SPECTRA
ENVIRONMENTAL GROUP, INC.
ENGINEERING, ARCHITECTURE & SURVEYING, PC

January 9, 2014

Mr. James Drumm, Project Manager
New York State Department of Environmental Conservation
625 Broadway, 12th Floor
Albany, New York 12233-7016

Re: Dynamic Systems Inc. DEC Site No. 442040
Amended Site Investigation Report

Dear Mr. Drumm:

Enclosed is the report on the Amended Site Investigation for the Dynamic Systems, Inc. (DSI) facility in Poestenkill, New York. This reports describes the findings obtained from the implementation of the DEC approved Amended Site Investigation Plan dated September 26, 2013.

Findings and recommendations are included in the report.

Sincerely,

SPECTRA ENVIRONMENTAL GROUP, INC.

Frank R. Peduto, P.E.
Project Manager

Attachment

cc via e-mail: D. Ferguson, DSI
J. Privitera, Esq.
J. Brown, NYSDEC

FRP/akm
G:\2011\11124\Reports\Amended Site Investigation\Amended Site Investigation Report Cover Letter.doc

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DYNAMIC SYSTEMS, INC.

SUPPLEMENTAL SITE INVESTIGATION REPORT
AND
PROPOSED SUPPLEMENTAL MONITORING PLAN

DEC SITE NO. 442040-P

TOWN OF POESTENKILL
RENSSELAER COUNTY, NEW YORK

Prepared for:

Dynamic Systems, Inc.
323 State Route 355
Poestenkill, New York 12140

Prepared by:

Spectra Environmental Group, Inc.
Spectra Engineering, Architecture, & Surveying, P.C.
19 British American Boulevard
Latham, New York 12110

January 2014
Spectra Project No. 11124

DYNAMIC SYSTEMS, INC.
SUPPLEMENTAL SITE INVESTIGATION REPORT
AND
PROPOSED SUPPLEMENTAL MONITORING PLAN
DEC SITE NO. 442040-P

TOWN OF POESTENKILL, RENSSELAER COUNTY, NEW YORK

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1.0 INTRODUCTION

On behalf of Dynamic Systems, Inc. (DSI) located at 323 State Route 355 in Poestenkill, New York, Spectra Environmental Group, Inc. (Spectra) is submitting this report on the Supplemental Site Investigation (SSI) conducted by Spectra on October 28, 29, and November 26, 2013.

Information reviewed prior to the investigation includes the Phase I Environmental Site Assessment (September 2010), the Phase II Site Investigation Report, with addendum (December 2010), conducted by GaiaTech Inc., and the monthly and quarterly well monitoring results.

Over the course of the last two years, groundwater monitoring has shown increases in the TCE concentration in one downgradient well (MW-3). In light of these results, and consistent with DSI's desire to be proactive, a supplemental investigation has been commenced. This Supplemental Site Investigation (SSI) was conducted in accordance with the September 23, 2013 Investigation Plan submitted to and approved by the NYSDEC on September 26, 2013.

1.1 SITE LOCATION, PHYSICAL SETTING

The one acre site (Site) is located on the northwest corner of the 82 acre property at 323 State Route 355, Poestenkill, New York (See Figure 1 – Site Location Map). The Site is developed with an approximate 29,000 square foot light industrial building. The building contains offices, production areas, testing areas, a painting room, a machine shop, and a warehouse. A leach-field based septic system is located on the building's west side and a water supply well is located on the northern side. The water supply well is located north of the parking lot on the north side of the building. It is approximately 180 foot deep and was installed in 1966 (See Figure 2 – Site Plan Map). Municipal water became available in the town in January 2011. The well was disconnected in June 2011 when the facility changed over to the municipal public water supply system. The site and the site area slope to the east toward a wetland area and Newfoundland Creek.

1.2 SITE OCCUPANTS AND OPERATIONS

The site is occupied exclusively by DSI personnel. DSI conducts assembly and testing of equipment used for thermal testing of metals. A small vapor degreasing unit, installed in 1966, used trichloroethylene (TCE) to clean components of equipment prior to use in the operation. The degreasing unit was decommissioned and removed in July 2011. It was replaced by a water-based ultra-sound unit. All TCE inventory was properly removed from the premises at that time.

2.0 HISTORICAL INVESTIGATION AND REMEDIATION

In September 2010, GaiaTech Incorporated, Chicago, Illinois (GaiaTech) was hired to perform a Phase I Environmental Site Assessment. The Phase I report identified three areas of environmental concern: a vapor degreaser unit situated within a concrete pit, a historical site use which included the use of chemicals such as oils, coolants and paints, and a leach-field based septic system.

Based on the Phase I findings, a limited Phase II was conducted in November 2010 in which six (6) soil borings were advanced in the area of the degreaser unit and septic leach field area. The septic leach field area was eliminated as an area of concern. Soil samples were collected inside the building near the degreaser unit. Several contaminants (acetone @ .12 mg/kg and Cis-1, 2-dichlorothene @0.9 mg/kg) exceeded the most stringent SCOs for the protection of groundwater but did not exceed any other SCOs. TCE was also detected at concentrations of 0.1 mg/kg (below the most stringent SCO of 0.47 mg/kg) and 0.48 mg/kg (minimally above the most stringent SCO of 0.47mg/kg).

In December 2010, GaiaTech performed a supplemental Phase II ESA Investigation which included the installation of three (3) temporary monitoring wells and five (5) permanent groundwater monitoring wells. The Phase II ESA Investigation Report identified elevated levels (3800 ppb) of TCE in groundwater in one temporary monitoring well (GP5) located inside and adjacent to the vapor degreasing unit. The regulatory standard for TCE in groundwater is 5 ppb (ug/L).

Based on the results of the Phase II performed by GaiaTech, the groundwater monitoring data, and on the assumption the source of contamination was the degreaser pit, DSI removed the degreaser unit, excavated and removed the soil beneath the degreaser pit.

On February 14, 2012 the target soils located in the interior of the DSI facility beneath the concrete floor that formed the bottom of the 8’x10’ degreaser pit were excavated and post excavation soil sample were collected. PID readings were taken in the air space following the exposure of the sub grade soil and were recorded as ND. There was no significant amount of groundwater encountered that required collection.

Once all concrete was removed from within and around the 8'x10'grease pit area, the soil was removed from under the concrete floor. Soil was removed to a depth at or just below the measured groundwater level (approximately 6 feet). With the exception of one shallow soil sample along the south wall of the pit (PID readings of 50 ppm), no other soil indicated any

soil contamination.

Post excavation soil sampling also revealed minimal contamination in the soil beneath the degreaser pit. Six (6) post excavation discrete soil samples were taken, one from each sidewall (PIT East , PIT West, PIT North, and PIT South), one (PIT Bottom) from the bottom of the excavated pit and one additional bottom floor sample (PIT Bottom-3/MSD) for sample accuracy. Soil samples were analyzed for volatile organic contaminants (VOCs) and chlorinated solvents using EPA Methods 8260. The following TCE results were observed:

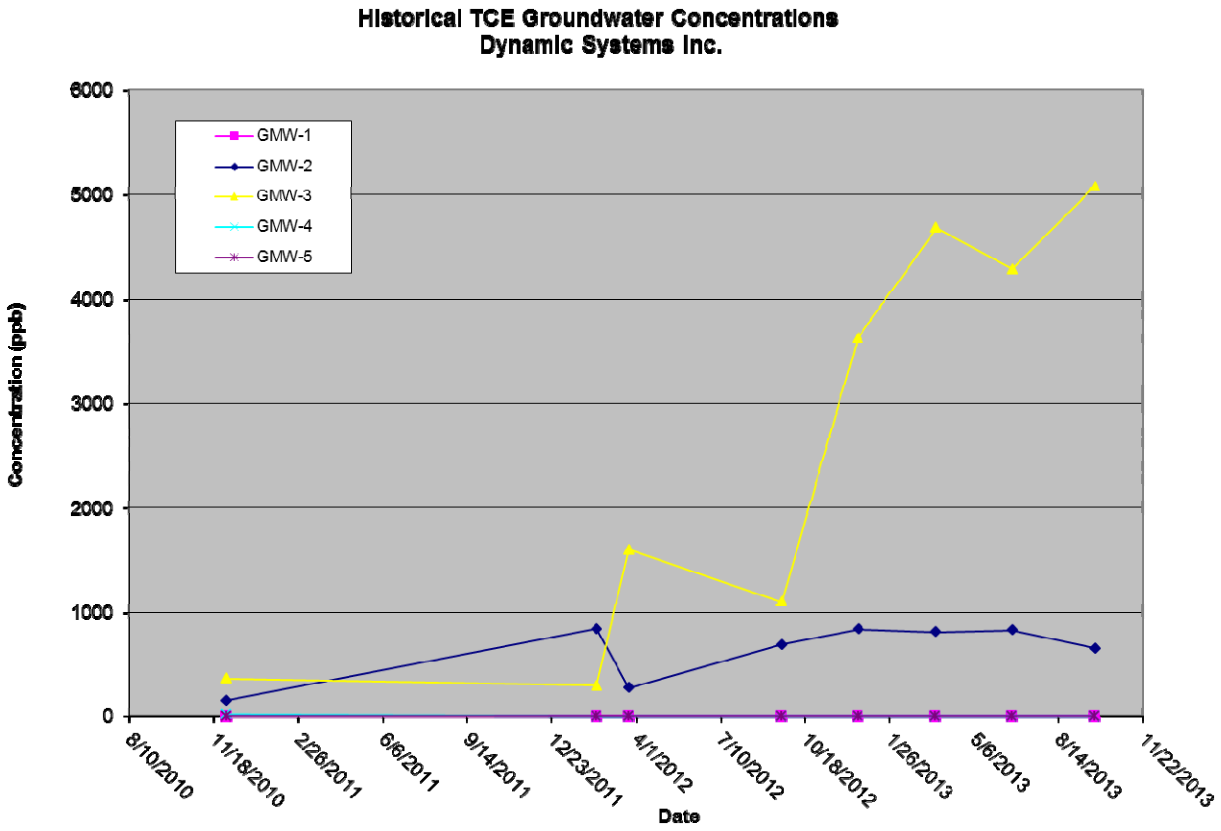
North Wall – 120 ug/Kg	South Wall – 15 ug/ Kg
East Wall - 65 ug/ Kg	West Wall – 460 ug/Kg
Pit Bottom – 33 ug/ Kg	Pit Bottom MS/MSD – 39 ug/ Kg

With the exception of the West wall reading of 460 ug/kg (Industrial = 400 ug/ Kg) each of the remaining side wall and bottom samples were below SCOs criteria for commercial use (200 ug/Kg.

Once exposed, the bottom of the pit was then covered with 10 gallons of HRC-X®, a liquid chemical additive sold by the Regenesis Corporation. HRC-X® is a hydrogen release chemical used to accelerate the degradation of chlorinated hydrocarbons like TCE. After the HRC-X® was applied, the excavation was backfilled with #2 pea stone to floor grade.

Monitoring Program

Over the next two years the five monitoring wells installed by GaiaTech were monitored with the results shown below.



Only MW-3 demonstrated increased concentrations.

3.0 PHASE I - SUPPLEMENTAL SITE INVESTIGATION

3.1 OBJECTIVE

This Supplemental Site Investigation (SSI) was performed to better define trichloroethylene contamination identified in an earlier Phase II Investigation and in subsequent groundwater monitoring at the DSI site. The technology used in the SSI provides qualitative screening data in support of obtaining quantitative data from the proposed supplemental site investigation plan (See Appendix C).

Using the MIP screening method described below, the objective of this investigation was to:

a) Determine the likely depths and extent of TCE contamination in soil and/or groundwater;

b) Determine if there is a connection between the original source (degreaser pit) and MW-3; and

c) Better define a downgradient plume.

3.2 APPLIED TECHNOLOGY

The investigation was conducted on October 28, 29, and November 26, 2013. The existing groundwater monitoring wells were installed at varying depths, so it was not possible to fully determine at what depths the contamination existed in the soil and/or groundwater. The investigation entailed the use of ZEBRA Environmental's "Membrane Interface Probe" (MIP). This technology continuously probes and logs volatile organics at selected locations across the site.

The unit has the equipment and capability to measure four elements: 1) a PID meter to measure total petroleum hydrocarbons (TPH); 2) an FID meter to measure ethane/methane gases; 3) an electron capture device (ECD) which is specific to and measures total chlorinated solvents, e.g., TCE; and 4) an electrical conductivity (EC) dipole which indicates the electrical conductivity of the soil by sending an electrical current through the matrix between two probe points. With respect to the EC measurement, the voltage generated is recorded and is attributed to an approximate grain size. A high EC value indicates the likely presence of clay and/or silty-clay soils, which are more electrically conductive than sandy soils. The primary objective of this investigation is to define the location of TCE and the media it is traveling through, the data being collected will focus on the ECD and EC results.

The MIP (probe) contains a membrane which is heated to a temperature ranging from 100 ^{0}C - 124 ^{0}C and is advanced in one foot increments. At each one foot interval the probe is stopped and the membrane heats the material in its immediate vicinity. Any contaminant, if available, is vaporized and the gas is collected and measured by the built-in analyzers (PID, FID, ECD, and EC detector). This technique allows us to determine both the horizontal expanse and the vertical depth of the TCE in groundwater or soil. All the results provide qualitative data to indicate the likely depth at which there is a presence or absence of the compounds in question.

The ECD identifies the likely depth and intensity at which the chlorinated hydrocarbons exist. The results, reported in MEVs (million electron volts), are recorded on a data logger and graphed at the end of the day. High-response MEV values indicate a more concentrated presence of the contaminants.

4.0 INVESTIGATION STRATEGY

The investigation began immediately adjacent to MW-3 (See Figure 2), which has historically contained the highest levels of TCE in groundwater. The objective is to use the real time data response from the MIP, identify at what depth(s) the highest TCE responses were being recorded and simultaneously log soil conductivity, which provides information on soil lithology.

In 2010, MW-3 was installed by GaiaTech, Inc. at a depth of 27.5 feet and screened over the last ten feet (17.5-27.5). The first MIP probe (B-1) was advanced with the expectation of drilling across the screened depth and beyond to approximately 40 feet. The advantage of the MIP technology is if there is a contaminant zone, the response data will indicate when it is first encountered and when it ends. As a result, B-1 was probed continuously to a depth of 24.25 feet where the data demonstrated there was no more contaminant. At that point the probe was terminated.

The above process was repeated both up- and down- gradient to confirm relative contaminant concentrations and locations in both a vertical and horizontal direction. The MIP installed probes in a grid pattern as shown on the Figure 2 – Site Plan Map. The resultant probes and their actual locations were adjusted in the field based on the MIP response data. The depths of all subsequent probes were also determined by the response data provided by the MIP.

Two (2) upgradient probes (B-2 and B-4) were installed on a line between MW-2 and MW-3 in an effort to confirm a connection between MW-3 and the original source (Degreaser Unit) at MW-2. The investigation was then fanned-out to screen a potential contaminant zone.

MW-4 never demonstrated any TCE contamination in groundwater. It was originally installed to a depth of 15 feet and screened from 5-15 feet. Based on the response from the MIP unit, probes (B-11, B-12, B-13, and B-14) were installed near and downgradient of MW-4. The results and findings are discussed below.

5.0 FINDINGS

In the field, results were generated in real time and were relative to each boring. At the conclusion of each day, ZEBRA generated graphical representations of all data responses of the ECD (chlorinated hydrocarbons) and EC (electrical conductivity). More specific to this investigation, another graphical display of independently normalized ECD and EC data was created (See Appendix A). The latter is the focus of the interpreted results.

While each boring is independent unto itself, Spectra organized the MIP output to display several borings in a sequence representing cross-sectional views of the subsurface. The cross-sections, A-A', B-B', C-C', and D-D', are shown on Figure 3.

5.1 GENERAL OBSERVATIONS:

1) The investigation indicates that none of the existing wells are screened at the ideal intervals to correctly monitor the TCE plume in groundwater;

2) Electrical Conductivity readings indicate areas of varying clay content i.e. high and low permeability throughout the area downgradient of the assumed source.

3) The majority of the highest responses were identified at depths of 15 – 22 feet;

4) Several areas of high response frequently exist within or just prior to zones of low permeability. This suggests contaminant migration was retarded which allowed the contaminant to concentrate in random locations;

5) The responses indicate that contamination is following the groundwater flow direction. It also indicates that, with one notable exception, the contamination seems to originate from beneath the building and from the direction of the removed source area.

6) The exception noted in #5 above is the response identified in B-25 across a depth of 10-21 feet (See explanation in Section 5.2).

5.2 DETAILED OBSERVATIONS:

Because MW-3 has historically shown the highest concentration of TCE in groundwater, the first boring (B-1) was placed directly along side MW-3. The data from B-1 (See Appendix A) indicates there is a high ECD response from 12 to 18 feet below ground surface (bgs). This

information is important because MW-3 is screened entirely below the water table from 17.5–27.5 feet. Given the depth of the contaminant shown by the ECD response data, it suggests the groundwater contaminant is entering the well only within the first foot of the screened interval. Groundwater samples previously collected from this configuration may not truly represent the water quality in that area.

Cross-section A-A' includes B-1, 4, 5, 6, 7, 8, and 9 (See Figure 3). This cross-section follows the general path of groundwater flow. The ECD response data indicates that the presence of chlorinated hydrocarbon (e.g. TCE,) generally decreases from B-4 until B-7 (See Appendix B). The deeper concentrations shown in B-7 may be explained by the increased electrical conductivity (EC) at or around 17 feet bgs. The higher EC indicates a less permeable horizon (e.g. more clay) compared to the rest of the boring. Groundwater would be expected to take the path of least resistance either around or under the less permeable zone. Continuing south from B-7 to B-8 and B-9, the responses rebound to a shallower depth.

Cross-section A-A' also indicates that for this section of the site the majority of the contaminant migration is moving in the direction of groundwater flow and not laterally across the site.

Cross-section B-B' includes B-26 and continues southeast to B-12 (See Figure 3). This cross section shows a response that follows the general gradient of the site (See Appendix B). The response peaks at B-8 since it is directly in line with the flow path from the assumed original source. From B-8 the ECD response continues to decrease to B-12. Based on the data from B-12, it is not likely that contaminant extends very much further east.

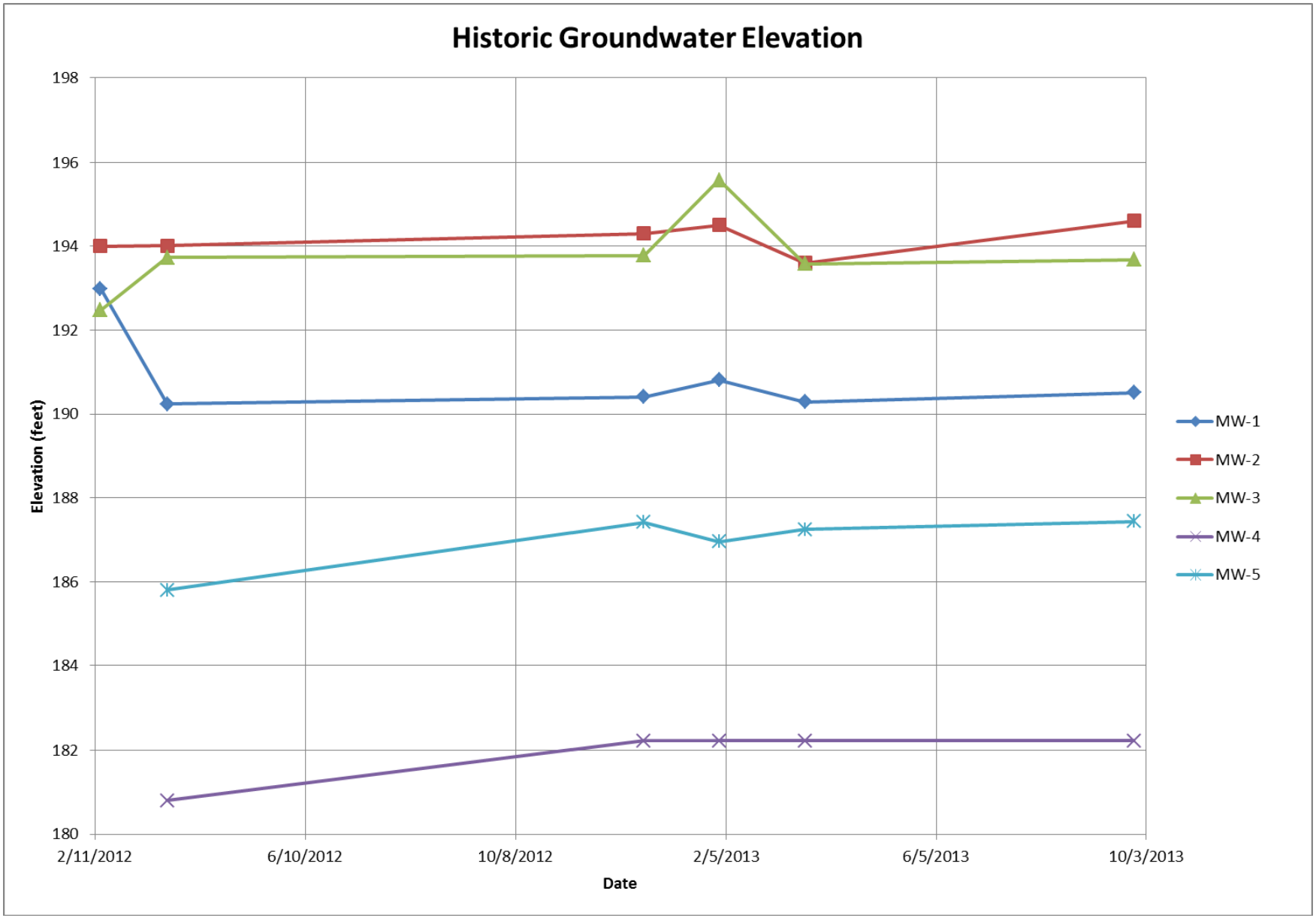
Boring B-18 was completed well upgradient of the suspected source to serve as a baseline for the rest of the site. As expected, the MIP results show no presence of any contaminant in this area.

Boring B-25 produced a high enough response to merit a 26th boring against the southwest corner of the building in an effort to trace the contamination to the building (See Appendix B). Cross-section C-C' shows this area following the preferential groundwater flow direction (See Figure 3). Although there is some level of contamination identified in B-26, the ECD response in B-25 and B-23 are significantly higher. Additionally, with groundwater flowing generally to the southeast, it is unlikely that any contamination in B-25 came from the building to the northeast.

This area has historically been the location of dumpsters. Many years ago solvent-soaked rags used to clean equipment may have been disposed in the dumpsters. This provides a plausible explanation for the existence of the contaminant in this isolated area.

Cross section D-D' trends from B-23 west to B-17 (See Figure 3). This series allows for a cross section view perpendicular to groundwater flow. This cross-section indicates there are three (3) areas of higher relative concentrations that seemingly do not interact with each other (See Appendix B).

MW-4 is a 15 foot deep well located approximately 160 feet downgradient from MW-3. There is a 17.26 foot drop in ground elevation between the wells. The table below represents the findings from the Spectra's investigation from 2012 to 2013. The depths to water have been consistent over the last three (3) years as measured by Spectra during the more recent monthly and quarterly monitoring events.


Historic Groundwater Elevation
198
196
194
192
190
188
186
184
182
180
Elevation (feet)
2/11/2012
6/10/2012
10/8/2012
2/5/2013
6/5/2013
10/3/2013
Date
MW-1
MW-2
MW-3
MW-4
MW-5

The depth to groundwater in MW-4 is shallow at 2.63 feet and the well is screened entirely beneath the groundwater table at 5 – 15 feet. Due to the significant change in topography, the elevations of MIP responses (albeit low) in B-11, 12, 13, and 14 at 3-5 feet are generally consistent with the elevations of the responses identified in the upgradient probes.

5.3 SAMPLING RESULTS (Laboratory Data)

One groundwater sample (GW-1) and two (2) soil samples (SS-1 and SS-2) were collected during the investigation (See locations on Figure 2). The detected results are shown in Table 1 below. The groundwater sample was not collected using a low flow method so the results should be interpreted in that context. The laboratory report is provided in Appendix D.

Table 1:
VOC Analytical Results

VOCs by 8260	GW1 16-20'	SS1 16-20'	SS2 5-10'
Benzene	0.21 J	0.0057	0.005
Trichloroethene	100	NA	NA
Acetone	16	NA	NA
2-Butanone	1 J	NA	NA
p/m-Xylene	NA	0.00074 J	<0.0023 U
cis-1,2-Dichloroethene	NA	<0.0011 U	0.002

NOTES:

1. Samples were collected by Spectra and submitted to Alpha Analytical for analysis of total VOCs.
2. Only constituents detected are displayed.
3. <0.457 U: Analyte was not detected. The number following the 'less than' (<) is the associated reporting limit.
4. All soil results in mg/kg or ppm
5. All groundwater results in ug/l or ppb.
6. NA: Not Analyzed

Data Qualifiers

7. J: Indicates an estimated value less than the reporting limit.

6.0 RECOMMENDATIONS

To quantify and more accurately characterize the vertical and lateral extent of the contamination, and based on the data gathered from the MIP investigation, an expanded investigation and monitoring plan is proposed in Appendix C. The primary objectives of the expanded investigation are as follows:

1) Decommission MW-3, MW-4, and MW-5 as per DER-10 Guidelines. Based on data gathered from the SSI and past groundwater flow data, there is no evidence suggesting contaminated groundwater is travelling to MW-5.

2) Replace existing well MW-3 with a new well at a screened interval of 13-18' bgs based on the ECD responses generated by the MIP and install a new monitoring well at a screen interval of 5-10' bgs to the east of MW-4, near B-12.

3) Install and develop two additional monitoring wells DSI-2 and DSI 3 at screened intervals of 9-19' bgs and 19-24' bgs respectively based on the depths and extents of responses generated by the ECD (See Figure 4 for exact locations);

4) Determine whether a new monitoring well needs to be installed near MW-1.

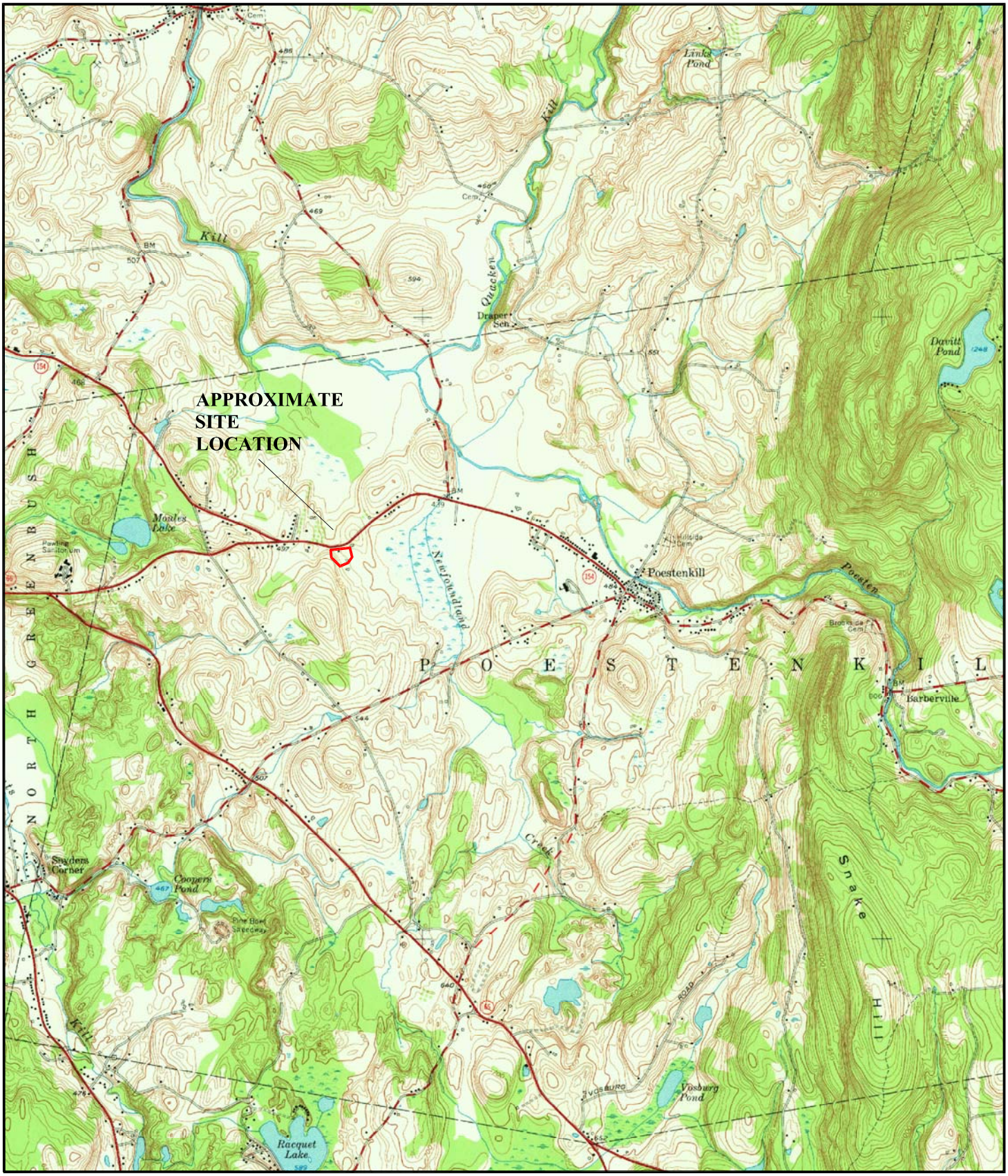
5) Complete two (2) soil borings near B-25, the former dumpster location.

6) Quantify the data from the MIP investigation by collecting additional groundwater and soil samples.

7) Establish a new quarterly monitoring program for the Site based on new wells and supporting soil data.

8) Upon review and approval of the DEC, and dependent on weather conditions, initiate the expanded investigation plan by Spring 2014.

FIGURES



SPECTRA
ENGINEERING, ARCHTECTURE, & SURVEYING, P.C.
SPECTRA ENVIRONMENTAL GROUP, INC.
19 British American Blvd.
Latham, N.Y. 12110

SITE LOCATION
DYNAMIC SYSTEMS, INC.
POESTENKILL, NEW YORK
TOWN OF POESTENKILL — RENSSELAER CO.,NY

PROJ. NO.: 11124	DATE: 05/18/12	SCALE: 1"=100'	DWG. NO.: SAMPLING...	FIGURE: 1

Parking Lot

Former location of vapor degreaser

DSI

Shipping Area

NORTH

MW-1

MW-2

MW-3

MW-4

MW-5

B-1 B-2 B-3 B-4 B-5 B-6 B-7 B-8 B-9 B-10 B-11 B-12 B-13 B-14 B-15 B-16 B-17 B-19 B-20 B-21 B-22 B-23 B-24 B-25 B-26

GW-1

SS-1

SS-2

MONITORING WELL

COMPLETED PROBE POINTS

NO.	DATE	RECORD OF WORK	DRN	CKD	APPR

PROJECT

PROJ. ENGR.:	FP
PROJ. NO.:	11124
PREPARED BY:	FP
DRAFTED BY:	JCK
CHECKED BY:	FP
APPROVED BY:	
DATUM:	
CONTOUR INTERVAL:	

0 12.5 15 30

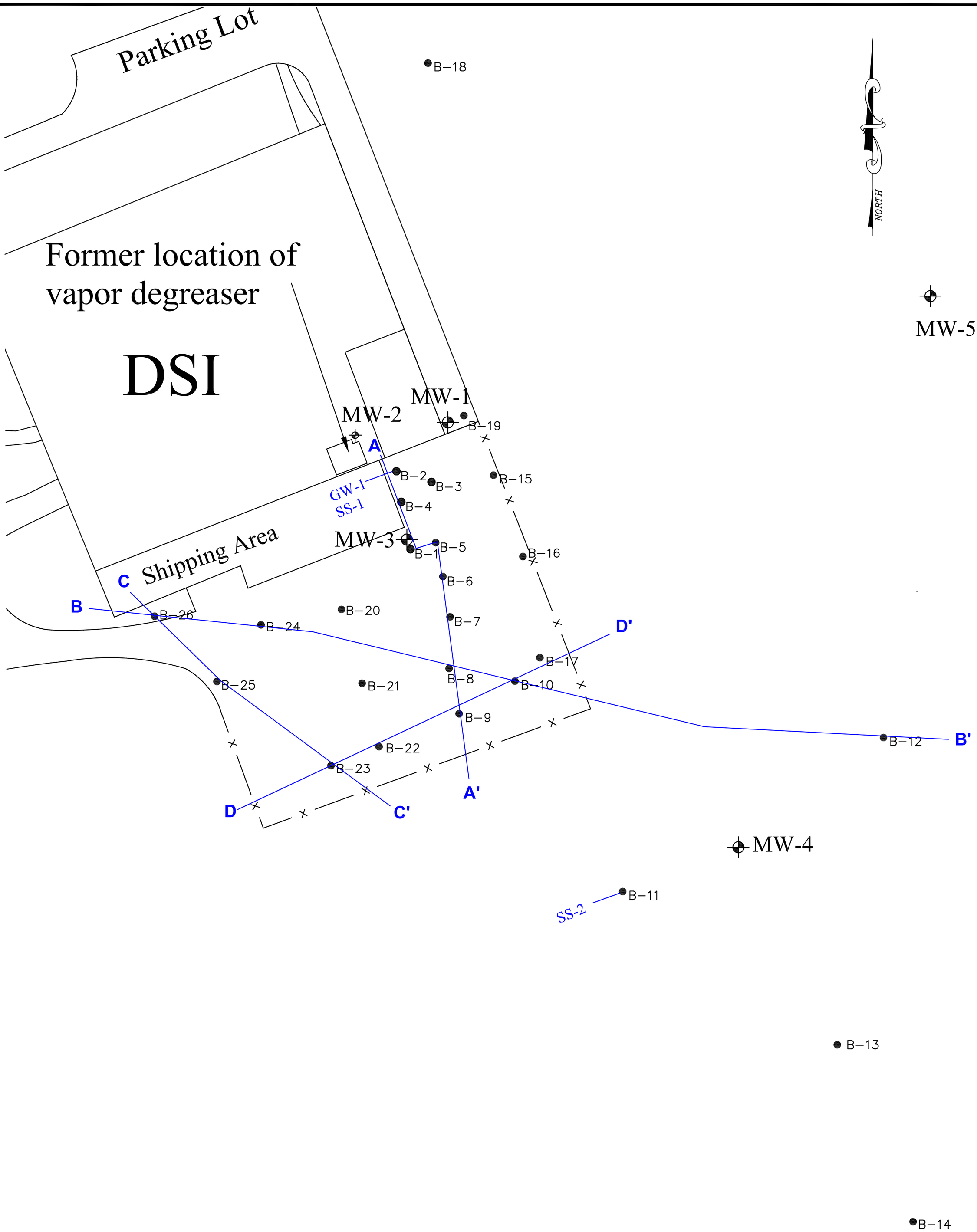
1"=30'

SITE MAP
MIP BORING LOCATIONS
DYNAMIC SYSTEMS, INC.
POESTENKILL, NEW YORK

TOWN OF POESTENKILL RENSSELAER COUNTY NY

SPECTRA ENVIRONMENTAL GROUP, INC.
19 British American Blvd.
Latham, NY 12110

DATE: 12/10/13 | SCALE: 1" = 30' | DWG: MIP INVESTIG... | FIGURE 2



MONITORING WELL

COMPLETED PROBE POINTS

NO.	DATE	RECORD OF WORK	DRN	CKD	APPR

PROJECT	
PROJ. ENGR.:	FP
PROJ. NO.:	11124
PREPARED BY:	FP
DRAFTED BY:	JCK
CHECKED BY:	FP
APPROVED BY:	
DATUM:	
CONTOUR INTERVAL:	

0 12.5 15 30

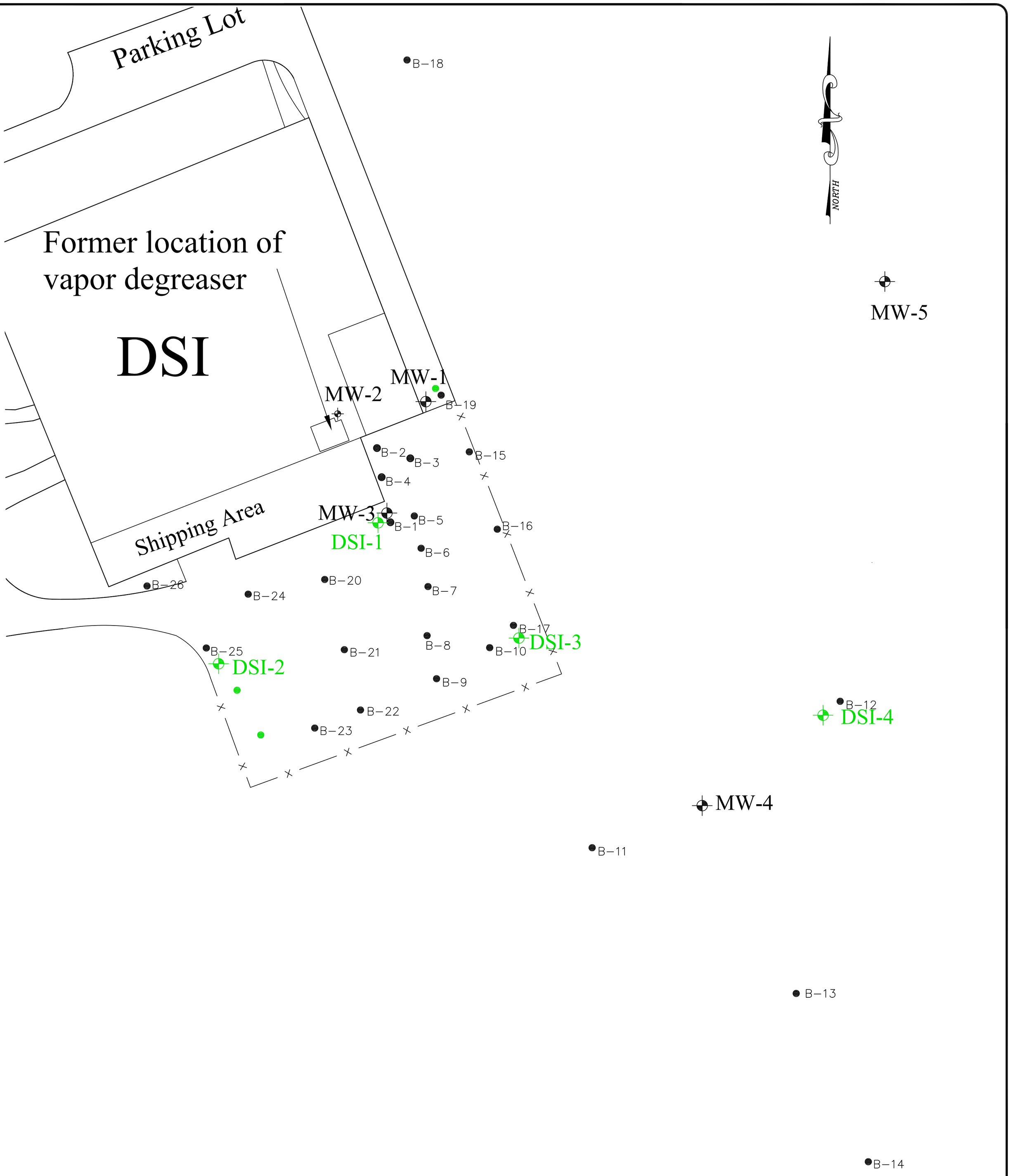
1"=30'

MIP CROSS SECTIONS
DYNAMIC SYSTEMS, INC.
POESTENKILL, NEW YORK

TOWN OF POESTENKILL — RENSSELAER CO.,NY

SPECTRA ENVIRONMENTAL GROUP, INC.
19 British American Blvd.
Latham, NY 12110

DATE: 12/10/13 | SCALE: 1" = 30' | DWG: MIP INVESTIG... | FIGURE 3



MONITORING WELL

COMPLETED PROBE POINTS

PROPOSED MONITORING WELL

PROPOSED SOIL BORING

NO.	DATE	RECORD OF WORK	DRN	CKD	APPR

PROJECT	
PROJ. ENGR.:	FP
PROJ. NO.:	11124
PREPARED BY:	FP
DRAFTED BY:	JCK
CHECKED BY:	FP
APPROVED BY:	
DATUM:	
CONTOUR INTERVAL:	

0 12.5 15 30

1"=30'

PROPOSED MONITORING WELLS AND BORINGS
DYNAMIC SYSTEMS, INC.
POESTENKILL, NEW YORK

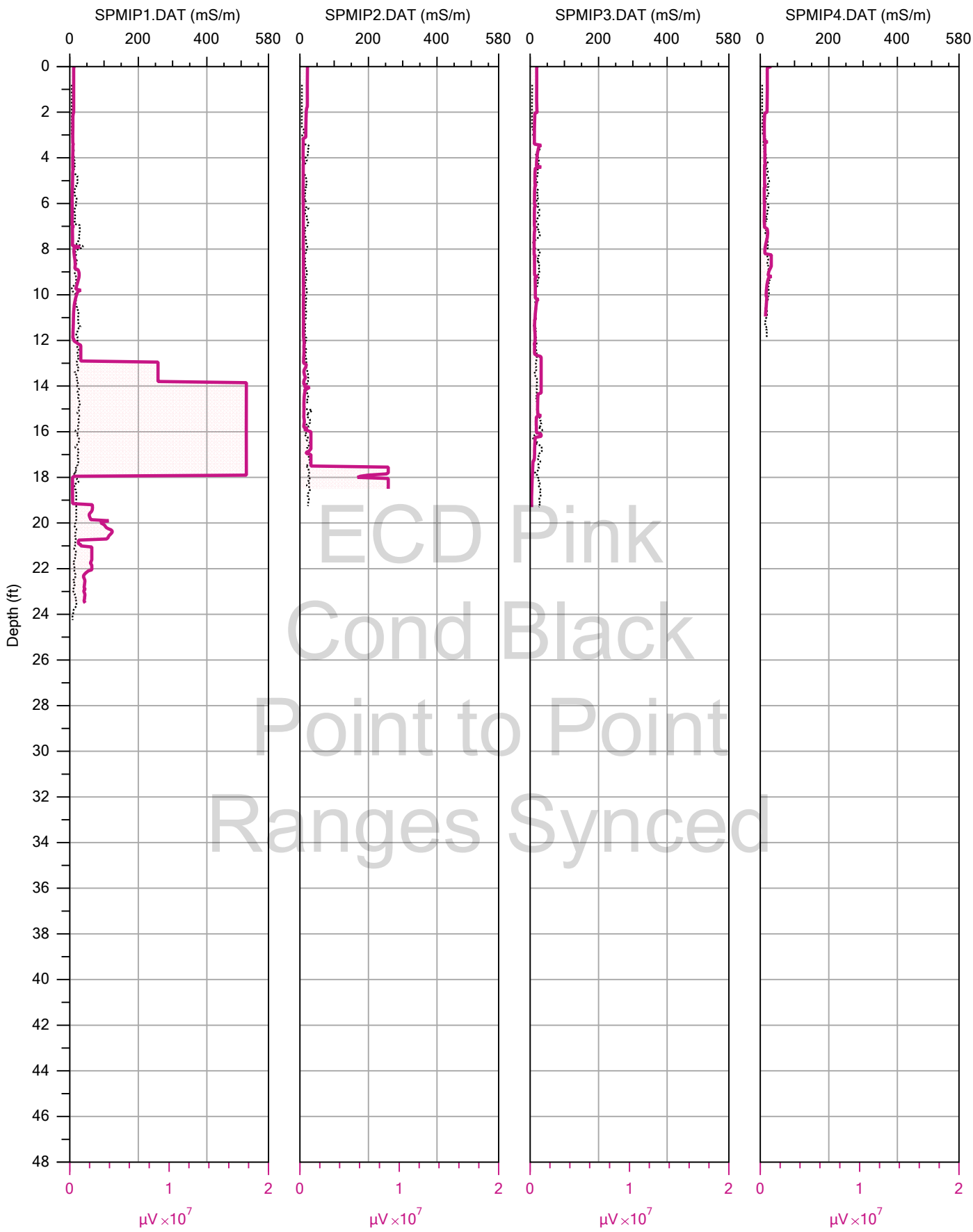
TOWN OF POESTENKILL — RENSSELAER CO.,NY

SPECTRA ENVIRONMENTAL GROUP, INC.
19 British American Blvd.
Latham, NY 12110

DATE: 12/31/13 | SCALE: 1" = 30' | DWG: MIP INVESTIG... | FIGURE 4

APPENDIX A

NORMALIZED ECD GRAPHICAL RESULTS

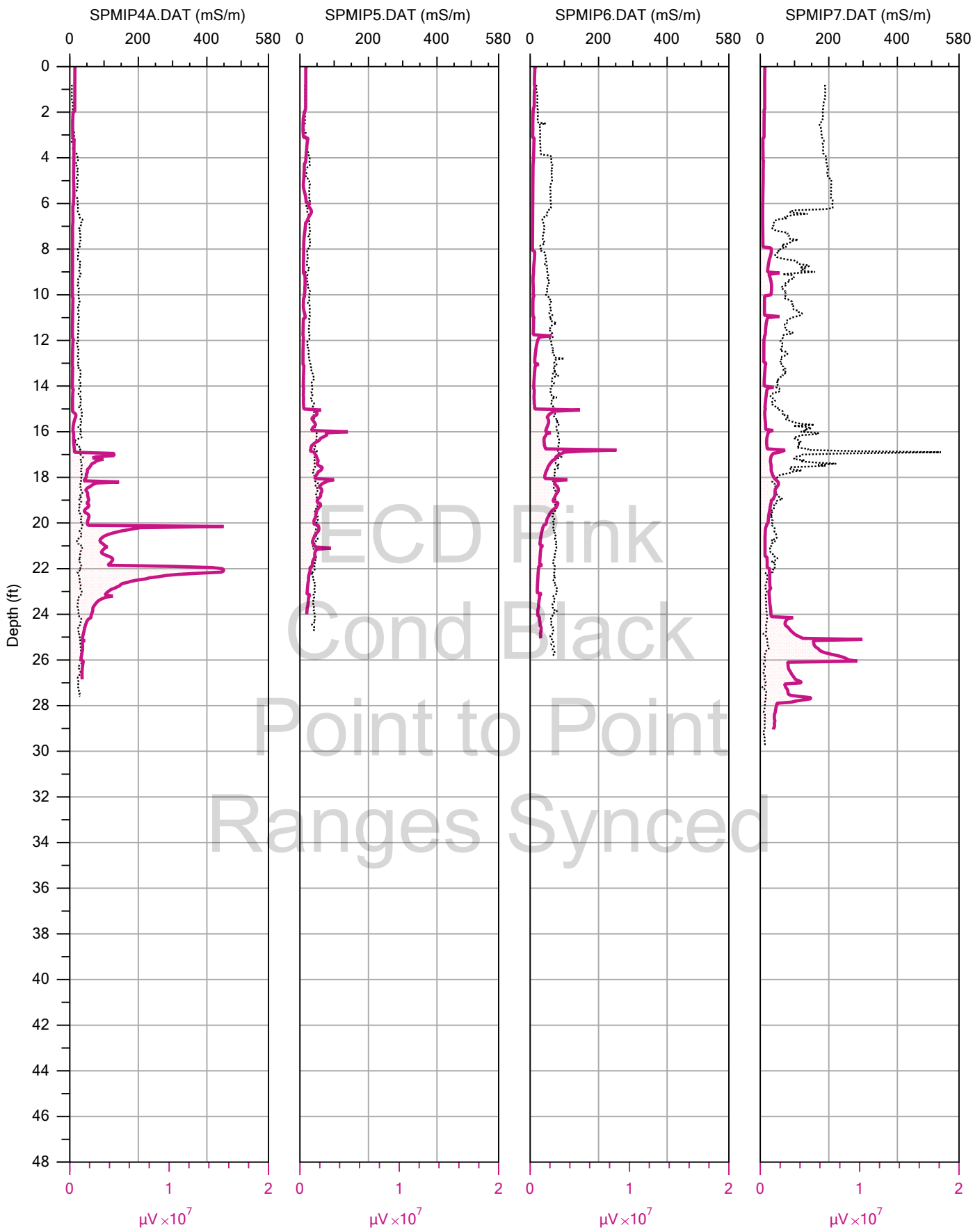


ZEBRA

EC / ECD Max

Company: Zebra	Operator: Zach/Will
Project ID:	Client: SPECTRA

SPMIP1.DAT	10/21/2013
SPMIP2.DAT	10/21/2013
SPMIP3.DAT	10/21/2013
SPMIP4.DAT	10/21/2013

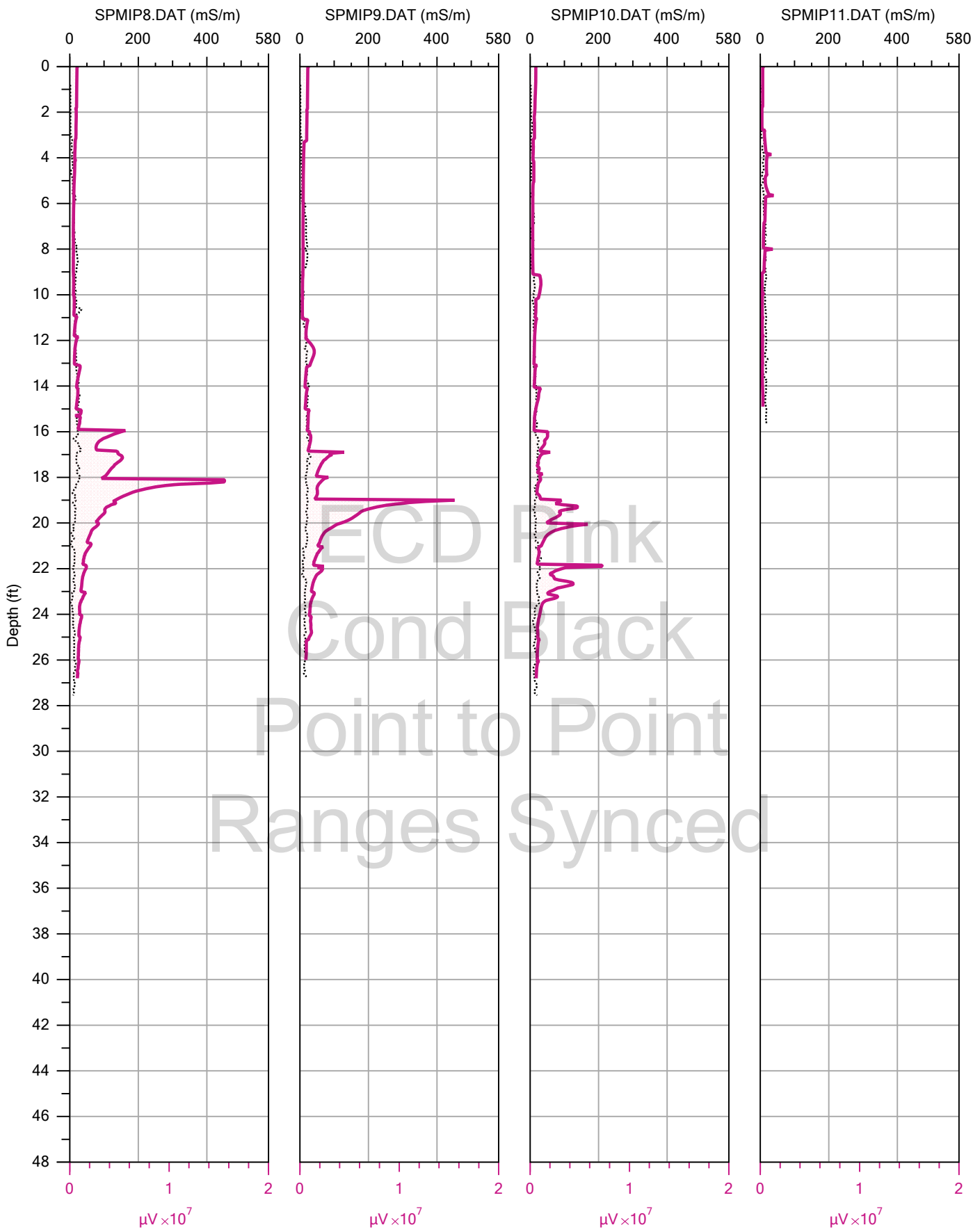


ZEBRA

EC / ECD Max

Company: Zebra	Operator: Zach/Will
Project ID:	Client: SPECTRA

SPMIP4A.DAT	10/28/2013
SPMIP5.DAT	10/28/2013
SPMIP6.DAT	10/28/2013
SPMIP7.DAT	10/28/2013

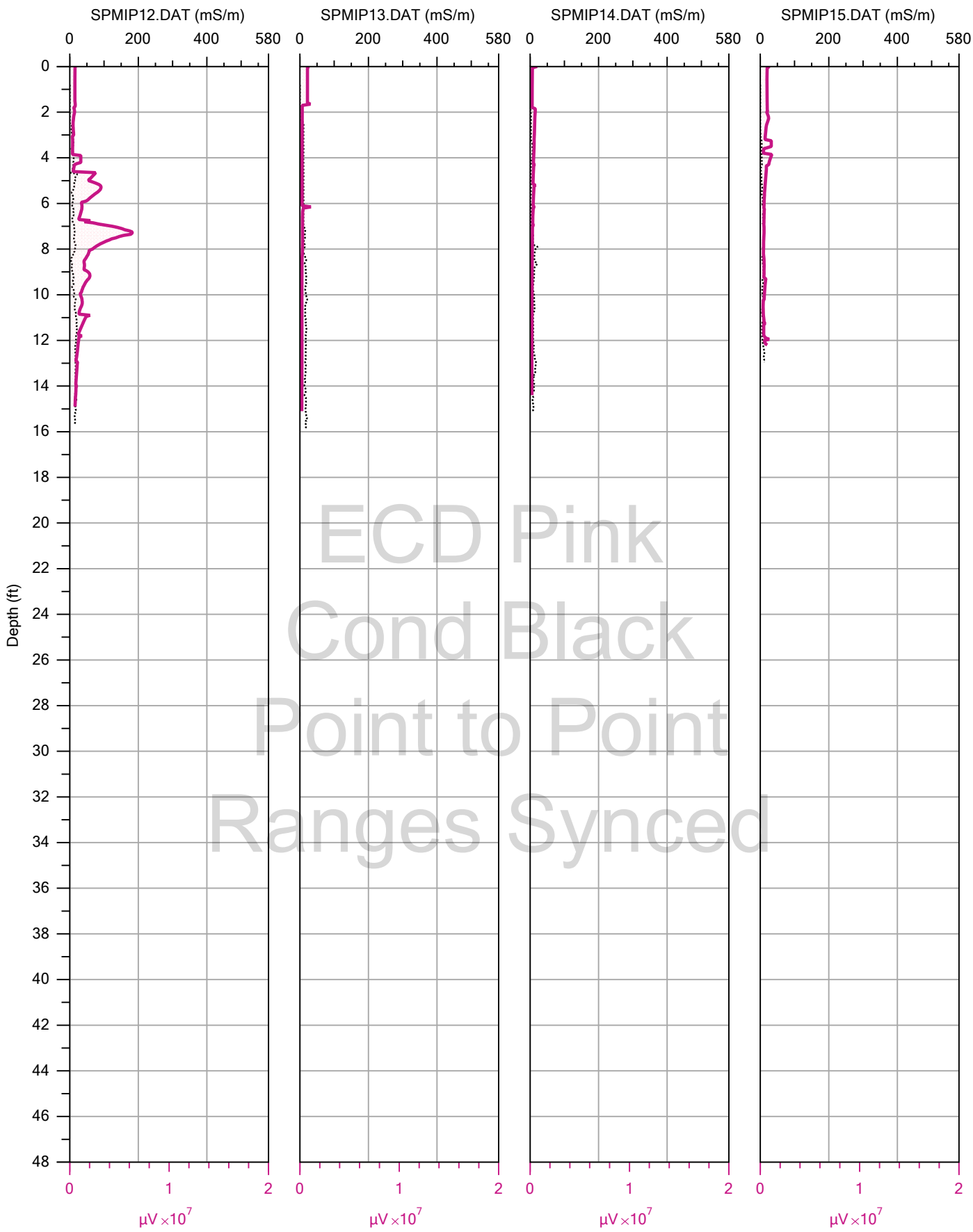


ZEBRA

EC / ECD Max

Company: Zebra	Operator: Zach/Will
Project ID:	Client: SPECTRA

SPMIP8.DAT	10/28/2013
SPMIP9.DAT	10/28/2013
SPMIP10.DAT	10/28/2013
SPMIP11.DAT	10/29/2013

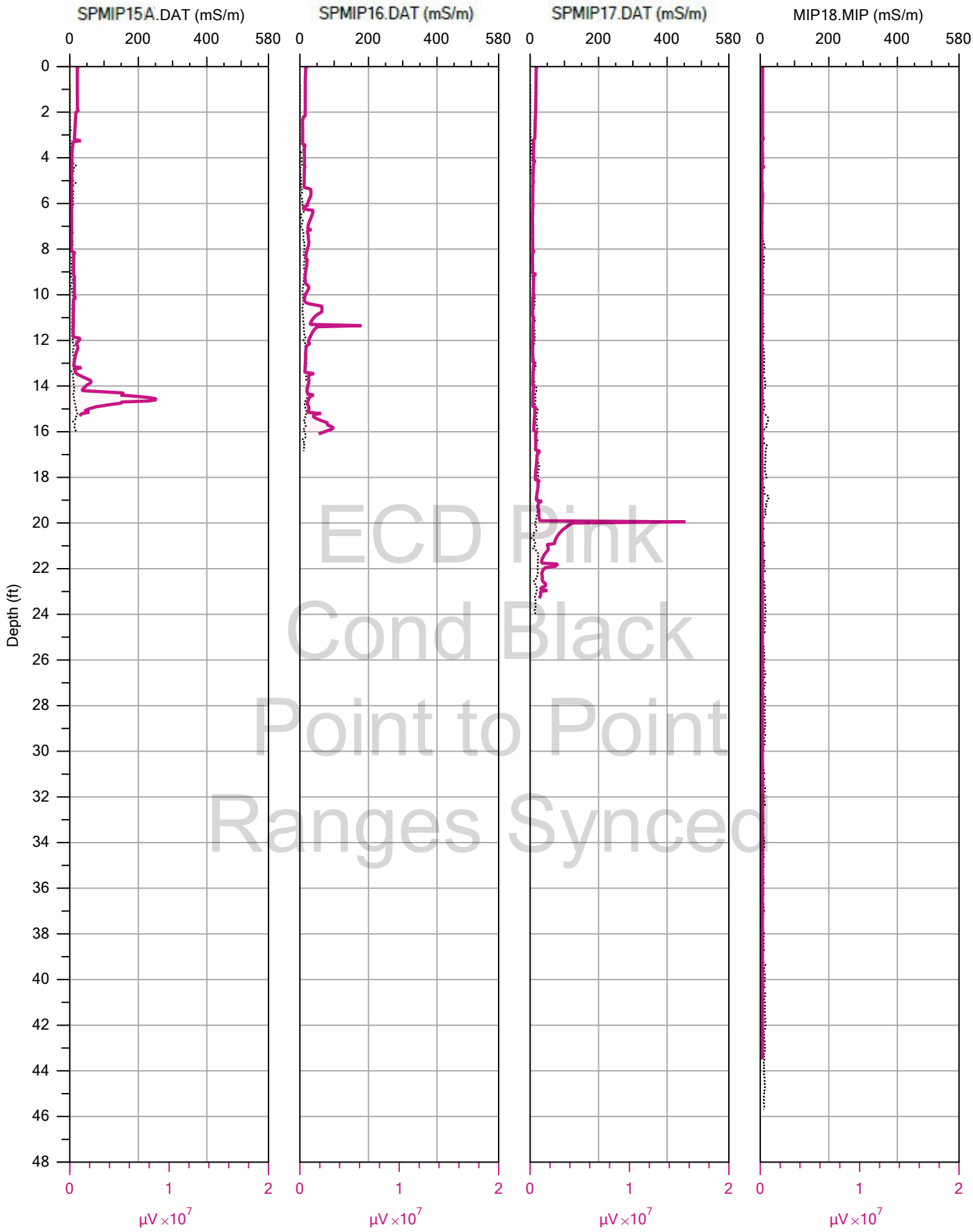


ZEBRA

EC / ECD Max

Company: Zebra	Operator: Zach/Will
Project ID:	Client: SPECTRA

SPMIP12.DAT	10/29/2013
SPMIP13.DAT	10/29/2013
SPMIP14.DAT	10/29/2013
SPMIP15.DAT	10/29/2013

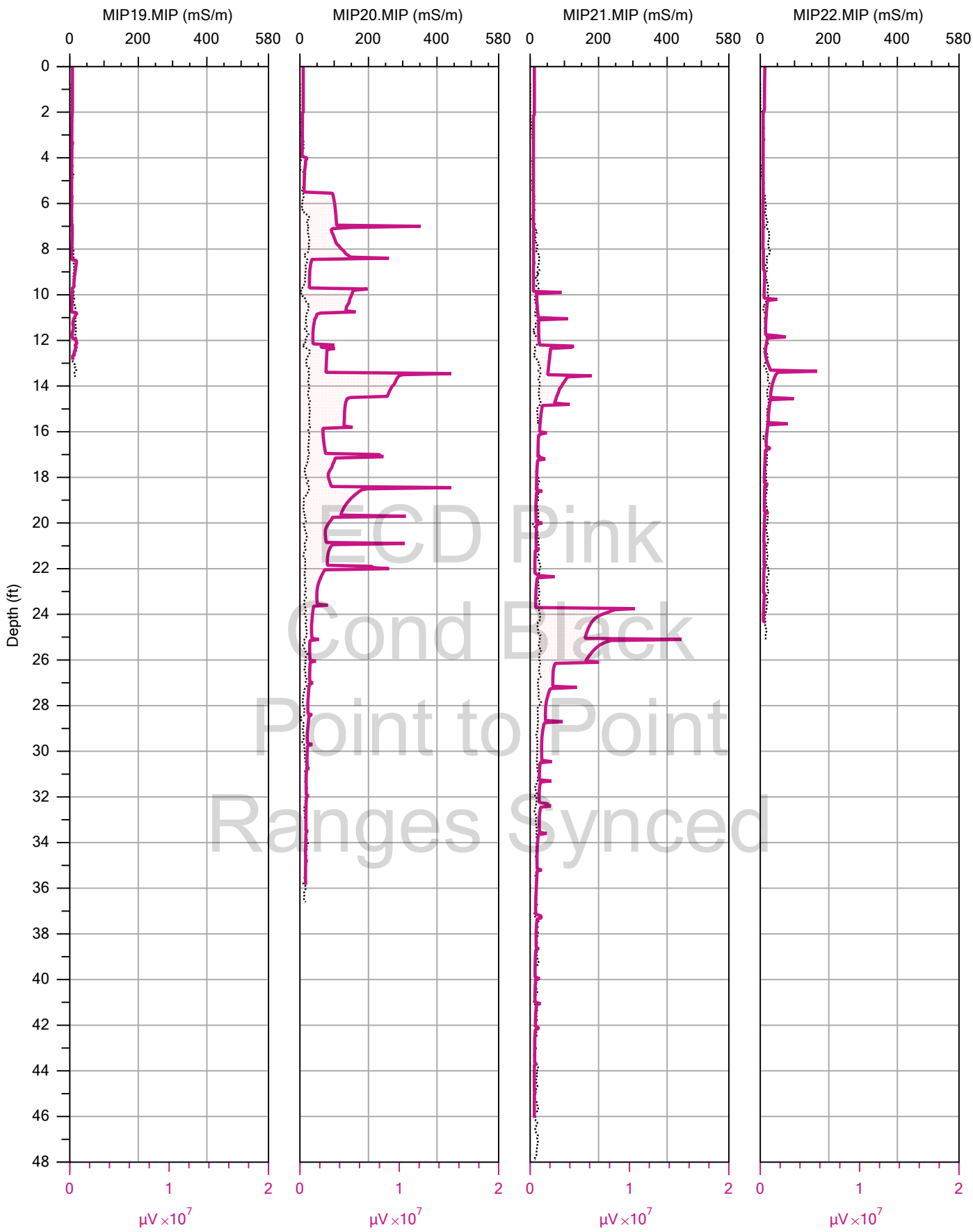


ZEBRA

EC / ECD Max

Company: Zebra	Operator: Zach/Will
Project ID:	Client: SPECTRA

SPMIP16.DAT	10/29/2013
SPMIP17.DAT	10/29/2013
SPMIP18.DAT	10/29/2013
MIP18.MIP	11/26/2013

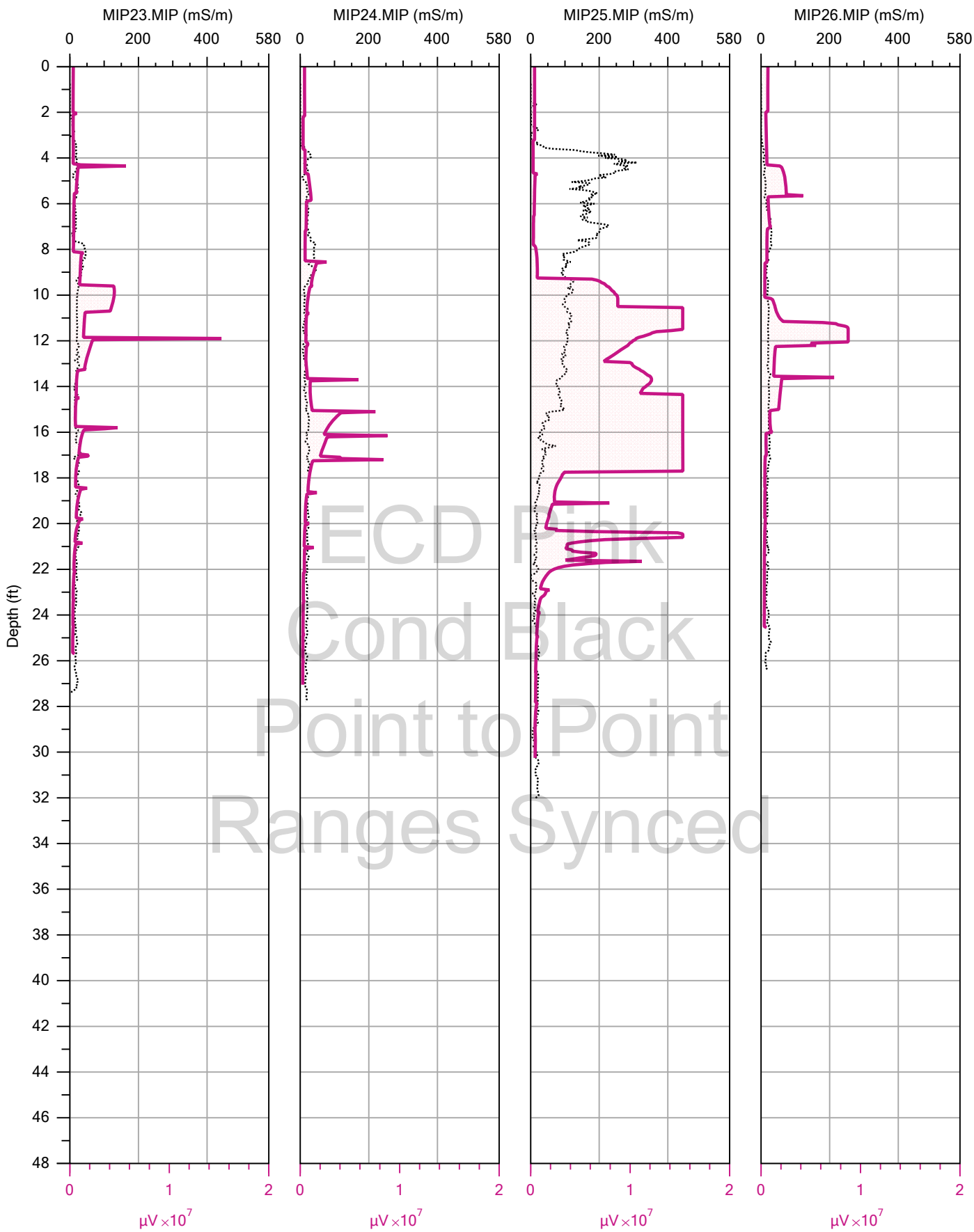


ZEBRA

EC / ECD Max

Company: Zebra	Operator: Zach/Will
Project ID:	Client: SPECTRA

MIP19.MIP	11/26/2013
MIP20.MIP	11/26/2013
MIP21.MIP	11/26/2013
MIP22.MIP	11/26/2013



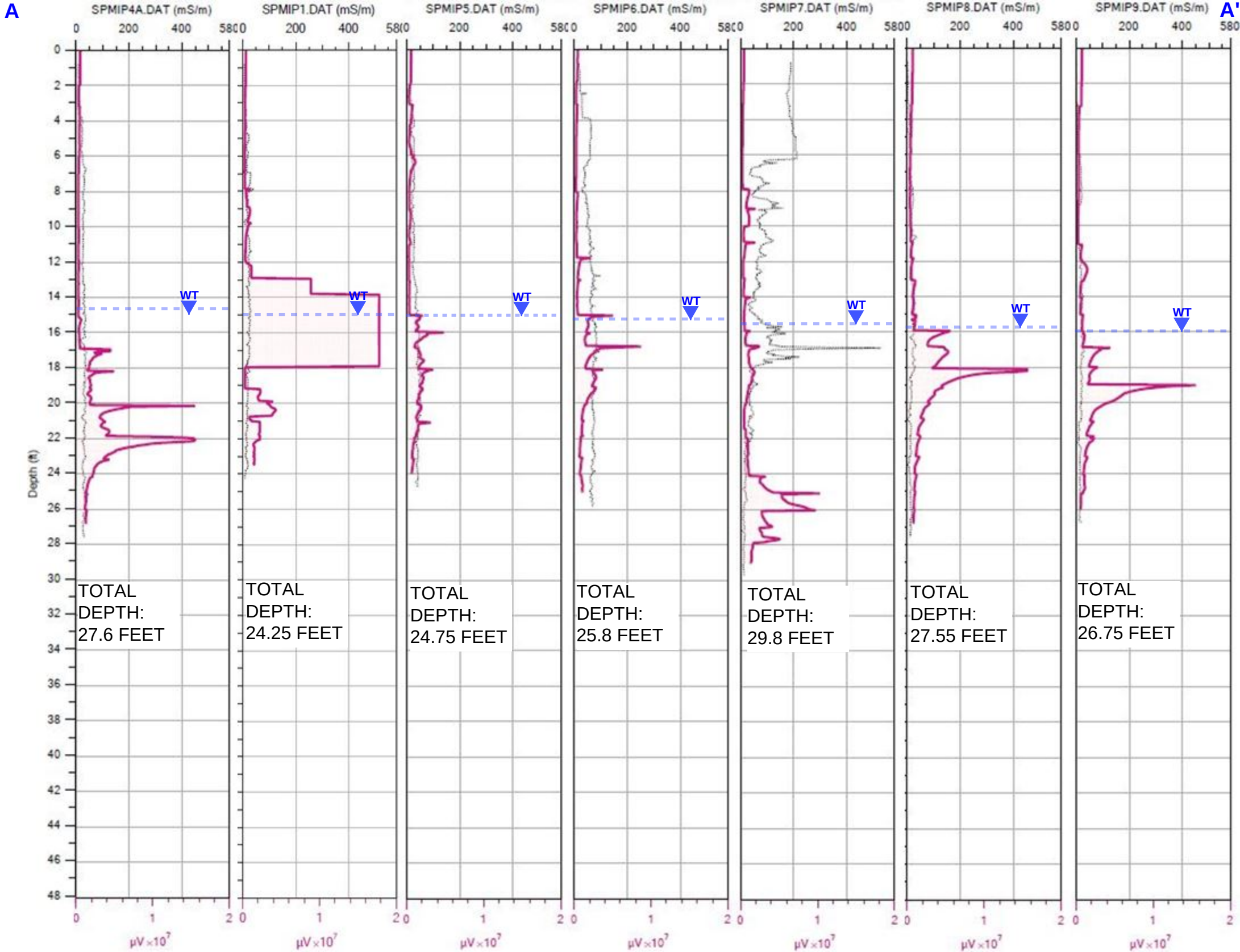
ZEBRA

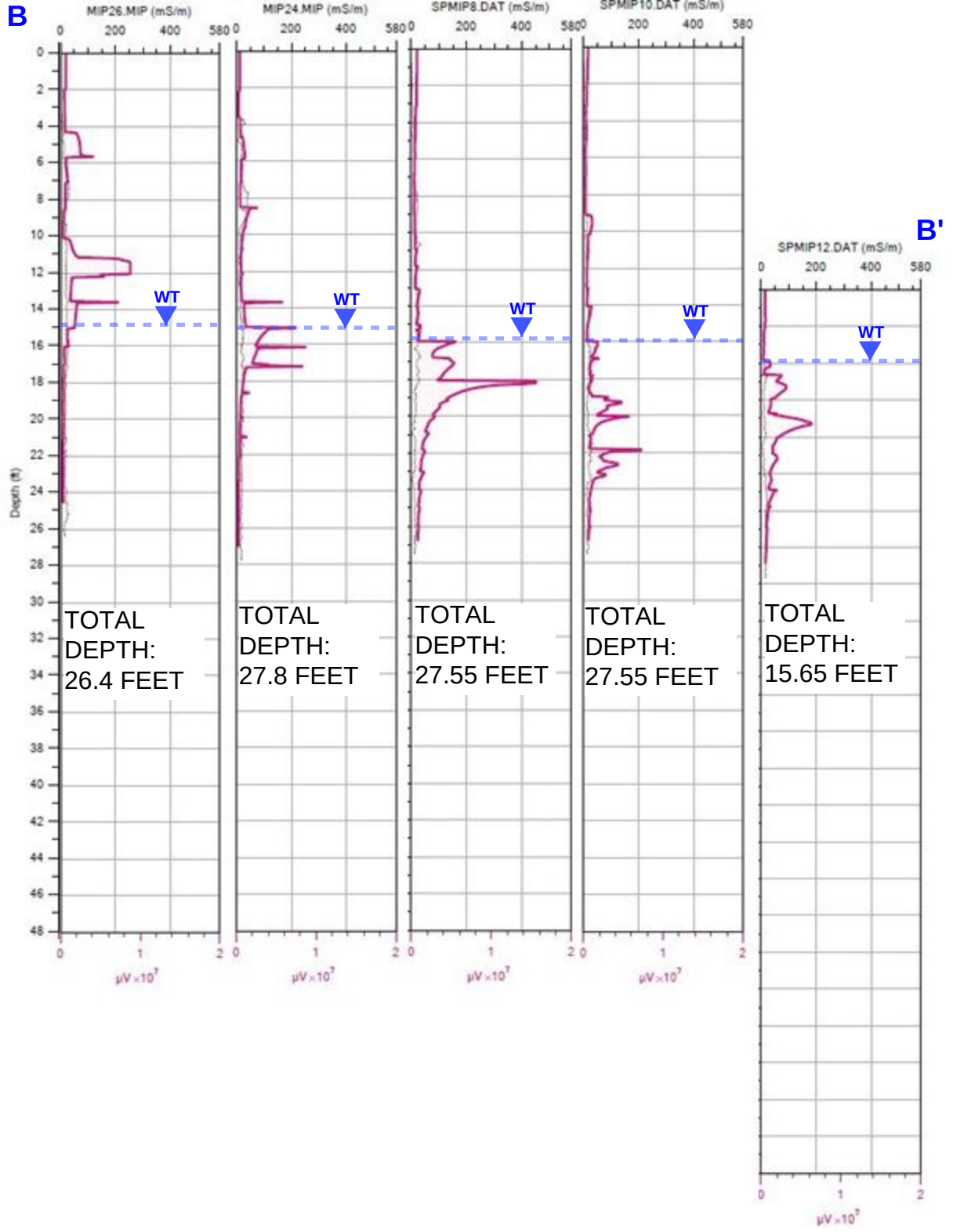
EC / ECD Max

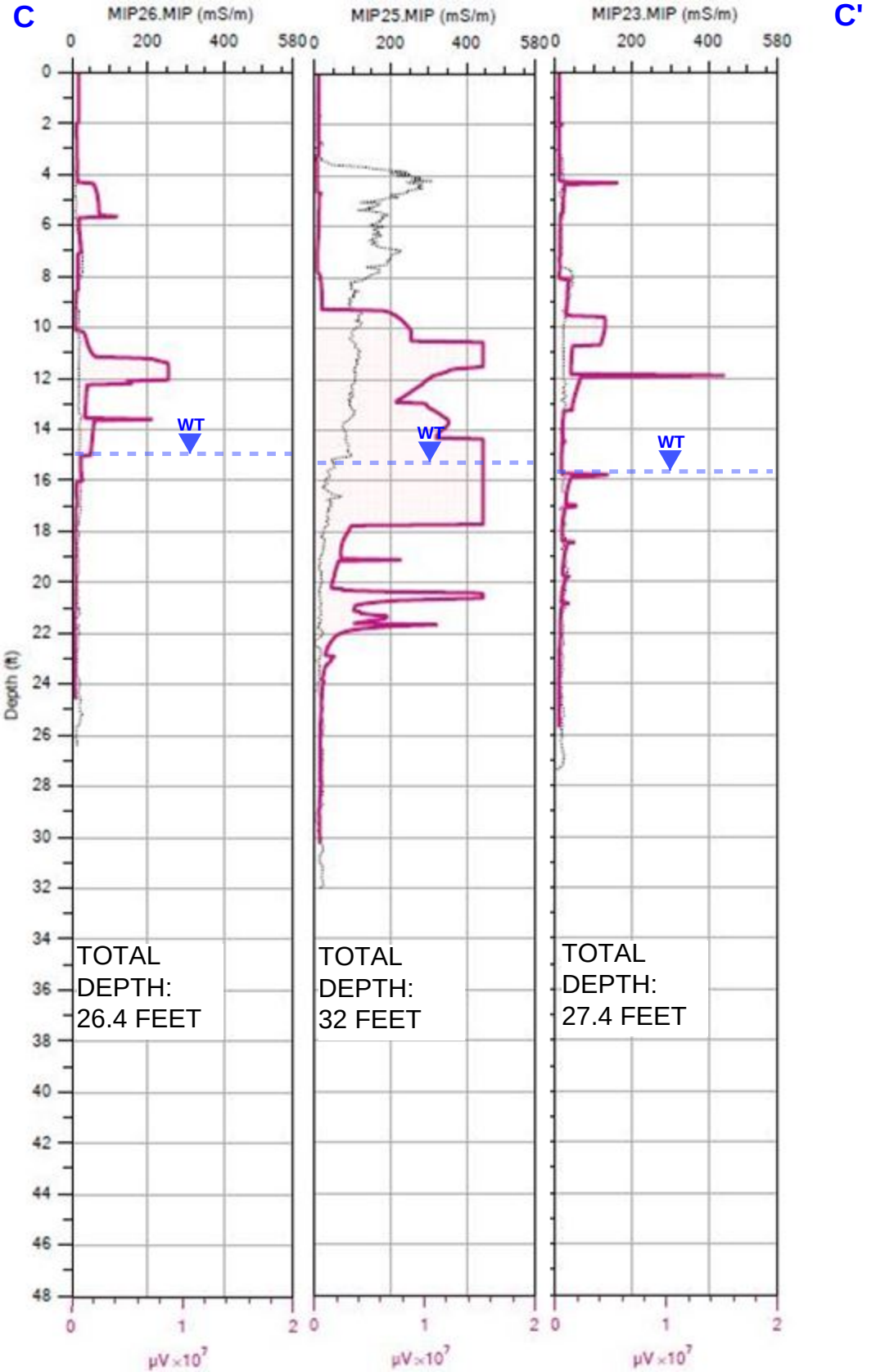
Company: Zebra	Operator: Zach/Will
Project ID:	Client: SPECTRA

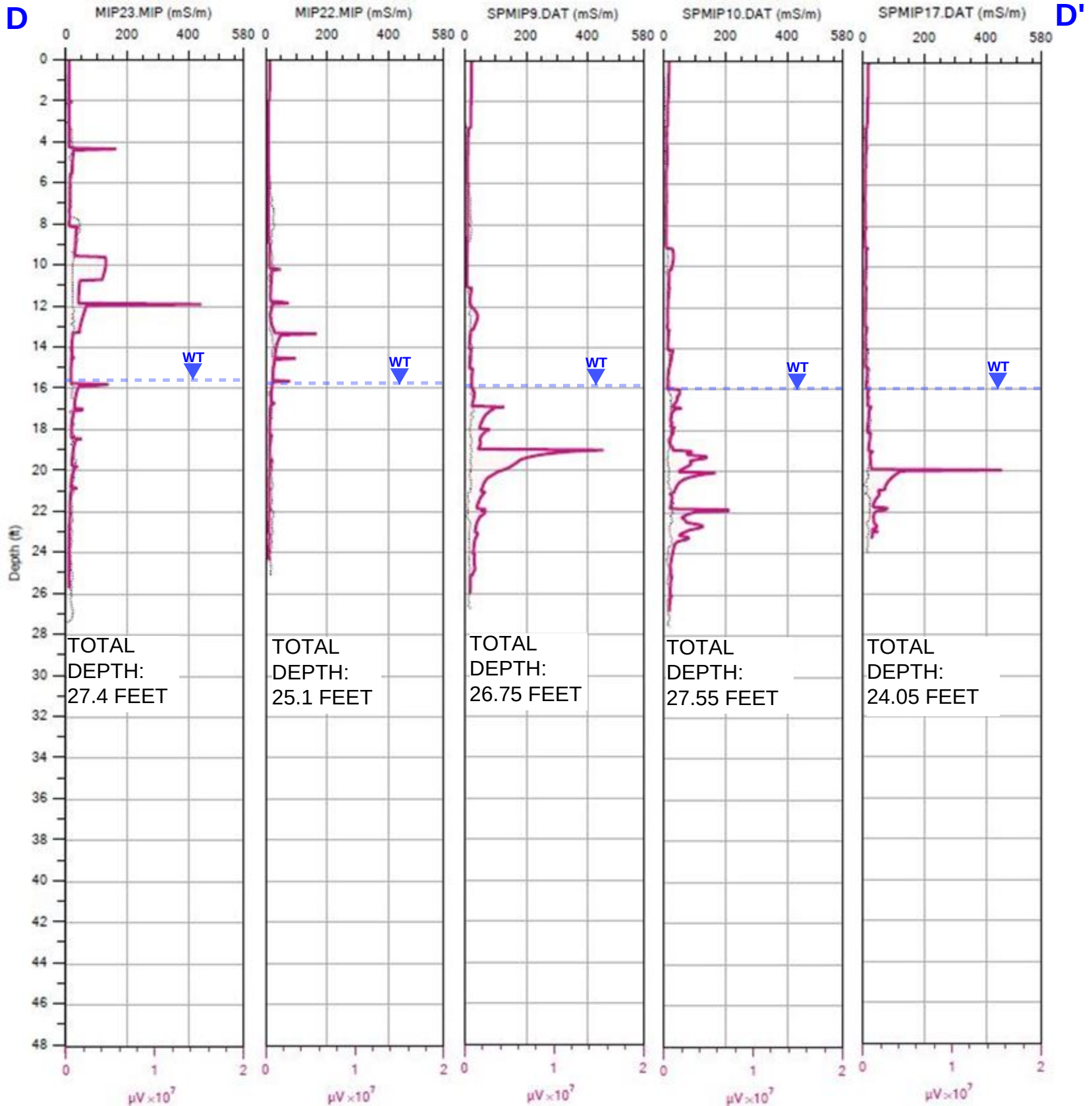
MIP23.MIP	11/26/2013
MIP24.MIP	11/26/2013
MIP25.MIP	11/26/2013
MIP26.MIP	11/26/2013

APPENDIX B
CROSS SECTIONS


A
A
SPMIP4A.DAT (mS/m)
SPMIP1.DAT (mS/m)
SPMIP5.DAT (mS/m)
SPMIP6.DAT (mS/m)
SPMIP7.DAT (mS/m)
SPMIP8.DAT (mS/m)
SPMIP9.DAT (mS/m)
0
200
400
5800
Depth (ft)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
WT
TOTAL DEPTH: 27.6 FEET
TOTAL DEPTH: 24.25 FEET
TOTAL DEPTH: 24.75 FEET
TOTAL DEPTH: 25.8 FEET
TOTAL DEPTH: 29.8 FEET
TOTAL DEPTH: 27.55 FEET
TOTAL DEPTH: 26.75 FEET
0
1
2
μV×10⁷


B
B'
MIP26.MIP (mS/m)
MIP24.MIP (mS/m)
SPMIP8.DAT (mS/m)
SPMIP10.DAT (mS/m)
SPMIP12.DAT (mS/m)
0
200
400
580
Depth (ft)
WT
TOTAL DEPTH: 26.4 FEET
TOTAL DEPTH: 27.8 FEET
TOTAL DEPTH: 27.55 FEET
TOTAL DEPTH: 27.55 FEET
TOTAL DEPTH: 15.65 FEET
μV ×10⁷


C
C'
MIP26.MIP (mS/m)
MIP25.MIP (mS/m)
MIP23.MIP (mS/m)
0
200
400
580
Depth (ft)
WT
TOTAL DEPTH: 26.4 FEET
TOTAL DEPTH: 32 FEET
TOTAL DEPTH: 27.4 FEET
μV×10⁷
0
1
2


D
D'
MIP23.MIP (mS/m)
MIP22.MIP (mS/m)
SPMIP9.DAT (mS/m)
SPMIP10.DAT (mS/m)
SPMIP17.DAT (mS/m)
0
200
400
580
Depth (ft)
WT
TOTAL DEPTH: 27.4 FEET
TOTAL DEPTH: 25.1 FEET
TOTAL DEPTH: 26.75 FEET
TOTAL DEPTH: 27.55 FEET
TOTAL DEPTH: 24.05 FEET
μV ×10⁷

Legend

ECD

All ECD units in Microvolts x 10^6

Electrical Conductivity

All Electrical Conductivity units in mS/m

Estimated Groundwater Table

APPENDIX C

INVESTIGATION AND MONITORING PLAN

1.0 PHASE II – PROPOSED INVESTIGATION AND MONITORING PLAN

1.1 OBJECTIVES

This Investigation and Monitoring Plan is proposed in support of the Supplemental Site Investigation (SSI). The purpose of this plan is to quantify the data collected during the SSI and to more accurately monitor the site in the future.

Using the data gathered during the MIP investigation, the objectives of this work plan are:

1. Decommission MW-3, MW-4, and MW-5 as per DER-10 Guidelines. Based on data gathered from the SSI and past groundwater flow data, there is no evidence suggesting contaminated groundwater is travelling to MW-5.

2. Replace existing well MW-3 with a new well DSI-1 at a screened interval of 13-18' bgs based on the ECD responses generated by the MIP and install a new monitoring well DSI- 4 at a screen interval of 5-10' bgs to the east of MW-4, near B-12.

3. Install and develop two additional monitoring wells DSI-2 and DSI 3 at screened intervals of 9-19' bgs and 19-24' bgs respectively based on the depths and extents of responses generated by the ECD (See Figure 4 for exact locations);
4. Determine whether a new monitoring well needs to be installed near MW-1 by advancing one (1) soil boring, continuously sampling, and monitoring the samples in the field with a PID.
5. Complete two (2) soil borings near B-25, the former dumpster location. Soils will be continuously sampled and analyzed for VOCs.
6. Quantify the data from the MIP investigation by collecting additional groundwater and soil samples. Groundwater samples will be analyzed for VOCs. Soil samples will be continuously collected. Lithology will be visually described and soils will be sampled for VOCs at specified depths based on elevated ECD responses.

7. Establish a new quarterly monitoring program for the Site based on new wells and supporting data,
8. Upon review and approval of the DEC, and dependent on weather conditions, initiate the expanded investigation plan by Spring 2014.

1.2 SUPPLEMENTAL SITE INVESTIGATION STRATEGY

Four (4) new monitoring wells will be installed and three (3) soil borings will be completed (See Figure 5). Proposed screened intervals of monitoring wells are based on the ECD response and the vertical extent of the response at each boring (See Table 1 below). Soil samples will be collected during well installation and boring completion at depths concurrent with high ECD responses.

Table 1:
Proposed Screen Intervals

Proposed Well	Associated Boring	Depth of Max ECD Response (feet bgs)	Proposed Screen Interval (feet bgs)
DSI-1	B-1	13-18	13-18
DSI-2	B-25	9-20	9-19
DSI-3	B-17	20-23	19-24
DSI-4	B-12	5-10	5-10

2.0 Monitoring Well Installation

A combination hollow stem auger/geoprobe drill rig will be used to advance the monitoring wells. During the advancement of the wells, soil samples will be continuously collected and screened for VOCs. Frequency of samples will be determined by the ability of either the geoprobe or auger to advance through the subsurface. Soil samples will be collected using standard soil sampling methods and select intervals will be submitted to a NYSDOH ELAP-Certified laboratory for analysis. Soil samples will be analyzed for VOCs by EPA Method 8260 in accordance with the standard laboratory methods and procedures.

All wells will be constructed with a minimum of 5 feet of 2-inch diameter schedule 40, 0.010-inch PVC well screens, No. 1 graded sand packs, schedule 40 PVC riser (length to be determined during construction), bentonite seals, and depending on final location, stand pipes or protective road boxes. All wells will be surveyed horizontally and vertically.

Monitoring wells will be developed upon installation. All wells will be developed until the turbidity of the recovered groundwater is low based on visual inspection. SPECTRA will perform a complete round of depth to water measurements to determine the stabilized groundwater depths and calculate groundwater elevations.

2.1 Monitoring Well Screening

Existing monitoring well MW-3 is screened from 17.5 to 27.5 feet below ground surface (bgs). The ECD log from adjacent boring B-1 shows that the highest level of response begins around 13 feet bgs and extends to a depth of 18 feet bgs. Therefore, MW-3 is not screened across the most effective interval for determining contaminant impacts to groundwater. MW-3R will be installed proximal to MW-3 and screened from 13 to 18 feet bgs.

The ECD response at B-25 is attributed to the historical placement of dumpsters during a time when waste containing TCE was being discarded. The high response begins around 9 feet bgs and continues to 19 feet bgs. A new well will be drilled near B-25 to a depth of 19 feet bgs and screened the final 10 feet to assess potential impacts to groundwater quality.

Borings 11, 12, and 13 were completed in order to confirm low concentrations in the area surrounding MW-4. However, boring 12 showed an elevated ECD response from 5 to 10 feet bgs. A new monitoring well will be drilled east of MW-4, near B-12. The well will be drilled to 10 feet bgs and screened from 5 to 10 feet bgs. This screen interval may be adjusted in the field depending on the depth to groundwater.

A new monitoring well will also be placed near B-17 due to the elevated ECD response from 20 to 23 feet bgs. This well will be drilled to 24 feet bgs and screened from 19 to 24 feet.

3.0 Groundwater Sampling

Groundwater samples will be collected from all wells approximately one week following their proper development. Prior to sampling, SPECTRA will perform a second complete round of depth to groundwater measurements to determine the stabilized depths and calculate groundwater elevations.

All wells will be sampled using low-flow sampling procedures. A low-flow (e.g., 0.1 to 0.5 L/min) pump will be used for purging and sampling. The pump intake will be set at the approximate mid-screen depth. Well drawdown will be monitored and the pump rate will be adjusted if drawdown exceeds 1 foot. If possible, a flow rate of 0.1 to 0.5 L/min will be maintained during purging. Water quality parameters, including pH, conductivity, temperature, dissolved oxygen (DO), and turbidity will be measured every 5 minutes during sampling. A minimum of 1 L will be purged between readings, and a goal will be to collect samples after stabilization is achieved (three successive readings within: ± 0.1 for pH, ± 3% for conductivity, ± 10 mv for redox, and ±10% for turbidity and dissolved oxygen) and/or once three (3) well volumes have been purged. VOC samples will be collected at a flow rate between 100 and 250 ml/min.

All groundwater samples will be submitted to a NYSDOH ELAP-certified laboratory and analyzed for VOCs by EPA Method 8260.

4.0 Additional Soil Borings

At boring 19, located near MW-1, the MIP reached refusal at a shallow depth. Consequently, there is not enough data to determine whether this area should be monitored in the future. An adjacent soil boring will be completed and continuously sampled in order to better characterize this location. If an elevated PID reading is detected, a new monitoring well will be proposed.

Since there is limited data near boring B-25, two soil borings will be advanced and continuously sampled. Soil samples will be analyzed for VOCs.

5.0 Monitoring Plan

Within 60 days after the initial new round of sampling described in Section 3.0, Spectra will conduct a second round of sampling to confirm the initial findings

APPENDIX D

LAB SAMPLING REPORT

ANALYTICAL REPORT

Lab Number:	L1321934
Client:	Spectra Environmental Group 19 British American Blvd. Latham, NY 12110
ATTN:	Joe Krikorian
Phone:	(518) 782-0882
Project Name:	DSI
Project Number:	11124
Report Date:	11/05/13

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: DSI
Project Number: 11124

Lab Number: L1321934
Report Date: 11/05/13

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1321934-01	GW1-1620-20131029	POESTENKILL, NY	10/29/13 07:30
L1321934-02	SS1-1620-20131029	POESTENKILL, NY	10/29/13 07:30
L1321934-03	SS2-0510-20131029	POESTENKILL, NY	10/29/13 09:30

Project Name: DSI
Project Number: 11124

Lab Number: L1321934
Report Date: 11/05/13

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: DSI
Project Number: 11124

Lab Number: L1321934
Report Date: 11/05/13

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Cynthia McQueen

Title: Technical Director/Representative Date: 11/05/13

ORGANICS

VOLATILES

Project Name: DSI **Lab Number:** L1321934

Project Number: 11124 **Report Date:** 11/05/13

SAMPLE RESULTS

Lab ID:	L1321934-01	Date Collected:	10/29/13 07:30
Client ID:	GW1-1620-20131029	Date Received:	10/30/13
Sample Location:	POESTENKILL, NY	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C		
Analytical Date:	11/01/13 16:34		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.13	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14	1
Benzene	0.21	J	ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.33	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.14	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	100		ug/l	0.50	0.17	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1

Project Name: DSI **Lab Number:** L1321934

Project Number: 11124 **Report Date:** 11/05/13

SAMPLE RESULTS

Lab ID: L1321934-01 Date Collected: 10/29/13 07:30

Client ID: GW1-1620-20131029 Date Received: 10/30/13

Sample Location: POESTENKILL, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	16		ug/l	5.0	1.0	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	1.0	J	ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	41.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	104		70-130

Project Name: DSI **Lab Number:** L1321934

Project Number: 11124 **Report Date:** 11/05/13

SAMPLE RESULTS

Lab ID:	L1321934-02	Date Collected:	10/29/13 07:30
Client ID:	SS1-1620-20131029	Date Received:	10/30/13
Sample Location:	POESTENKILL, NY	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	10/31/13 17:34		
Analyst:	PP		
Percent Solids:	92%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	11	2.2	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.19	1
Chloroform	ND		ug/kg	1.6	0.40	1
Carbon tetrachloride	ND		ug/kg	1.1	0.23	1
1,2-Dichloropropane	ND		ug/kg	3.8	0.25	1
Dibromochloromethane	ND		ug/kg	1.1	0.33	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.33	1
Tetrachloroethene	ND		ug/kg	1.1	0.15	1
Chlorobenzene	ND		ug/kg	1.1	0.38	1
Trichlorofluoromethane	ND		ug/kg	5.4	0.13	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.16	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.12	1
Bromodichloromethane	ND		ug/kg	1.1	0.25	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.13	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.14	1
Bromoform	ND		ug/kg	4.4	0.45	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.18	1
Benzene	ND		ug/kg	1.1	0.13	1
Toluene	ND		ug/kg	1.6	0.12	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	5.4	0.85	1
Bromomethane	ND		ug/kg	2.2	0.37	1
Vinyl chloride	ND		ug/kg	2.2	0.15	1
Chloroethane	ND		ug/kg	2.2	0.34	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.23	1
Trichloroethene	5.7		ug/kg	1.1	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	5.4	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	5.4	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	5.4	0.26	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.11	1

Project Name: DSI **Lab Number:** L1321934

Project Number: 11124 **Report Date:** 11/05/13

SAMPLE RESULTS

Lab ID: L1321934-02 Date Collected: 10/29/13 07:30

Client ID: SS1-1620-20131029 Date Received: 10/30/13

Sample Location: POESTENKILL, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
p/m-Xylene	0.74	J	ug/kg	2.2	0.35	1
o-Xylene	ND		ug/kg	2.2	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.16	1
Styrene	ND		ug/kg	2.2	0.34	1
Dichlorodifluoromethane	ND		ug/kg	11	0.24	1
Acetone	ND		ug/kg	11	3.4	1
Carbon disulfide	ND		ug/kg	11	2.2	1
2-Butanone	ND		ug/kg	11	0.39	1
4-Methyl-2-pentanone	ND		ug/kg	11	0.26	1
2-Hexanone	ND		ug/kg	11	0.20	1
1,2-Dibromoethane	ND		ug/kg	4.4	0.19	1
n-Butylbenzene	ND		ug/kg	1.1	0.22	1
sec-Butylbenzene	ND		ug/kg	1.1	0.22	1
tert-Butylbenzene	ND		ug/kg	5.4	0.61	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.4	0.86	1
Isopropylbenzene	ND		ug/kg	1.1	0.18	1
n-Propylbenzene	ND		ug/kg	1.1	0.14	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.4	0.86	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.4	0.16	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.4	0.62	1
1,4-Dioxane	ND		ug/kg	110	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	102		70-130

Project Name: DSI **Lab Number:** L1321934

Project Number: 11124 **Report Date:** 11/05/13

SAMPLE RESULTS

Lab ID:	L1321934-03	Date Collected:	10/29/13 09:30
Client ID:	SS2-0510-20131029	Date Received:	10/30/13
Sample Location:	POESTENKILL, NY	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	10/31/13 18:01		
Analyst:	PP		
Percent Solids:	86%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	12	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.7	0.20	1
Chloroform	ND		ug/kg	1.7	0.43	1
Carbon tetrachloride	ND		ug/kg	1.2	0.24	1
1,2-Dichloropropane	ND		ug/kg	4.0	0.26	1
Dibromochloromethane	ND		ug/kg	1.2	0.36	1
1,1,2-Trichloroethane	ND		ug/kg	1.7	0.35	1
Tetrachloroethene	ND		ug/kg	1.2	0.16	1
Chlorobenzene	ND		ug/kg	1.2	0.40	1
Trichlorofluoromethane	ND		ug/kg	5.8	0.14	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.17	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.13	1
Bromodichloromethane	ND		ug/kg	1.2	0.26	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.15	1
Bromoform	ND		ug/kg	4.6	0.48	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.20	1
Benzene	ND		ug/kg	1.2	0.14	1
Toluene	ND		ug/kg	1.7	0.13	1
Ethylbenzene	ND		ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	5.8	0.91	1
Bromomethane	ND		ug/kg	2.3	0.39	1
Vinyl chloride	ND		ug/kg	2.3	0.16	1
Chloroethane	ND		ug/kg	2.3	0.36	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.24	1
Trichloroethene	5.0		ug/kg	1.2	0.18	1
1,2-Dichlorobenzene	ND		ug/kg	5.8	0.21	1
1,3-Dichlorobenzene	ND		ug/kg	5.8	0.21	1
1,4-Dichlorobenzene	ND		ug/kg	5.8	0.28	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.12	1

Project Name: DSI **Lab Number:** L1321934

Project Number: 11124 **Report Date:** 11/05/13

SAMPLE RESULTS

Lab ID: L1321934-03 Date Collected: 10/29/13 09:30

Client ID: SS2-0510-20131029 Date Received: 10/30/13

Sample Location: POESTENKILL, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
p/m-Xylene	ND		ug/kg	2.3	0.37	1
o-Xylene	ND		ug/kg	2.3	0.31	1
cis-1,2-Dichloroethene	2.0		ug/kg	1.2	0.17	1
Styrene	ND		ug/kg	2.3	0.36	1
Dichlorodifluoromethane	ND		ug/kg	12	0.25	1
Acetone	ND		ug/kg	12	3.6	1
Carbon disulfide	ND		ug/kg	12	2.3	1
2-Butanone	ND		ug/kg	12	0.41	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.28	1
2-Hexanone	ND		ug/kg	12	0.22	1
1,2-Dibromoethane	ND		ug/kg	4.6	0.20	1
n-Butylbenzene	ND		ug/kg	1.2	0.23	1
sec-Butylbenzene	ND		ug/kg	1.2	0.24	1
tert-Butylbenzene	ND		ug/kg	5.8	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.8	0.91	1
Isopropylbenzene	ND		ug/kg	1.2	0.19	1
n-Propylbenzene	ND		ug/kg	1.2	0.14	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.8	0.91	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.8	0.16	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.8	0.66	1
1,4-Dioxane	ND		ug/kg	120	20.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	100		70-130

Project Name: DSI
Project Number: 11124

Lab Number: L1321934
Report Date: 11/05/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/31/13 11:13
Analyst: PP

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-03 Batch: WG648821-3					
Methylene chloride	ND		ug/kg	10	2.0
1,1-Dichloroethane	ND		ug/kg	1.5	0.18
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.31
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.12
1,2-Dichloroethane	ND		ug/kg	1.0	0.15
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.23
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.13
Bromoform	ND		ug/kg	4.0	0.41
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.17
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.11
Ethylbenzene	ND		ug/kg	1.0	0.15
Chloromethane	ND		ug/kg	5.0	0.78
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.14
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.20
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21
Trichloroethene	ND		ug/kg	1.0	0.15
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.24
Methyl tert butyl ether	ND		ug/kg	2.0	0.10

Project Name: DSI
Project Number: 11124

Lab Number: L1321934
Report Date: 11/05/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/31/13 11:13
Analyst: PP

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-03 Batch: WG648821-3					
p/m-Xylene	ND		ug/kg	2.0	0.32
o-Xylene	ND		ug/kg	2.0	0.27
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.15
Styrene	ND		ug/kg	2.0	0.31
Dichlorodifluoromethane	ND		ug/kg	10	0.22
Acetone	ND		ug/kg	10	3.1
Carbon disulfide	ND		ug/kg	10	2.0
2-Butanone	ND		ug/kg	10	0.36
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.19
1,2-Dibromoethane	ND		ug/kg	4.0	0.18
n-Butylbenzene	0.24	J	ug/kg	1.0	0.20
sec-Butylbenzene	ND		ug/kg	1.0	0.20
tert-Butylbenzene	ND		ug/kg	5.0	0.56
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.79
Isopropylbenzene	ND		ug/kg	1.0	0.17
n-Propylbenzene	ND		ug/kg	1.0	0.12
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.79
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.57
Methyl Acetate	ND		ug/kg	20	0.76
Cyclohexane	ND		ug/kg	20	1.1
1,4-Dioxane	ND		ug/kg	100	17.
Freon-113	ND		ug/kg	20	0.27
Methyl cyclohexane	ND		ug/kg	4.0	1.3

Project Name: DSI
Project Number: 11124

Lab Number: L1321934
Report Date: 11/05/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/31/13 11:13
Analyst: PP

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-03 Batch: WG648821-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	101		70-130

Project Name: DSI **Lab Number:** L1321934

Project Number: 11124 **Report Date:** 11/05/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/01/13 13:29
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG648917-3					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.13
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.33
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.14
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.17
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70

Project Name: DSI
Project Number: 11124

Lab Number: L1321934
Report Date: 11/05/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/01/13 13:29
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG648917-3					
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.0
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
1,2-Dibromoethane	ND		ug/l	2.0	0.65
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.24
1,4-Dioxane	ND		ug/l	250	41.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.29

Project Name: DSI
Project Number: 11124

Lab Number: L1321934
Report Date: 11/05/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/01/13 13:29
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG648917-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	99		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: DSI
Project Number: 11124

Lab Number: L1321934
Report Date: 11/05/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03 Batch: WG648821-1 WG648821-2								
Methylene chloride	100		100		70-130	0		30
1,1-Dichloroethane	98		99		70-130	1		30
Chloroform	98		98		70-130	0		30
Carbon tetrachloride	100		96		70-130	4		30
1,2-Dichloropropane	99		100		70-130	1		30
Dibromochloromethane	88		88		70-130	0		30
1,1,2-Trichloroethane	91		90		70-130	1		30
Tetrachloroethene	92		87		70-130	6		30
Chlorobenzene	89		90		70-130	1		30
Trichlorofluoromethane	99		99		70-139	0		30
1,2-Dichloroethane	97		99		70-130	2		30
1,1,1-Trichloroethane	98		97		70-130	1		30
Bromodichloromethane	98		99		70-130	1		30
trans-1,3-Dichloropropene	86		88		70-130	2		30
cis-1,3-Dichloropropene	98		99		70-130	1		30
1,1-Dichloropropene	98		95		70-130	3		30
Bromoform	87		87		70-130	0		30
1,1,2,2-Tetrachloroethane	84		85		70-130	1		30
Benzene	98		96		70-130	2		30
Toluene	88		87		70-130	1		30
Ethylbenzene	89		88		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: DSI

Project Number: 11124

Lab Number: L1321934

Report Date: 11/05/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03 Batch: WG648821-1 WG648821-2								
Chloromethane	95		93		52-130	2		30
Bromomethane	112		112		57-147	0		30
Vinyl chloride	98		95		67-130	3		30
Chloroethane	100		98		50-151	2		30
1,1-Dichloroethene	100		98		65-135	2		30
trans-1,2-Dichloroethene	98		96		70-130	2		30
Trichloroethene	100		101		70-130	1		30
1,2-Dichlorobenzene	85		87		70-130	2		30
1,3-Dichlorobenzene	86		86		70-130	0		30
1,4-Dichlorobenzene	86		87		70-130	1		30
Methyl tert butyl ether	112		110		66-130	2		30
p/m-Xylene	90		88		70-130	2		30
o-Xylene	89		90		70-130	1		30
cis-1,2-Dichloroethene	99		96		70-130	3		30
Dibromomethane	102		103		70-130	1		30
Styrene	89		90		70-130	1		30
Dichlorodifluoromethane	96		94		30-146	2		30
Acetone	**153**	Q	127		54-140	19		30
Carbon disulfide	92		90		59-130	2		30
2-Butanone	124		113		70-130	9		30
Vinyl acetate	120		120		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: DSI

Project Number: 11124

Lab Number: L1321934

Report Date: 11/05/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03 Batch: WG648821-1 WG648821-2								
4-Methyl-2-pentanone	104		104		70-130	0		30
1,2,3-Trichloropropane	85		86		68-130	1		30
2-Hexanone	98		90		70-130	9		30
Bromochloromethane	105		104		70-130	1		30
2,2-Dichloropropane	101		98		70-130	3		30
1,2-Dibromoethane	92		91		70-130	1		30
1,3-Dichloropropane	89		91		69-130	2		30
1,1,1,2-Tetrachloroethane	90		88		70-130	2		30
Bromobenzene	87		88		70-130	1		30
n-Butylbenzene	86		85		70-130	1		30
sec-Butylbenzene	87		86		70-130	1		30
tert-Butylbenzene	86		85		70-130	1		30
o-Chlorotoluene	83		84		70-130	1		30
p-Chlorotoluene	85		85		70-130	0		30
1,2-Dibromo-3-chloropropane	82		78		68-130	5		30
Hexachlorobutadiene	88		83		67-130	6		30
Isopropylbenzene	90		85		70-130	6		30
p-Isopropyltoluene	86		84		70-130	2		30
Naphthalene	85		84		70-130	1		30
Acrylonitrile	106		102		70-130	4		30
Isopropyl Ether	101		102		66-130	1		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: DSI
Project Number: 11124

Lab Number: L1321934
Report Date: 11/05/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03 Batch: WG648821-1 WG648821-2								
tert-Butyl Alcohol	97		94		70-130	3		30
n-Propylbenzene	85		83		70-130	2		30
1,2,3-Trichlorobenzene	85		87		70-130	2		30
1,2,4-Trichlorobenzene	85		87		70-130	2		30
1,3,5-Trimethylbenzene	86		85		70-130	1		30
1,2,4-Trimethylbenzene	84		85		70-130	1		30
Methyl Acetate	99		99		51-146	0		30
Ethyl Acetate	103		104		70-130	1		30
Acrolein	125		123		70-130	2		30
Cyclohexane	101		99		59-142	2		30
1,4-Dioxane	107		107		65-136	0		30
Freon-113	104		102		50-139	2		30
1,4-Diethylbenzene	99		101		70-130	2		30
4-Ethyltoluene	100		100		70-130	0		30
1,2,4,5-Tetramethylbenzene	99		99		70-130	0		30
Tetrahydrofuran	116		111		66-130	4		30
Ethyl ether	100		101		67-130	1		30
trans-1,4-Dichloro-2-butene	86		87		70-130	1		30
Methyl cyclohexane	102		97		70-130	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: DSI
Project Number: 11124

Lab Number: L1321934
Report Date: 11/05/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03 Batch: WG648821-1 WG648821-2								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	96		94		70-130
Toluene-d8	92		89		70-130
4-Bromofluorobenzene	97		96		70-130
Dibromofluoromethane	101		98		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: DSI
Project Number: 11124

Lab Number: L1321934
Report Date: 11/05/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG648917-1 WG648917-2								
Methylene chloride	97		93		70-130	4		20
1,1-Dichloroethane	106		102		70-130	4		20
Chloroform	103		101		70-130	2		20
2-Chloroethylvinyl ether	70		70		70-130	0		20
Carbon tetrachloride	98		94		63-132	4		20
1,2-Dichloropropane	106		104		70-130	2		20
Dibromochloromethane	106		102		63-130	4		20
1,1,2-Trichloroethane	109		106		70-130	3		20
Tetrachloroethene	100		96		70-130	4		20
Chlorobenzene	104		99		75-130	5		20
Trichlorofluoromethane	104		98		62-150	6		20
1,2-Dichloroethane	109		106		70-130	3		20
1,1,1-Trichloroethane	100		97		67-130	3		20
Bromodichloromethane	105		102		67-130	3		20
trans-1,3-Dichloropropene	108		103		70-130	5		20
cis-1,3-Dichloropropene	93		91		70-130	2		20
1,1-Dichloropropene	104		101		70-130	3		20
Bromoform	107		105		54-136	2		20
1,1,2,2-Tetrachloroethane	114		110		67-130	4		20
Benzene	106		103		70-130	3		20
Toluene	105		101		70-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: DSI

Project Number: 11124

Lab Number: L1321934

Report Date: 11/05/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG648917-1 WG648917-2								
Ethylbenzene	112		108		70-130	4		20
Chloromethane	69		**61**	Q	64-130	12		20
Bromomethane	74		72		39-139	3		20
Vinyl chloride	99		93		55-140	6		20
Chloroethane	103		100		55-138	3		20
1,1-Dichloroethene	94		90		61-145	4		20
trans-1,2-Dichloroethene	100		97		70-130	3		20
Trichloroethene	100		99		70-130	1		20
1,2-Dichlorobenzene	108		104		70-130	4		20
1,3-Dichlorobenzene	107		104		70-130	3		20
1,4-Dichlorobenzene	104		100		70-130	4		20
Methyl tert butyl ether	97		97		63-130	0		20
p/m-Xylene	112		107		70-130	5		20
o-Xylene	105		102		70-130	3		20
cis-1,2-Dichloroethene	104		104		70-130	0		20
Dibromomethane	106		104		70-130	2		20
1,2,3-Trichloropropane	110		107		64-130	3		20
Acrylonitrile	112		112		70-130	0		20
Isopropyl Ether	112		109		70-130	3		20
tert-Butyl Alcohol	101		102		70-130	1		20
Styrene	114		110		70-130	4		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: DSI
Project Number: 11124

Lab Number: L1321934
Report Date: 11/05/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG648917-1 WG648917-2								
Dichlorodifluoromethane	91		86		36-147	6		20
Acetone	126		122		58-148	3		20
Carbon disulfide	100		97		51-130	3		20
2-Butanone	119		112		63-138	6		20
Vinyl acetate	107		108		70-130	1		20
4-Methyl-2-pentanone	106		104		59-130	2		20
2-Hexanone	123		119		57-130	3		20
Acrolein	128		123		40-160	4		20
Bromochloromethane	108		104		70-130	4		20
2,2-Dichloropropane	102		96		63-133	6		20
1,2-Dibromoethane	105		102		70-130	3		20
1,3-Dichloropropane	109		105		70-130	4		20
1,1,1,2-Tetrachloroethane	105		101		64-130	4		20
Bromobenzene	106		102		70-130	4		20
n-Butylbenzene	101		97		53-136	4		20
sec-Butylbenzene	102		97		70-130	5		20
tert-Butylbenzene	104		100		70-130	4		20
o-Chlorotoluene	112		108		70-130	4		20
p-Chlorotoluene	112		108		70-130	4		20
1,2-Dibromo-3-chloropropane	110		109		41-144	1		20
Hexachlorobutadiene	100		97		63-130	3		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: DSI
Project Number: 11124

Lab Number: L1321934
Report Date: 11/05/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG648917-1 WG648917-2								
Isopropylbenzene	99		95		70-130	4		20
p-Isopropyltoluene	99		96		70-130	3		20
Naphthalene	93		92		70-130	1		20
n-Propylbenzene	112		108		69-130	4		20
1,2,3-Trichlorobenzene	99		97		70-130	2		20
1,2,4-Trichlorobenzene	92		90		70-130	2		20
1,3,5-Trimethylbenzene	114		109		64-130	4		20
1,2,4-Trimethylbenzene	107		104		70-130	3		20
Methyl Acetate	118		113		70-130	4		20
Ethyl Acetate	122		120		70-130	2		20
Cyclohexane	102		98		70-130	4		20
Ethyl-Tert-Butyl-Ether	104		103		70-130	1		20
Tertiary-Amyl Methyl Ether	99		98		66-130	1		20
1,4-Dioxane	108		107		56-162	1		20
Freon-113	101		97		70-130	4		20
1,4-Diethylbenzene	93		90		70-130	3		20
4-Ethyltoluene	110		105		70-130	5		20
1,2,4,5-Tetramethylbenzene	106		100		70-130	6		20
Ethyl ether	112		109		59-134	3		20
trans-1,4-Dichloro-2-butene	112		109		70-130	3		20
Methyl cyclohexane	99		95		70-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: DSI
Project Number: 11124

Lab Number: L1321934
Report Date: 11/05/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG648917-1 WG648917-2								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	102		102		70-130
Toluene-d8	98		98		70-130
4-Bromofluorobenzene	104		102		70-130
Dibromofluoromethane	99		100		70-130

INORGANICS
&
MISCELLANEOUS

Project Name: DSI
Project Number: 11124

Lab Number: L1321934
Report Date: 11/05/13

SAMPLE RESULTS

Lab ID: L1321934-02
Client ID: SS1-1620-20131029
Sample Location: POESTENKILL, NY
Matrix: Soil

Date Collected: 10/29/13 07:30
Date Received: 10/30/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	91.9		%	0.100	NA	1	-	10/31/13 01:23	30,2540G	RT

Project Name: DSI
Project Number: 11124

Lab Number: L1321934
Report Date: 11/05/13

SAMPLE RESULTS

Lab ID: L1321934-03
Client ID: SS2-0510-20131029
Sample Location: POESTENKILL, NY
Matrix: Soil

Date Collected: 10/29/13 09:30
Date Received: 10/30/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.4		%	0.100	NA	1	-	10/31/13 01:23	30,2540G	RT

Lab Duplicate Analysis
Batch Quality Control

Project Name: DSI
Project Number: 11124

Lab Number: L1321934
Report Date: 11/05/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02-03 QC Batch ID: WG648299-1 QC Sample: L1321658-01 Client ID: DUP Sample						
Solids, Total	71.7	73.2	%	2		20

Project Name: DSI
Project Number: 11124

Lab Number: L1321934
Report Date: 11/05/13

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1321934-01A	Vial HCl preserved	A	N/A	2.4	Y	Absent	NYTCL-8260(14)
L1321934-01B	Vial HCl preserved	A	N/A	2.4	Y	Absent	NYTCL-8260(14)
L1321934-01C	Vial HCl preserved	A	N/A	2.4	Y	Absent	NYTCL-8260(14)
L1321934-02A	Vial Large Septa unpreserved	A	N/A	2.4	Y	Absent	NYTCL-8260(14)
L1321934-02B	Plastic 2oz unpreserved for TS s	A	N/A	2.4	Y	Absent	TS(7)
L1321934-03A	Vial Large Septa unpreserved	A	N/A	2.4	Y	Absent	NYTCL-8260(14)
L1321934-03B	Plastic 2oz unpreserved for TS s	A	N/A	2.4	Y	Absent	TS(7)

*Values in parentheses indicate holding time in days

Project Name:	DSI	**Lab Number:**	L1321934
Project Number:	11124	**Report Date:**	11/05/13

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

Report Format: DU Report with "J" Qualifiers

Project Name:	DSI	**Lab Number:**	L1321934
Project Number:	11124	**Report Date:**	11/05/13

Data Qualifiers

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with "J" Qualifiers

Project Name:	DSI	**Lab Number:**	L1321934
Project Number:	11124	**Report Date:**	11/05/13

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised October 1, 2013 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Selenium, Silver, Sodium, Thallium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223, Enumeration and P/A), E. Coli. – Colilert (SM9223, Enumeration and P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), E. Coli – Colilert (SM9223 Enumeration), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterococcus - Enterolert.

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Dalapon, Volatile Organics (SW 8260), Acid Extractables (Phenols) (SW 8270), Benzidines (SW 8270), Phthalates (SW 8270), Nitrosamines (SW 8270), Nitroaromatics & Cyclic Ketones (SW 8270), PAHs (SW 8270), Haloethers (SW 8270), Chlorinated Hydrocarbons (SW 8270).)

State of Illinois Certificate/Lab ID: 003155. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM2120B, 2320B, 2510B, 2540C, SM4500CN-CE, 4500F-C, 4500H-B, 4500NO3-F, 5310C, EPA 200.7, 200.8, 245.1, 300.0. Organic Parameters: EPA 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: SM2120B, 2310B, 2320B, 2340B, 2510B, 2540B, 2540C, 2540D, SM4500CL-E, 4500CN-E, 4500F-C, 4500H-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500P-E, 4500S-D, 4500SO3-B, 5210B, 5220D, 5310C, 5540C, EPA 120.1, 1664A, 200.7, 200.8, 245.1, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1. Organic Parameters: EPA 608, 624, 625.)

Hazardous and Solid Waste (Inorganic Parameters: EPA 1010A, 1030, 1311, 1312, 6010C, 6020A, 7196A, 7470A, 7471B, 9012B, 9014, 9038, 9040C, 9045D, 9050A, 9065, 9251. Organic Parameters: 8011 (NPW only), 8015C, 8081B, 8082A, 8151A, 8260C, 8270D, 8315A, 8330.)

Maine Department of Human Services Certificate/Lab ID: 2009024.
Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2120B, 2130B, 2320B, 2510C, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, 5310C, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 8315A, 9010C, SM2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-C, 4500NH3-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500P-B, 4500P-E, 4500S2-D, 4500SO3-B, 5540C, 5210B, 5220D, 5310C, 9010B, 9030B, 9040C, 7470A, 7196A, 2340B, EPA 200.7, 6010C, 200.8, 6020A, 245.1, 1311, 1312, 3005A, Enterolert, 9223B, 9222D. Organic Parameters: 608, 624, 625, 8011, 8081B, 8082A, 8330, 8151A, 8260C, 8270D, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014, 9040B, 9045C, 6010C, 6020A, 7471B, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B, 9038, 9251. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260C, 8270D, 8330, 8151A, 8081B, 8082A, 3540C, 3546, 3580A, 3620C, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
*Drinking Water (*Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

*Non-Potable Water (*Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT,Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, SW-846 6010C, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9010C, 9030, 9040B, 9040C, SM2120B, 2310B, 2320B, 2340B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 4500SO3-B, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082A, 8081B, 8015C, 8151A, 8330, 8270D-SIM.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010C, 6020A, 7196A, 7471B, 1010, 1010A, 1030, 9010C, 9012B, 9014, 9030B, 9040C, 9045C, 9045D, 9050, 9065, 9251, 1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3050B, 3580A, 3620D, 3630C, 5030B, 5035, 8260C, 8270D, 8270D-SIM, 8330, 8151A, 8015B, 8015C, 8082A, 8081B.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 2064. ***NELAP Accredited.***
Drinking Water (Organic Parameters: **EPA 524.2:** Di-isopropyl ether (DIPE), Ethyl-t-butyl ether (ETBE), Tert-amyl methyl ether (TAME)).

Non-Potable Water (Organic Parameters: **EPA 8260C:** 1,3,5-Trichlorobenzene. **EPA 8015C(M):** TPH.)

Solid & Chemical Materials (Organic Parameters: **EPA 8260C:** 1,3,5-Trichlorobenzene.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.1, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310C, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, 4500SO4-E, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, SW-846 9040B, 9040C, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010C, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 5030C, 8011, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9030B, 1010, 1010A, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9010C, 9012B, 9014, 9038, 9040B, 9040C, 9045C, 9045D,

9050A, 9065, 9251. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3620C, 3630C, 5030B, 5030C, 5035L, 5035H, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.1, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2340B, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010C, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 7470A, SM2120B, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 8315A, 3005A, 9010C, 9030B. Organic Parameters: EPA 624, 8260C, 8270D, 8270D-SIM, 625, 608, 8081B, 8151A, 8330A, 8082A, EPA 3510C, 5030B, 5030C, 8015C, 8011.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, EPA 6010C, 6020A, 7196A, 7471B, 8315A, 9012B, 9014, 9065, 9050A, 9038, 9251, EPA 1311, 1312, 3005A, 3050B, 9010C, 9030B, 9040C, 9045D. Organic Parameters: EPA 8260C, 8270D, 8270D-SIM, 8015C, 8081B, 8151A, 8330A, 8082A, 3540C, 3546, 3580A, 5035A-H, 5035A-L.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. (Inorganic Parameters: SM2310B, 2320B, 4500Cl-E, 4500Cn-E, 9012B, 9014, Lachat 10-204-00-1-X, 1010A, 1030, 4500NO3-F, 353.2, 4500P-E, 4500SO4-E, 300.0, 4500S-D, 5310B, 5310C, 6010C, 6020A, 200.7, 200.8, 3500Cr-B, 7196A, 245.1, 7470A, 7471B, 1311,1312. Organic Parameters: 608, 8081B, 8082A, 624, 8260B, 625, 8270D, 8151A, 8015C, 504.1, MA-EPH, MA-VPH.)

Drinking Water Program Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: 200.7, 200.8, 300.0, 332.0, 2120B, 2320B, 2510B, 2540C, 4500-CN-CE, 4500F-C, 4500H+-B, 4500NO3-F, 5310C. Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1312, 3005A,3015, 3060A, 200.7, 200.8, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE, 245.1, 300.0, 350.1, 350.2, 351.1, 353.2, 420.1, 6010C, 6020A, 7196A, 7470A, 9030B, 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C, 9010C, 9040C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, 8015C, NJ-EPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010C, 6020A, 7196A, 7471B, 9010C, 9012B, 9014, 9040B, 9045D, 9050A, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3620C, 3630C, 5035, 8015C, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, NJ-EPH.)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. ***NELAP Accredited via NJ-DEP.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality Certificate/Lab ID: T104704476. ***NELAP Accredited.***
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 $S2^{-}$D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: EPA 200.7, 200.8, 300.0, 2510B, 2120B, 2540C, 4500CN-CE, 245.1, 2320B, 4500F-C, 4500NO3-F, 4500H+B, 5310C. Organic Parameters: EPA 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 200.8, 245.1, 300.0, 350.1, 351.1, 351.2, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 2340B, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 3500Cr-D, 426C, 4500Cl-E, 4500F-B, 4500F-C,

4500NH3-H, 4500NO2-B, 4500NO3-F, 4500 SO3-B, 4500H-B, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C, 9010Cm 9030B, 9040C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8011, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330,)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, 3060A, 3050B, 1311, 1312, 6010B, 6010C, 6020, , 7196A, 7471A, 7471B, 6020A, 9010C, 9012B, 9030B, 9014, 9038, 9040C, 9045D, 9251, 9050A, 9065. Organic Parameters: EPA 5030B, 5035, 3540C, 3546, 3550B, 3580A, 3620C, 3630C, 6020A, 8260B, 8260C, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330.)

Department of Defense, L-A-B Certificate/Lab ID: L2217.
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010C, 6020A, 245.1, 7470A, 9040B, 9010B, 180.1, 300.0, 332.0, 6860, 351.1, 353.2, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500Norg-C, 4500NO3-F, 5310C, 2130B, 2320B, 2340B, 2540C, 5540C, 3005A, 3015, 9056, 7196A, 3500-Cr-D. Organic Parameters: EPA 8015C, 8151A, 8260C, 8270D, 8270D-SIM, 8330A, 8082A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010C, 6020A, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9040B, 9045C, 9010C, 9012B, 9251, SM3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8015C, 8151A, 8260C, 8270D, 8270D-SIM, 8330A/B-prep, 8082A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether. **EPA 8260B:** 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8260 Non-potable water matrix:** Iodomethane (methyl iodide), Methyl methacrylate. **EPA 8260 Soil matrix:** Tert-amyl methyl ether (TAME), Diisopropyl ether (DIPE), Azobenzene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine. **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd In Lab: 10/30/13

ALPHA Job #: L1321934

Client Information

Client: Spectra Environmental
Address: 19 British American blvd Latham NY 12110
Phone: 518 782 0882
Fax:
Email: fpeduto@spectraenv.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: DSI
Project Location: Poestenkill NY
Project #: 11124
Project Manager: Frank Peduto
ALPHA Quote #:

Turn-Around Time

☐ Standard ☑ RUSH (only confirmed if pre-approved!)
Date Due: 10/7/13 Time:

Report Information - Data Deliverables

☐ FAX ☑ EMAIL
☑ ADEx ☐ Add'l Deliverables

Billing Information

☑ Same as Client info PO #: 11124

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS 8260 TCL TAL PLUS	8260 TCL TAL PLUS	Sample Specific Comments	TOTAL # BOTTLES
21934-01	GW-1620-20131029	10/29/13	730	GW	JCK	✓			
-02	SS1-1620-20131029	10/29/13	730	S	JCK		✓		
-03	SS2-6510-20131029	10/29/13	930	S	JCK		✓		

SAMPLE HANDLING

Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	✓		A																
Preservative	B																		

Relinquished By:	Date/Time	Received By:	Date/Time
	10/29/13 1125		10/29/13 1125
	10/29/13 2053		10/30/13 2053
	10/30/13 23:12		10/30/13 23:12

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)