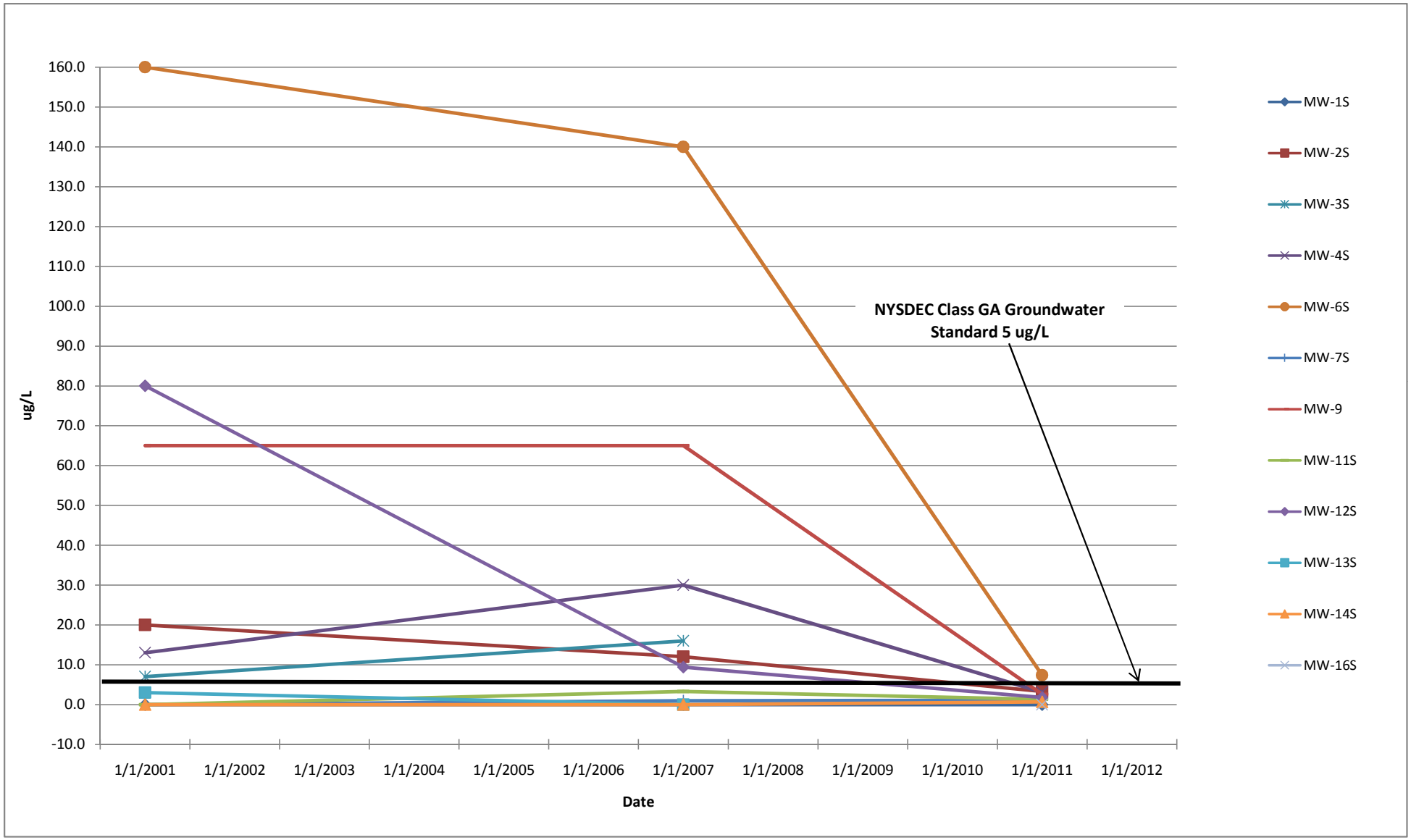
- The percent difference was above QC limits in the serial dilution for magnesium and was qualified as estimated (J) in all samples.

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

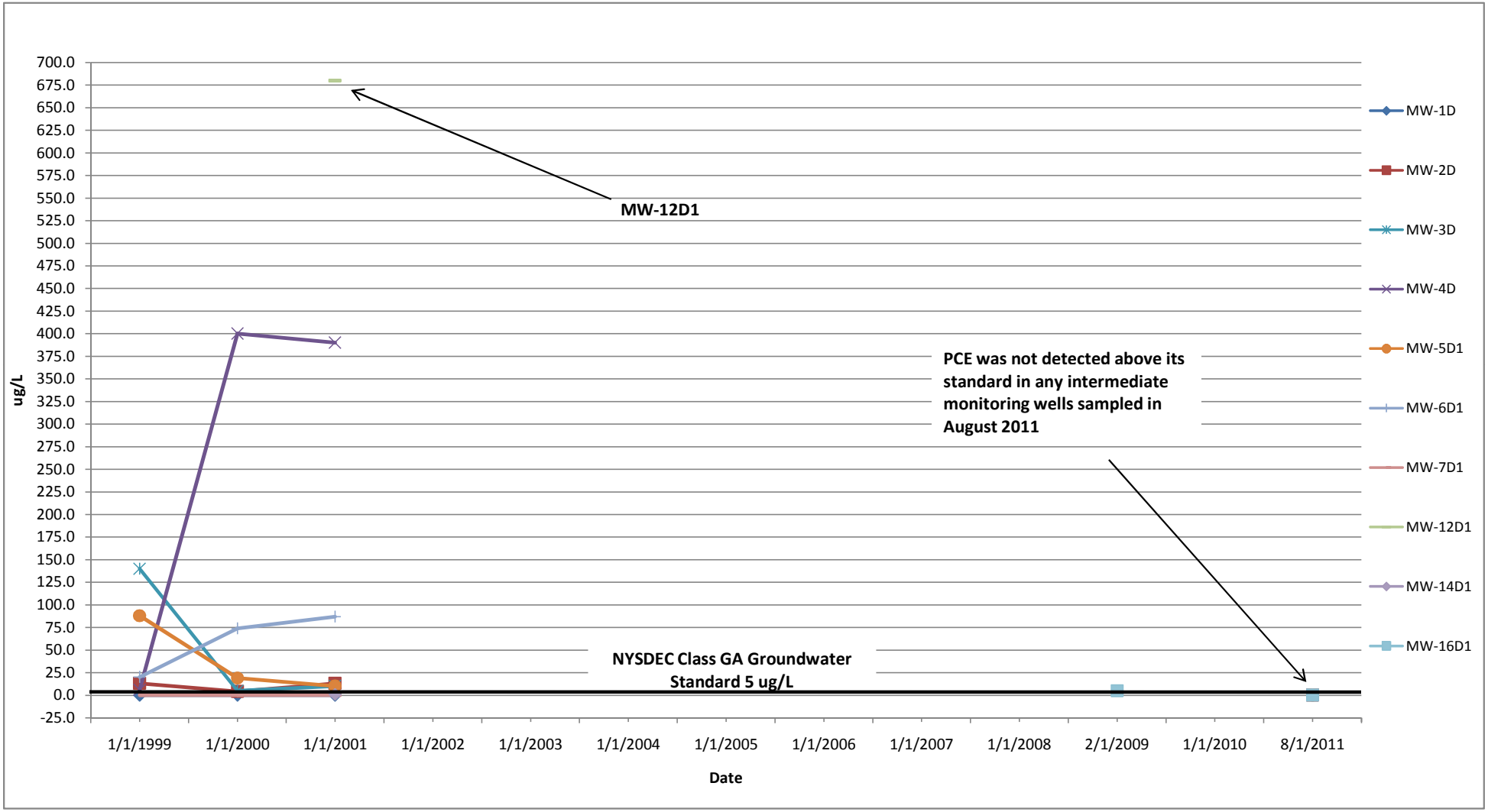
APPENDIX F

CONTAMINANT DATA PLOTS

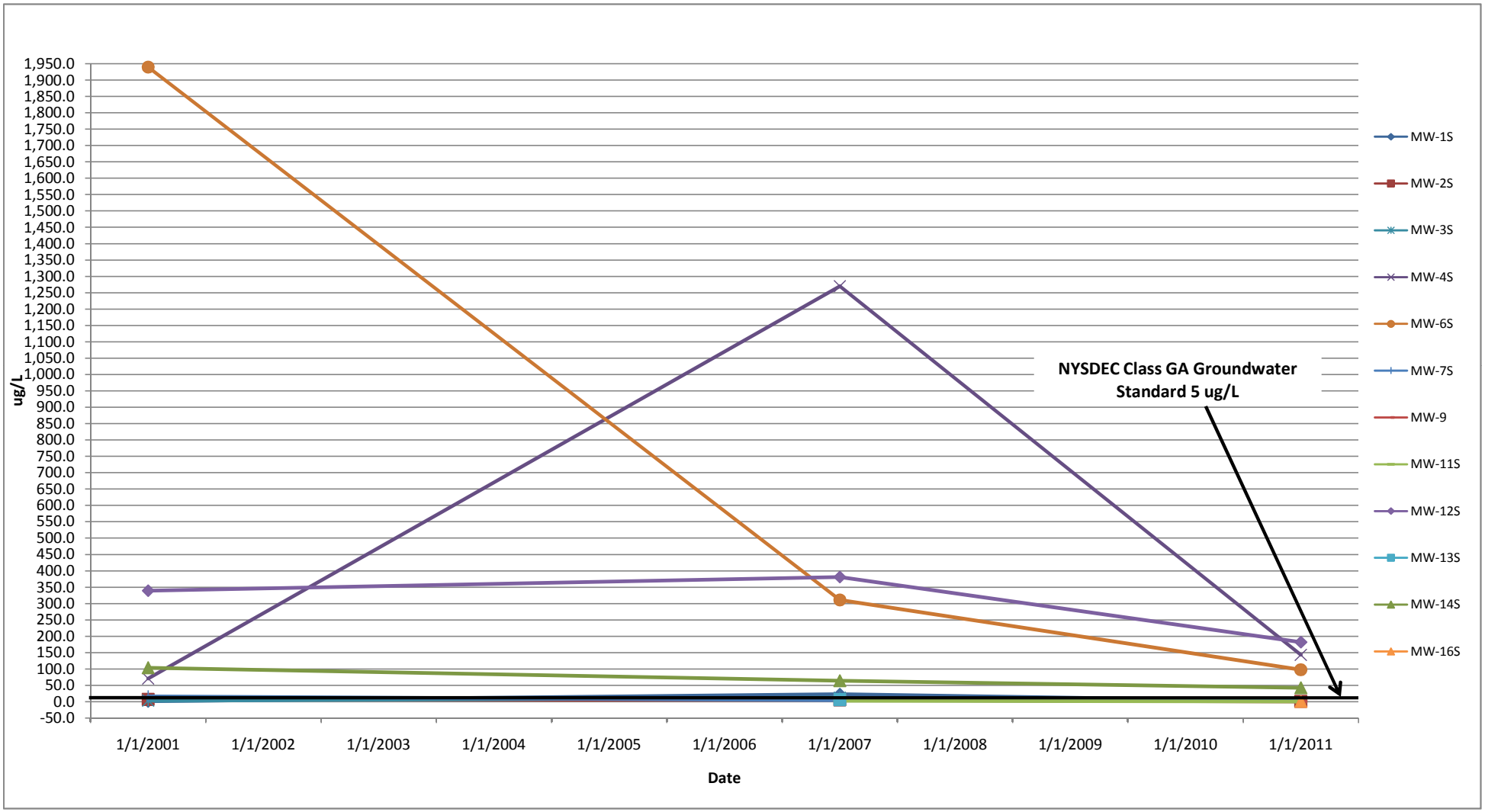
SPECTRUM FINISHING CORPORATION SITE
PERIODIC REVIEW REPORT
TETRACHLOROETHENE CONCENTRATIONS
SHALLOW MONITORING WELLS



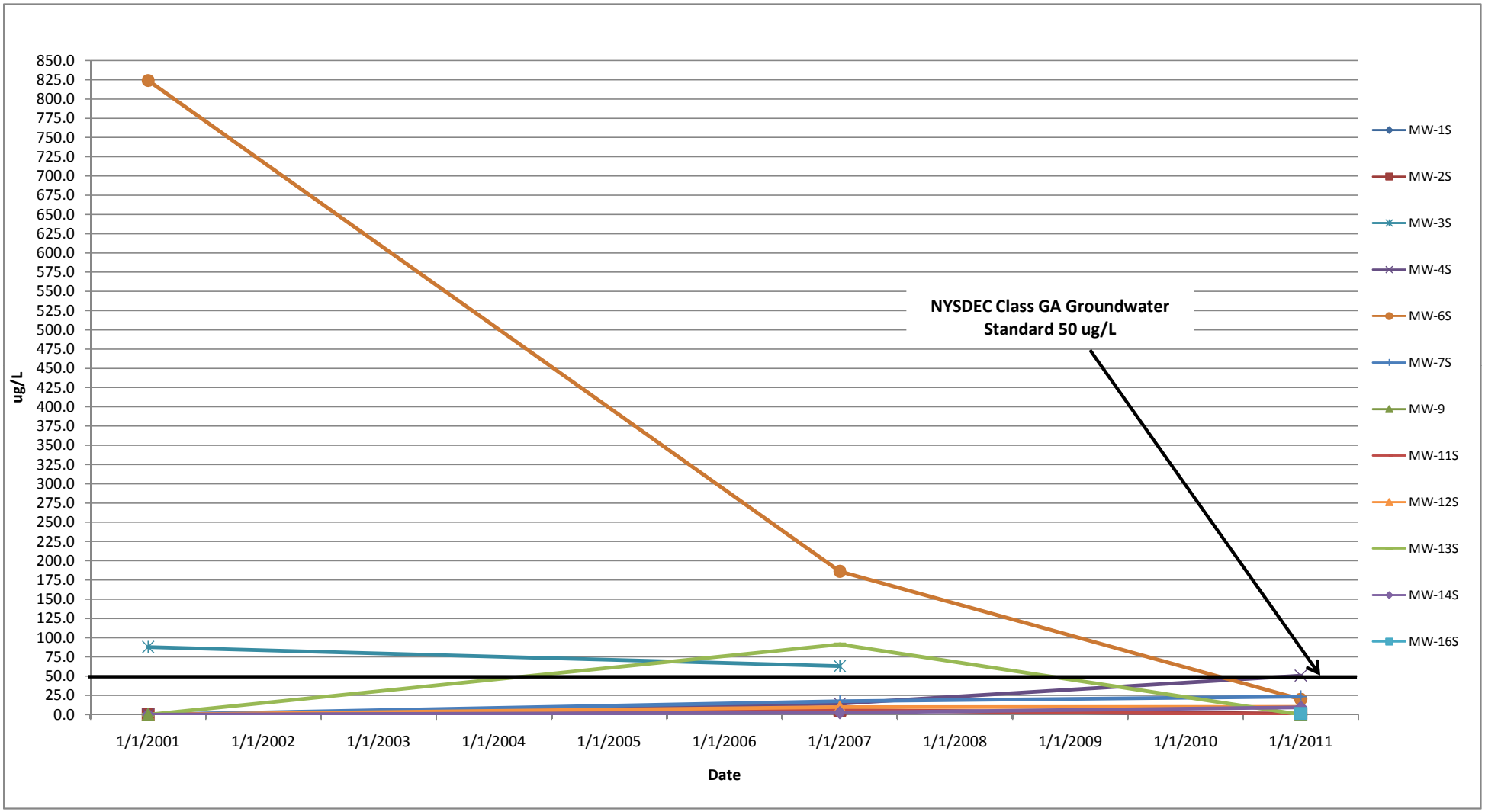
SPECTRUM FINISHING CORPORATION SITE
PERIODIC REVIEW REPORT
TETRACHLOROETHENE CONCENTRATIONS
INTERMEDIATE MONITORING WELLS



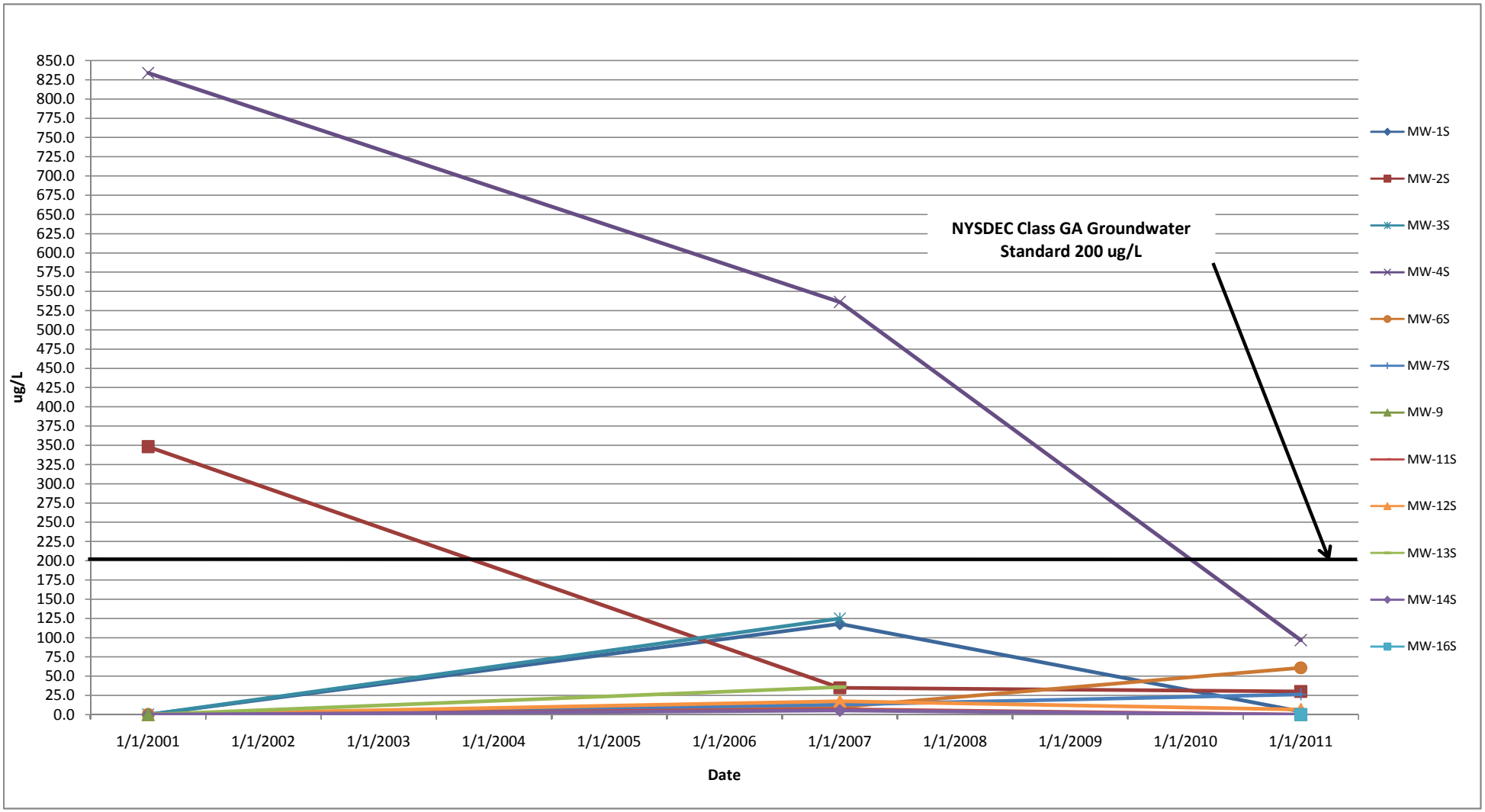
SPECTRUM FINISHING CORPORATION SITE
PERIODIC REVIEW REPORT
CADMIUM CONCENTRATIONS
SHALLOW MONITORING WELLS



SPECTRUM FINISHING CORPORATION SITE
PERIODIC REVIEW REPORT
CHROMIUM CONCENTRATIONS
SHALLOW MONITORING WELLS



SPECTRUM FINISHING CORPORATION SITE
PERIODIC REVIEW REPORT
COPPER CONCENTRATIONS
SHALLOW MONITORING WELLS



SPECTRUM FINISHING CORPORATION SITE
PERIODIC REVIEW REPORT
NICKEL CONCENTRATIONS
SHALLOW MONITORING WELLS