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		☑	As Requested
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Reference: Former Lockheed Martin French Road Facility, Utica, NY

Attachment:

Copies	Doc Date	Pages	Description
1	**January 10, 2017**	**209 (pdf)**	**Final Document entitled "Excavation Initial Design Investigation Report, Former Lockheed Martin French Road Facility, Utica, New York"**
		7,578 (pdf)	**Appendix C – Analytical Laboratory Reports**

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Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
Utica, New York

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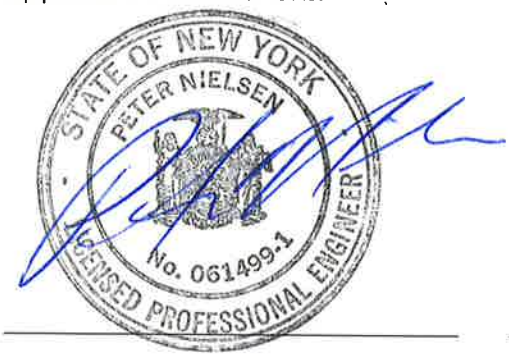
January 2017

Stantec

EXCAVATION INITIAL DESIGN
INVESTIGATION REPORT
FORMER LOCKHEED MARTIN FRENCH ROAD FACILITY
UTICA, NEW YORK

CERTIFICATIONS

I, Peter Nielsen, of Stantec Consulting Services Inc., certify that I am currently a NYS-registered professional engineer and that this *Excavation Initial Design Investigation Report* was prepared in accordance with applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that the described activities were performed in accordance with the DEC-approved work plan and any DEC-approved modifications.



Signature

1/10/2017

Date

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Acronyms and Abbreviations

1,1-DCA	1,1-dichloroethane
cis-1,2-DCE	cis-1,2-dichloroethene
CMS	Corrective Measures Study
CU	Commercial Use (NYSDEC Soil Cleanup Objective)
CVOC	chlorinated volatile organic compound
DCE	dichloroethene
DER	Division of Environmental Remediation
DUSR	data usability summary report
EDD	electronic data deliverable
EIMS	Environmental Information Management System
ft bgs	feet below ground surface
FNPD	Former Northern Perimeter Ditch
GCTS	Groundwater Collection and Treatment System
GPR	ground penetrating radar
HASP	Health and Safety Plan
IDW	investigation derived waste
Lockheed Martin	Lockheed Martin Corporation
mg/kg	milligrams per kilogram
MIP	Membrane Interface Probe
MS/MSD	matrix spike/matrix spike duplicate
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PCBs	polychlorinated biphenyls
PCE	tetrachloroethene

POGW	Protection of Groundwater (NYSDEC Soil Cleanup Objective)
QA/QC	quality assurance/quality control
QAPP	Quality Assurance Project Plan
RCRA	Resource Conservation and Recovery Act
SCO	Soil Cleanup Objective
Spectra	Spectra Subsurface Imaging Services Group, LLC
Stantec	Stantec Consulting Services Inc.
TCE	trichloroethene
TestAmerica	TestAmerica Laboratories, Inc.
µg/kg	micrograms per kilogram
USEPA	United States Environmental Protection Agency
VC	vinyl chloride
VOC	volatile organic compound
WM	Waste Management

1.0 Introduction

On behalf of Lockheed Martin Corporation (Lockheed Martin), Stantec Consulting Services Inc. (Stantec) has prepared this *Excavation Initial Design Investigation Report* (Report) for the Former Lockheed Martin French Road Facility, located at 525 French Road in Utica, Oneida County, New York (site) (see Figure 1). Lockheed Martin formerly owned and occupied the facility and used it for the manufacture of electronic equipment. The current occupant is ConMed, a manufacturer of medical equipment.

The goal of the investigation described herein was to further characterize the nature and extent of chlorinated volatile organic compound (VOC) impacts in Former Northern Perimeter Ditch (FNPD) Area 2, and polychlorinated biphenyl (PCB) impacts to surface soils near three locations where previous sampling identified PCB impacts.

This investigation was performed in accordance with the *Revised Work Plan for Excavation Initial Design Investigation* (Work Plan) dated November 3, 2015. The Work Plan was approved by the New York State Department of Conservation (NYSDEC) on November 13, 2015. The initial field program was implemented in November and December 2015. Based on review of preliminary findings and discussions with NYSDEC, three supplemental work plans for additional surface and subsurface investigations were developed, and subsequently approved by NYSDEC:

- *Supplemental Work Plan for Additional Surface Soil Sampling* (dated January 15, 2016; approved January 21, 2016);
- *Supplemental Work Plan for Additional Area 2 Subsurface Soil Sampling* (dated February 26, 2016; approved April 15, 2016 (with conditions described in the response letter); and
- *Second Supplemental Work Plan for Additional Surface Soil Sampling* (dated September 29, 2016; approved October 4, 2016).

This report summarizes the activities and results for both the initial and supplemental mobilizations for excavation initial design investigation.

2.0 Project Background and Objectives

2.1 BACKGROUND

The Former Lockheed Martin French Road Facility is located at 525 French Road in Utica, Oneida County, NY ("site"; see location, Figure 1). The site is divided into two sites being remediated under NYSDEC oversight: 1) the Solvent Dock Area (Site No. 633036A); and 2) the West Lot (Site No. 633036). Lockheed Martin Corporation (Lockheed Martin) entered into an Order on Consent with NYSDEC for the Solvent Dock Area on October 3, 2008; the Solvent Dock Area is regulated under the Resource Conservation and Recovery Act (RCRA). Lockheed Martin also entered into an Order on Consent for the West Lot on April 1, 1999; the West Lot is listed as a Class 4 site on the New York State Registry of Inactive Hazardous Waste Disposal Sites. Previous documents including reports of the various site investigations and remedial measures implemented to date should be referred to for a detailed site history. These documents are on file with the NYSDEC and most historical technical documents are available at the project's public repository site (Utica Public Library).

Based on the findings of the investigations to date, the NYSDEC issued its Final Statement of Basis (SB) in March 2015 (NYSDEC, 2015). As directed by the SB, both areas (Solvent Dock and West Lot) will be managed under a Site Management Plan (SMP) and Environmental Easement.

2.1.1 FNPD Area 2 Remediation

The SB directs that soil in FNPD "Area 2" that is impacted with chlorinated volatile organic compounds (CVOCs) at concentrations in excess of NYSDEC's Part 375 Soil Cleanup Objectives (SCOs) for the Protection of Groundwater (POGW) requires excavation and disposal. "Area 2" refers to a specific portion of the FNPD study area that is considered to be a source of VOC impacts to soil and groundwater, and is located immediately north of and partially beneath a one-story storage structure referred to as the "pole barn" on the north side of the ConMed facility (see Figure 2). This remedial action (combined with other actions) was included as Alternative A2-4 in the 2013 *Corrective Measures Study, Former Northern Perimeter Ditch, Solvent Dock Area, Former Lockheed Martin French Road Facility, Utica, New York*, prepared by ARCADIS (CMS; ARCADIS, 2013).

Based on findings summarized in the CMS and included in the SB, complete source-area soil excavation within a delimited portion of Area 2 would result in removal and disposal of approximately 1,170 cubic yards of soil over an area of approximately 2,100 square feet to a depth of approximately 15 ft. Eight test borings had previously been drilled in Area 2 within the excavation area delineated in the SB:

A2-PZ-1	A2-PZ-7	MW-17
A2-PZ-2	A2-PZ-8	MW-18
A2-PZ-6	MW-16	

Other borings were performed at the same time just outside the limits of the Area 2 proposed excavation limits, as shown on Figure 2.

The primary CVOCs of concern in soil are trichloroethene (TCE) and tetrachloroethene (PCE). Cis-1,2-dichlorethene (cis-1,2-DCE), 1,1-dichlorethane (1,1-DCA) and vinyl chloride (VC) were also detected although at lower concentrations. Soil samples from five of the eight borings inside the original Area 2 limits exhibited one or more CVOC at concentrations in excess of POGW SCOs (see red boring symbols on Figure 2). Samples obtained from borings MW-16, MW-17 and A2-PZ-8 did not exhibit CVOCs at exceedance levels. As indicated on Figure 2, the distribution of CVOCs at exceedance levels appeared generally to be in the eastern and western portions of Area 2; borings in the central portion did not exhibit POGW exceedances.

The SB also directed that the soil beneath the adjacent pole barn be more thoroughly characterized. The pole barn is an unoccupied slab-on-grade building immediately adjacent to and south of Area 2. As reported in the 1995 Phase I Environmental Site Assessment Report by Blasland, Bouck and Lee (BBL, 1995), the pole barn is the former location of a hazardous waste drum storage area. The pole barn contains a cylindrical sump structure, located along the interior of the north wall of the building. The sump was installed when the structure was built (prior to 1980). The pole barn floor is sloped towards the sump. Details of the sump construction are unknown. A former penetration through the concrete berm that surrounds the floor of the pole barn, which now appears to be plugged, is immediately north of the sump. The sump has typically been observed to contain clear water, sometimes filled to the brim, however the mechanism for infiltration of the water is unclear.

At the time the WP was prepared, one subsurface exploration (test boring/monitoring well PZ-42) had previously been advanced beneath the pole barn. A soil sample from this boring did not exhibit CVOC presence at concentrations in excess of POGW SCOs. Groundwater sampled in June 2010 from monitoring well PZ-42 (located in the western half of the pole barn) exhibited concentrations of TCE, cis-1,2-DCE, and 1,1-DCA in excess of NYSDEC's groundwater standards.

2.1.2 PCB Exceedance Locations

In addition to the FNPD Area 2 source area excavation and the pole barn investigation, the SB directed that surface soil be removed from each of three sample locations where polychlorinated biphenyls (PCBs) had previously been detected in surface soil samples at exceedance levels. PCBs in samples identified as LMCU-SS-07, LMCU-SS-20 and LMCU-SS-21 (each collected in 2013 from 0-0.5 ft. depth) were reported at concentrations in excess of NYSDEC's Total PCB SCO for Commercial Use (CU, 1 mg/kg or 1,000 µg/kg) but below the SCO for Industrial Use, for which the site is currently zoned. These locations are within both the Solvent

Dock and West Lot sites, as shown on Figure 3. The SB indicated that soil removal is to be performed at these three locations to a depth of 1 ft., with confirmatory sampling to demonstrate sufficient removal and compliance with CU SCOs.

2.2 PROJECT OBJECTIVES

Based on the requirements of the SB, the investigation objectives were to:

- Investigate and potentially further refine the lateral and vertical limits of impacted soil in FNPD Area 2 where excavation is required by the SB;
- Further investigate the pole barn sump and underlying soil;
- Further delineate the limits of PCB-impacted surface soil at the three previous sample locations; and
- Provide the basis for Remedial Excavation Design.

3.0 Investigation Program

This section of the report presents a description of the investigative activities performed, methods used and procedures followed during the investigation phases. The field program was conducted over the course of multiple field events starting in November 2015 and concluding in October 2016. The investigation type, locations, and program dates are summarized in Table 1. Surface soil PCB sampling locations are shown on Figure 4. Membrane Interface Probe (MIP) and soil boring locations for Area 2 and the pole barn are shown on Figure 5.

Investigation activities were performed in general conformance with NYSDEC's DER-10 guidance document, the approved work plans (including both the initial and supplemental work plans), the *Quality Assurance Project Plan* (QAPP), and the *Health and Safety Plan* (HASP).

3.1 POLE BARN SUMP INSPECTION AND SAMPLING

During site activities performed in 2015, the sump was observed to contain standing water at or near the floor slab level. On November 19, 2015, one water sample was collected from the standing water in the sump for laboratory analysis for VOCs, in case the sump did not recharge. On November 20, 2015, approximately 30 gallons of water were pumped from the sump into a 55-gallon drum. A thin layer (less than ½ inch) of sediment was observed at the base of the sump following pump-out; one sediment sample was collected for VOC analysis. The sump water and sediment removed were managed as investigation-derived waste (IDW) (see Section 3.5). During the sump pump-out, PID measurements in the sump ranged from 0.5-5.0 ppm.

The sump walls and bottom appeared solid but somewhat porous, with minor cracks and holes. The inner diameter of the sump is approximately 1.7 ft and the outer diameter is approximately 2.3 ft; the sump is approximately 1.6 ft deep. No piping connections were observed in the sump structure. Because the sump did not recharge during the day, the original sump water sample was submitted for analysis. On December 8, 2015, and on several subsequent occasions, water was observed in the sump. Additionally, the bottom half of the sump walls and the pole barn floor, particularly north of the sump, appeared wet. We suspect groundwater is seeping through the wall of the sump, but the exact mechanism for infiltration of this water is unclear.

Table 2 summarizes the sediment and water samples collected from the sump for laboratory analysis.

3.2 SURFACE SOIL SAMPLING

Prior to drilling mobilizations, Stantec retained Spectra Subsurface Imaging Services Group, LLC (Spectra) to identify potential underground utility features in the vicinity of proposed drilling locations using ground penetrating radar (GPR) and a radio detection (RD) unit capable of detecting live electrical current.

Eight surface soil samples were collected in the vicinity of each of the three previously-identified surface soil PCB exceedance locations on November 17 and 20, 2015. The samples were collected between 0 and 6 inches below the surface cover. Samples were collected in a concentric "ring" pattern around each of the three exceedance locations, at distances of five and ten feet from the original sample location (Figure 4). Four of the samples around SS-20 were located in an asphalt-paved area. Given the thickness of the asphalt (ranging from 0.3-1.2 ft), the soil samples were collected from beneath the asphalt at approximately 0.7-1.5 feet below ground surface (ft bgs). Table 3 summarizes the surface soil samples, and associated quality assurance/quality control (QA/QC) samples, submitted for PCB analysis by USEPA Method 8082. The samples were collected using a sampling spade.

Several of the November 2015 samples exhibited PCB concentrations in excess of the CU SCO. Accordingly, an additional 20 "step-out" surface soil samples were collected on June 6 and 7, 2016 at the three exceedance locations (see Figure 4 and Table 3) to further delineate the PCB presence. The samples were collected from 0.3-0.5 ft bgs using a metal sampling tool; a plastic sampling tool was used in the vicinity of SS-20 given the substation proximity and findings from pre-clearance activities.

In an August 29, 2016 meeting, Lockheed Martin, CDM Smith, Stantec, NYSDEC, and NYSDOH discussed the findings from the Excavation Initial Design Investigation (November 2015) and the supplemental sampling (June 2016). Based on the results in the SS-7 area, NYSDEC/NYSDOH indicated further delineation should be performed given the distribution and levels of PCBs. The additional SS-7 surface soil sampling consisted of 12 additional samples collected on October 5, 2016 at 0.5 ft. bgs.

3.3 FNPD AREA 2 SUBSURFACE INVESTIGATION AND SOIL SAMPLING

The primary objective of the subsurface soil investigation was to delineate the extent of soil in the vicinity of Area 2 impacted with VOCs at levels above the POGW SCOs. Additionally, subsurface soil VOC impacts beneath the pole barn were investigated. The initial investigation phase consisted of a Membrane Interface Probe (MIP) investigation conducted November 17-24, 2015, and a soil boring and sampling program conducted during November 23-December 15, 2015. Based on the results of the initial investigation, a supplemental soil boring and sampling program was subsequently conducted June 6-8, 2016.

As with the surface soil sampling, potential underground utility interference in the vicinity of proposed sampling locations was assessed using GPR and RD instruments Given the identification of numerous underground linear features and known potential buried utilities in the area, all drilling locations were hand-cleared using an air knife and/or hand auger. Exterior Area 2 boring locations were hand-cleared to approximate depths of 1.5-4.5 ft bgs; a dense till layer was encountered at approximately 3.5-4.0 ft at most locations and could not be penetrated further with hand-clearing equipment. Pole barn interior boring locations were hand-cleared to approximately 1.0-4.8 ft bgs. Saturated gravel/crushed stone fill was encountered immediately

below the concrete slab. The wet fill material continuously collapsed in the borehole during hand-clearing thus limiting the depth of the hand-clearing.

The following sub-sections describe details of the field activities and methods associated with the MIP and soil boring investigation programs. Results of the investigation are discussed in Section 4.

3.3.1 Membrane Interface Probe (MIP) Investigation

The MIP technology employed during this investigation is described in the Work Plan. MIP services were provided by Zebra Technical Services (Zebra). A total of 34 MIP probes (designated MIP-01 through MIP-21 and MIP-23 through MIP-35) were advanced with a Geoprobe® direct push rig (see locations, Figure 5). The refusal depth for the MIP holes ranged from 10.4 to 15.5 ft bgs, as summarized on Table 4. The MIP probe assembly was equipped with:

- An electron capture detector (ECD) instrument for the detection of chlorinated VOCs;
- Photoionization detector (PID) and flame ionization detector (FID) to gauge total VOCs; and
- Electrical conductivity (EC) detector for qualitative lithologic logging of soil type.

MIP response testing was performed prior to use at each borehole by inserting the probe into a water solution prepared in advance with known concentrations of TCE. Sensor data were continuously logged and a response plot was generated continuously for each probe location for review (see plots, Appendix A). The MIP response plots were reviewed in real time during probing and again each evening. To attempt to establish the limits of VOC impacts, results from the initial locations proposed in the Work Plan (MIP-01 through MIP-21) were used to identify thirteen "step-out" locations for additional MIP borings (MIP-23 through MIP-35; note that no MIP probe was performed at the B22 location [pole barn interior] due to a lack of sufficient overhead clearance for the drill rig). Although the MIP data indicated that the plume edges may not have been reached, the investigation area was limited during the first mobilization by the extent of the pre-clearance GPR survey.

Because the MIP results at any location are relative and generally require verification, soil borings were advanced adjacent to each MIP hole (as described below in Section 3.3.2) to further screen soils with a PID and selectively quantify VOC concentrations with soil sampling and laboratory analysis. Accordingly, locations 1-21 and 23-35 are paired MIP/soil boring locations, thus allowing for corroboration of and comparison between the findings of both delineation techniques. Location B-22 was a soil boring only.

Decontamination of the MIP probe was performed between boreholes. One rinse blank was collected from the MIP to confirm effective decontamination procedures.

3.3.2 Soil Boring and Sampling Programs

To confirm the qualitative results of the MIP investigation and obtain soil analytical data for delineation of impacts, a Geoprobe® soil boring program was completed from November 23-December 15, 2015. The soil boring program consisted of 38 borings in the vicinity of Area 2 and the pole barn. Drilling services for this phase of the investigation were provided by Zebra from November 23-24, 2015, and by NYEG Drilling LLC (NYEG) from December 2-15, 2015. Borings B1-B21 and B23-B35 were drilled adjacent to the corresponding MIP hole.

Based on the results and findings of the initial MIP and soil sampling, and discussions with NYSDEC, a supplemental program consisting of 15 additional borings (designated B-101 through B-115), was conducted June 6-8, 2016. Drilling services were provided by NYEG. Figure 5 depicts the boring locations.

Continuous samples were typically obtained using a Macrocore® sampler; however due to high soil density a limited number of samples were obtained with a standard split spoon sampler. The soil borings were advanced to 15-20 ft bgs or to refusal (refusal depths ranged from 9.0 to 19.5 ft bgs). Table 5 summarizes the boring and sample depths.

Soils were screened with a calibrated PID for the presence of volatile organic vapors. Soil samples were also visually observed for indications of nuisance characteristics (odors and/or staining), fill, etc. Soil boring logs, including soil sample depths and descriptions, observed nuisance characteristics, and PID readings, are presented in Appendix B.

Between one and three discrete subsurface soil samples were collected from each soil boring for VOC analysis using USEPA Method 8260C. Samples were obtained to identify potential lateral and vertical contaminant boundaries. The sample depth intervals were selected based on the following lines of evidence:

- Peak field PID readings indicating maximum VOC impact interval;
- Lack of field PID response indicating either the top and/or bottom of VOC impacts;
- MIP ECD/PID/FID peaks indicating maximum VOC impact interval;
- Lack of MIP ECD/PID/FID response indicating bottom of VOC impacts; and
- Previous soil sampling depths exhibiting VOC impacts in test borings for nearby monitoring wells.

The soil samples collected for lab analysis are summarized on Table 5 along with the analytical parameters for each sample and the QA/QC samples (duplicates and matrix spike/matrix spike duplicate samples [MS/MSDs]) collected. Soil cuttings from the boreholes were returned downhole, where possible; the material not returned downhole was containerized in 55-gallon drums as IDW (see Section 3.5).

3.4 DECONTAMINATION

Non-dedicated equipment was decontaminated prior to and following each use. Decontamination of equipment consisted of a wash with Alconox (or equivalent) solution and a tap water rinse. Decontamination water was containerized in 55-gallon drums and disposed (see Section 3.5).

3.5 INVESTIGATION DERIVED WASTE

Soil cuttings from test borings were returned to the boreholes where feasible; remaining cuttings (including asphalt and concrete) were containerized in 55-gallon drums. Decontamination water and water extracted from the pole barn sump were also containerized in a 55-gallon drum. IDW drums generated during the November/December 2015 event were delivered to Waste Management's (WM) Model City, New York facility on May 6, 2016. Additional IDW drums generated during the June 2016 event were also delivered to the Model City facility on July 14, 2016. The drums were ultimately transferred to WM's American Landfill in Waynesburg, Ohio, due to the treatment and disposal restrictions on the current permit for the Model City Landfill.

3.6 SAMPLING LOCATION SURVEY

Exterior surface soil sampling locations, soil borings, and MIP borings were surveyed for horizontal coordinates with a GeoXT global positioning system instrument with sub-meter accuracy. The exterior soil investigation locations were also tape-measured, and referenced from known surveyed locations. Interior soil borings, MIP borings, and the sump were tape-measured from known surveyed locations or existing structural features.

3.7 FIELD QUALITY CONTROL SAMPLES

In accordance with the QAPP, field QA/QC samples were collected during the investigations including field duplicates, MS/MSDs, trip blanks, and rinsate blanks. Field duplicates and MS/MSD samples were collected at a rate of one per 20 field samples. Trip blanks were used for aqueous matrices only and consisted of deionized water. A trip blank accompanied each shipment of aqueous samples scheduled for analysis of VOCs (excluding trip blanks). One rinsate blank was collected per mobilization for each type of non-dedicated sampling equipment. Rinsate blanks were collected by pouring deionized water over decontaminated equipment. The non-dedicated equipment used for this project included the sampling tool used during the surface soil sampling events, the MIP assembly, a split spoon sampler, and Macrocore samplers.

4.0 Investigation Results

4.1 GEOLOGY

Soil classifications and observations of subsurface conditions were recorded on soil boring logs for the Area 2 borings (see Appendix B); no logs were generated for the surface soil samples. The soil borings were advanced to 15-20 ft bgs (or refusal) and were limited to overburden. Although discrete observations were made during hand-clearing, the top few feet (approximately 0-4 ft bgs) of material was not logged.

Previous reports (ARCADIS, 2009; ARCADIS, 2013) have described the overburden materials present beneath the site. Consistent with previous findings, the general subsurface profile observed in Area 2 and the pole barn consisted of the following deposits, in order of increasing depth:

- Fill;
- Glacial till; and
- Glaciolacustrine Clay.

The native soils are typically very dense, as indicated by difficulty in advancing the MIP and Macrocore® samplers and the occurrence of several sampler refusals at varying depths. Groundwater was typically encountered in the boreholes between 1 and 3 ft bgs during hand-clearing, and the upper fill materials often appeared saturated in that interval (particularly beneath the pole barn slab); however, the depth to the water table was not evident in most of the borings given the lack of underlying saturated native material.

4.2 SAMPLING AND ANALYTICAL RESULTS

Investigation and waste characterization samples were submitted to TestAmerica of Amherst, New York, a NYSDOH Environmental Laboratory Accreditation Program certified lab. Tables 6 and 7 summarize the analytical results from the pole barn sump samples. Table 8 summarizes the surface soil sample analytical results. Table 9 summarizes the subsurface soil sample analytical results. Analytical reports were prepared in accordance with the NYSDEC Analytical Services Protocol Category B requirements for all samples except those collected for characterization of IDW. Copies of the laboratory reports for the investigation sampling (not including waste characterization) are provided in Appendix C.

Analytical data (excluding waste characterization samples) underwent a data usability evaluation and the results were summarized in a Data Usability Summary Report (DUSR) for each sample delivery group. The data usability evaluation was performed in accordance with the NYSDEC's "Guidance for the Development of Data Usability Summary Reports," revised 1997 and DER-10. The DUSRs are discussed further in Section 5.1.

An Electronic Data Deliverable (EDD) was prepared in accordance with requirements of the NYSDEC Electronic Data Deliverable Manual (v.3, April 2013) for results of the initial and both supplemental sampling events. Data from the November-December 2015 field program were submitted to NYSDEC's Environmental Information Management System (EIMS) on February 19, 2016, revised on February 25, 2016 in response to a qualifier error issue encountered by EIMS and re-uploaded on March 1, 2016. Data from the June 2016 field program were submitted to NYSDEC's EIMS on August 17, 2016, and successfully uploaded on August 22, 2016. Data from the October 2016 surface soil sampling were submitted to NYSDEC's EIMS on November 4, 2016 and successfully uploaded on November 8, 2016. Where appropriate, the NYSDEC EDDs reflect DUSR-related modifications made to the reported data.

Subsurface soil and sump sediment sample results are compared to CU and POGW SCOs for the VOC data. Surface soil sample results are compared to CU SCOs for the PCB data.

Results from the sump water sample are compared to Class GA standards and guidance values listed in NYSDEC's *Ambient Water Quality Standards and Guidance Values*, Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) Memorandum dated October 22, 1993, Reissued June 1998, and addenda dated April 2000 and June 2004.

4.2.1 Pole Barn Sump

Results from the pole barn sump water and sediment sampling are shown on Tables 6 and 7, respectively. No VOCs were detected above laboratory reporting limits in the sump water sample. There were several detections of low-level (estimated) concentrations of petroleum and chlorinated VOCs in the sump sediment sample, including: 1,2,4-trichlorobenzene; 1,2-tichlorobenzene; ethylbenzene; methyl ethyl ketone; PCE; toluene; TCE; and total xylenes. Acetone was the only analyte reported to exceed the POGW SCO (270 µg/kg vs. the POGW SCO of 50 µg/kg). Acetone is not a site COC, and it is widely considered a common laboratory contaminant. Thus, the acetone exceedance is likely not representative of impacted sediment in the sump. No other exceedances were identified.

It appears that the pole barn sump takes on water in response to rain events, based on the timing of the refilling of the sump after it was emptied. It is not clear whether the water collects as a result of groundwater infiltration through the sump walls or precipitation runoff and seepage through the exterior pole barn wall/floor connection. There is no evidence of direct runoff from precipitation to the sump. Given the lack of impacts observed in the sump water and sediment, the pole barn sump structure does not likely require remedial action. However, subsequent sections of this report discuss the soil impacts in proximity to the sump.

4.2.2 Surface Soil

Figure 6 depicts the PCB surface soil sample locations and analytical results for the delineation of PCB impacts around each of the three previously-identified PCB exceedance locations.

Exceedances of the CU SCO for PCBs (1 mg/kg) are depicted both on Figure 6 and in Table 8. Of the 24 surface soil samples collected during the initial sampling in November 2015, ten samples exhibited PCB concentrations exceeding the CU SCO (1 mg/kg). The highest concentration (13 mg/kg) was observed in the vicinity of LMCU-SS-20, located near the substation. The other locations exhibited only slight exceedances of this SCO.

The supplemental (June 2016) sampling locations were selected to further delineate the impacts surrounding the newly-identified exceedances. Of the 20 supplemental surface soil samples collected, ten samples exhibited PCB concentrations exceeding the CU SCO. The highest concentration (3.6 mg/kg) reported in the supplemental round of sampling was observed at two locations: one in the vicinity of LMCU-SS-07 and one in the vicinity of LMCU-SS-20.

Based on the results in the SS-7 area, and discussions with NYSDEC/NYSDOH, twelve additional samples were collected on October 5, 2016 to supplement the delineation of PCB impacts on the northern and southern edges of the sampling area.

The spatial distribution and range of concentrations at each of the three previous surface soil sample exceedance locations is described further below.

LMCU-SS-07

In total, nine of the twenty-seven surface soil samples collected in this West Lot location exhibit PCB concentrations greater than the CU SCO. Five of the twenty-seven surface soil samples were non-detect for PCBs. Detected concentrations ranged from 0.12 mg/kg to 3.9 mg/kg. The original surface soil sample PCB concentration was 2.4 mg/kg. As shown on Figure 6, the exceedance concentrations are oriented in a somewhat linear pattern aligned in a NNE-SSW trend. Most of the exceedances fall within the former burn pit excavation limits. The alignment of exceedances roughly overlaps with the edge of the original former burn pit area, and along the adjacent limits of excavation (see Figure 7).

LMCU-SS-20

In total, seven of the thirteen surface soil samples collected in the vicinity of LMCU-SS-20, located south of the substation, exhibit PCB concentrations greater than the CU SCO. The original surface soil sample PCB concentration was 3.5 mg/kg. One of the thirteen surface soil samples was non-detect for PCBs. Most of the detected concentrations ranged from 0.16 mg/kg to 3.6 mg/kg, except for one outlier concentration of 13 mg/kg (sample SS20-4). Sample SS20-13 (a step-out sample from previous exceedance location SS20-4) exhibited a concentration of 1.8 mg/kg, providing a limiting extent to this elevated exceedance. As shown on Figure 6, the exceedance locations are limited to the grassy area; no exceedances were reported beneath the asphalt. The distribution of concentrations appears somewhat random although they generally increase northward towards the substation fence.

LMCU-SS-21

In total, eight of the sixteen surface soil samples collected in this area exhibited PCB concentrations slightly greater than the CU SCO. Concentrations ranged from 0.45 mg/kg to 2.5 mg/kg. The original surface soil sample PCB concentration was 1.3 mg/kg. As shown on Figure 6, the distribution of exceedance locations and concentrations appears random. The northern-most sample location (SS21-15) is within approximately 5 ft of the fence line (and property boundary).

Note that the PCB levels in surface soil samples meet the Industrial Use SCO. The proposed excavation limits are described in Section 4.3.

4.2.3 Subsurface Soil

As described earlier in this Report, the initial mobilization based on the original Work Plan involved a combined MIP and soil boring program (November/December 2015). The supplemental soil boring program was initiated for further delineation in June 2016 following a review of findings from the initial mobilization. Figure 8 shows the original estimated excavation limits, with MIP and soil boring locations color-coded to illustrate the approximate lateral extent of VOC impacts at levels above POGW SCOs, i.e., impacted locations are shown with a red symbol; non-impacted locations are gray. Historical soil sampling locations are also shown for reference. The graphic depiction of impacted and non-impacted locations is based on both MIP response and soil analytical results for all investigations. The sub-sections below describe the investigation results for each methodology which were used in developing the distinction between impacted and non-impacted locations.

4.2.3.1 MIP Response

MIP response plots from the investigation are included in Appendix A. The plots depict a profile view of each of the continuous sensor outputs with increasing depth. The MIP response was used primarily as a field tool to determine whether the limits of impact had been reached, whether a step-out MIP location was warranted, and potential target zones for soil samples.

Depicting impacted or non-impacted MIP locations is interpretive, since the MIP responses cannot be directly correlated to an actual contaminant concentration; the interpretation relies on recognizing the relative MIP response in the context of the larger dataset, which includes soil PID screening values and sample analytical results. On Figure 8, MIP locations with ECD responses greater than or equal to $1x10^6$ microvolts (µV) were considered to be impacted and are therefore represented with a red symbol. For screening purposes, this threshold was assumed to represent a corresponding soil analytical exceedance of POGW SCOs for the target VOC compounds, and was established based on field PID measurements and soil analytical data obtained during the soil boring program. Alternatively, any MIP location with ECD readings of less than $1x10^6$ µV is depicted as gray and is assumed to be representative of a non-impacted probe hole based solely on the MIP data.

To determine whether a step-out location was warranted, the ECD, PID, and FID responses were evaluated. A peak in the ECD plot indicated presence of CVOCs. If a peak was also seen at a similar depth in the PID/FID profiles, the magnitude of VOC impact was considered significant. If no peaks were observed at a given location, the location was assumed to be at or beyond the lateral extent of VOC impacts, thus not warranting additional MIP borings. A total of thirteen step-out MIP locations were investigated beyond the original locations in the work plan. Note that during the MIP program, the final lateral extent of the step-out locations (and delineation of potential impact boundaries) was limited by the areal extent of the preclearance GPR survey and/or the anticipated practicable excavation restrictions.

4.2.3.2 Comparison of MIP and Initial Soil Analytical Data

Overall, the MIP response and field PID/soil analytical data for a given location had variable consistency. The MIP was primarily a real-time field delineation tool and is considered as a semi-quantitative line of evidence only. Nine MIP/soil boring location pairs show conflicting impact vs. non-impact designation on Figure 8 based on the criteria described above. Clarifications associated with presenting the data as such, through a comparison of MIP response plots and soil analytical data, are discussed below.

1. In some borings the soil sample depths selected did not target obvious elevated MIP responses considered to be indicative of likely POGW SCO exceedances. Instead, soil samples were often chosen to vertically "bracket" those zones with pronounced ECD responses. For example, at locations B1, B2, B5, B30, and B32, the MIP ECD response plot appeared to indicate impacts at levels assumed to exceed POGW SCOs; therefore, the soil sample depths were selected based on field PID measurements of the apparent top and/or bottom of the significantly impacted zone. As a result, Figure 2 identifies these co-located explorations as red (impacted) MIP locations and gray (non-impacted) soil borings; these locations are thus presumed to have a zone of soil that exceeds POGW SCOs.
2. There were additional locations at which MIP data indicated significant VOC impacts (based on the selected ECD response threshold), but field PID measurements did not indicate VOC impacts and sample analytical results confirmed concentrations were below POGW SCOs. At B18, for example, a sample was collected at the depth of the ECD peak, but there were no analytical exceedances and field PID measurements did not suggest impacts. At a few other locations (B6, B17, and B27), the sample intervals did not necessarily align with the MIP peak; this was due to a variety of field factors including observed lithology (i.e., depth of clay layer), poor recovery, and possible hand-clearing disturbance. The field PID readings were minor, ranging from 0.0 to 2.0 ppmv. The collective data indicate that these locations are not impacted at levels above the target SCOs.

4.2.3.3 Soil Analytical Results

A total of 77 soil samples (plus QA/QC) were collected for VOC analysis during the November/December 2015 field program from 38 borings. A total of 30 samples (plus QA/QC) were collected for VOC analysis during the June 2016 field program from 15 borings. The analytical VOC results for both events are summarized in Table 9. No exceedances of Commercial Use SCOs were identified. However, POGW SCO exceedances were identified for one or more of the following ten compounds: 1,1-DCA, acetone, cis-1,2- DCE, ethylbenzene, methylene chloride, PCE, toluene, TCE, VC, and total xylenes. Figure 9 graphically depicts the soil analytical results only for the exceedance locations (i.e., any location with at least one sample exhibiting at least one POGW SCO exceedance). Note that in the cases of POGW exceedances for acetone and methylene chloride, the results were flagged as B (detected in a laboratory blank) and/or J (estimated value); as such, we do not consider these instances of POGW exceedances to be representative of actual soil conditions. Further, because neither compound is a site COC, any location with POGW exceedances for only one or both of these compounds is not considered to be an impacted location. For example, the only compound detected at B101 and B111 at levels exceeding the POGW SCO was methylene chloride; these locations are therefore not considered to be impacted.

These data demonstrate the lateral and vertical distribution of VOC impacts based on multiple samples from each boring collected at different depths. The combined soil analytical and field PID data lead to the following conclusions for FNPD Area 2 and the pole barn:

- The SB estimated that the likely maximum depth of excavation would be approximately 15 ft. To confirm potential excavation depths, the apparent bottom of CVOC impact was evaluated using soil boring field PID and soil analytical data. The bottom of impact appears generally to be approximately 10 ft. at the majority of investigation locations. The exception to this is at an exterior location near the pole barn wall and to the north east of the sump (B13), where impacts were seen at 14.0 - 14.5 ft.

- Given the depth of hand-clearing performed at each borehole (ranging between 1.5 and 4.5 ft.), the top of impacts is not identified.

- The combined field MIP and analytical laboratory data demonstrate that the central area of the original SB-defined excavation limits is not impacted, meets POGW SCOs, and does not require excavation. Historical soil and groundwater data also support this observation.

- The exceedance locations occur in two distinct areas: The western area (referred to here as “Area 2A”) covers the western “leg” of the SB excavation limits, located northwest of the pole barn and west of the maintenance building. The eastern area

(referred to here as "Area 2B") includes most of the eastern half of the SB excavation limits and the northeast quadrant of the pole barn.

- In the western half of the SB-defined excavation area, the following boring locations exhibited POGW exceedance for VOCs in soil samples: B3, B4, B23, B24, B25, and B33. Supplemental sampling in June 2016 extended the area of impacts south to include boring B115, and confirmed the apparent continuity of impacts between historic boring MW-18 and boring B23 (supplemental borings B102 and B103).

In the eastern half of the SB-defined excavation limits, the following locations were identified as POGW exceedances locations for VOCs: B9, B10, B11, B12, B13, B14, B15, B29, B31, and B35. Those exceedance locations were constrained by outer non-exceedance locations except for B31 and B35 (the eastern and southern limits). Results from the supplemental soil boring program (June 2016) did not indicate that the eastern and southern boundaries of the Area 2B impacts extended farther east of B35 or further south of B31. Area 2B includes the soil impacts beneath the pole barn. Following the initial mobilization, analytical data indicated that soil impacts in excess of POGW SCOs were generally in the northeast portion of the pole barn, near the sump. The supplemental soil boring program delineated the areal extent of the impacts in proximity to the sump. This delineation is based on six exceedance locations: B20, B22, B36, B37, B38, and B105. POGW exceedances included the following CVOCs: TCE; PCE; cis-1,2-DCE; 1,1-DCA; and VC. The bottom of impacts ranged from 5 to 10 ft bgs. Supplemental borings B107 and B108, located within the partitioned eastern quarter of the pole barn, did not exhibit POGW SCO exceedances. These results indicate that the soil impacts surrounding the sump do not extend eastward to the pole barn exterior.

In addition to the exceedance locations in Areas 2A and 2B, boring B110 exhibited POGW exceedances for cis-1,2-DCE and toluene in a soil sample collected at 5.0-5.5 ft bgs. No exceedances were identified for the deeper soil sample collected at 9.0-9.5 ft bgs. The impacts in vicinity of B110 appear to be isolated given the results from adjacent borings B107, B108, B109, and B111.

The proposed excavation limits are described in Section 4.3.

4.3 PROPOSED LIMITS OF IMPACTED SOIL REMOVAL

Based on the analytical results of these investigations, the proposed limits of excavation are described below. Details regarding the soil removal will be documented in a subsequent excavation design report for review by NYSDEC.

4.3.1 Surface Soil PCB Impacts

In an August 29, 2016 meeting, Lockheed Martin, CDM Smith, Stantec, NYSDEC, and NYSDOH discussed the findings from the initial mobilization (November 2015) and the supplemental

sampling (June 2016). During this meeting, the parties discussed proposed excavation limits for each of the PCB-impacted areas and further sampling required. Figure 10 depicts the proposed excavation limits for each of the PCB-impacted surface soil areas.

LMCU-SS-07

Based on the results in the SS-7 area, NYSDEC/NYSDOH indicated the delineation was incomplete given the exceedance values at the northern and southern edges. To complete the delineation of PCB impacts, twelve additional surface soil samples were collected in October 2016.

Three of the twelve additional samples exhibited slight exceedances of the SCO: SS7-20, SS7-22, and SS7-23.

- Sample SS7-20 is on the north side of the sampling area. This location is surrounded by samples meeting the CU SCO. Furthermore, the concentration at SS7-20 (1.2 ppm) indicates a tapering from the concentrations reported from the samples located inward towards the original SS-7 (i.e., SS7-11, 3.6 ppm and SS7-8, 2.2 ppm).
- SS7-22 and SS7-23 are located on the southwest edge of the sampling area. The two southern exceedances (1.3 and 1.4 ppm) constrain the SS7-14 location (1.9/3.7 ppm) given the general drop in PCB concentrations moving outward from the original SS-7. Additionally, the west side of SS7-14 is constrained by both non-detects and non-exceedances.

Lockheed Martin concludes that these results represent sufficient delineation of impacted surface soil requiring removal.

LMCU-SS-20

The SS-20 location showed exceedances at the northern perimeter of the sampled area, approaching the substation fence. Accordingly, NYSDEC/NYSDOH indicated that either additional sampling would be required, or that area should be excavated northward to the fence of the electrical substation. Lockheed Martin agreed to excavate surface soils as far northward as the fence, in lieu of further sampling. Since no exceedances were identified for the asphalt locations, the soil excavation will be confined to the grass area.

LMCU-SS-21

The results observed for the SS-21 location indicated only relatively minor exceedances at the furthest step-out sampling location. NYSDEC/NYSDOH agreed that no further sampling was required for that area. The proposed excavation area will extend to the property boundary (fence line) north of SS-21. The eastern, western, and southern edges are constrained by non-exceedance locations on all sides.

The soil within the limits described above will be excavated to a depth of one foot bgs, in accordance with the SB directive. Additionally, the excavations will be backfilled with clean, imported soil, including six inches of topsoil, except at the substation driveway adjacent to SS-20 where the backfill will need to be crushed stone. No confirmatory soil sampling will be performed based on the amount of delineation sampling and as discussed with NYSDEC/NYSDOH during the August 29, 2016 meeting.

4.3.2 Subsurface Soil VOC Impacts

Both historical and recent soil sampling results demonstrate that soil in the area located between Excavation Areas 2A and 2B is not impacted above POGW SCOs. As such, this section of FNPD Area 2 does not require excavation. This conclusion was proposed in a letter sent to NYSDEC on February 26, 2016 (Stantec, 2016), and was approved by NYSDEC in a letter dated April 15, 2016 (NYSDEC, 2016).

The soil impacts requiring remedial action occur in three distinct areas. The western area (referred to here as "Excavation Area 2A") covers the area located between the pole barn and the maintenance building. The eastern area (referred to here as "Excavation Area 2B") includes roughly the eastern half of the SB excavation limits and the sump area beneath the pole barn. A third discrete excavation area (referred to here as "Excavation Area 2C") surrounds boring B110, located east of the pole barn and just north of the edge of asphalt. Figure 11 depicts the proposed excavation limits and depths for VOC-impacted soil for Excavation Areas 2A, 2B, and 2C, each of which is discussed further below:

- **Excavation Area 2A** - The limits of Investigation Area 2A are defined through a combination of historical and recent soil analytical results and existing constraints, described as follows:

  Northern edge:
  This limit is predominantly based on the existing constraints posed by the GCTS underdrain and storm sewer lines located on the northern boundary of this area. The concern is that digging too close to these structures could compromise their function and integrity. Additionally, historical soil sampling data collected north of the GCTS and storm sewer lines indicate that soil impacts (in excess of POGW SCOs) do not appear to extend beyond the piping (see Figure 2, locations PZ-25, PZ-26, and PZ-27). As shown on Figure 11, a 10 ft buffer is proposed for the GCTS. The final position of this northern excavation limit will be evaluated further during the design phase.

  Eastern (interior) edge:
  As described earlier in the text, recent and historical soil sampling results demonstrate that soil in the central portion of the SB-estimated excavation area limits meets POGW SCOs. The boring locations utilized in establishing this limit include B6, B34, and PZ-32.

Southern edge:
This limit is based on exceedance location B115. Although the soil sample in B115 exceeded POGW SCOs for select VOCs, we do not anticipate that VOC impacts extend to the south based on historical groundwater data from two wells in the asphalt area to the west of the pole barn (PZ-4 and MW-9; see Figure 11) which demonstrate that groundwater in this area is not impacted. Further, the asphalt serves as a cap to prevent infiltration of precipitation and leaching of VOCs; this cap will be maintained as a site cover system engineering control in accordance with the SMP.

Western edge:
This limit is based on the presence of the ConMed maintenance building. Given the close proximity of the maintenance building to the GCTS underdrain and storm sewer piping (approximately 15-20 ft.), it would be impracticable to excavate this area. Furthermore, historical soil data (boring PZ-31) indicate that POGW SCO exceedances do not likely extend west of boring B33.

- **Excavation Area 2B** - The limits of Investigation Area 2B are defined by historical and recent soil analytical results, as follows:

  Northern edge:
  This limit is based on both historical and recent soil analytical results that meet POGW SCOs (A2-PZ-4, B16, B17, B27, B28, A2-PZ-3, and A2-PZ-5).

  Eastern edge:
  Similarly, this limit is based on both historical and recent soil analytical results that meet POGW SCOs (PZ-33, B112 through B114).

  Southern edge:

  The exterior southern limit is based on recent soil analytical results that meet POGW SCOs (B109, B111, and B113). Recent soil analytical results have demonstrated that soil impacts beneath the pole barn are limited to the area immediately surrounding the sump. The interior southern edges are delineated by non-exceedance locations within the pole barn (B18, B104, and B106-B108).

  Western (interior) edge:
  As with the eastern (interior) limit of Excavation Area 2A, this limit was placed between known impacted areas (POGW SCO exceedances) and known non-impacted areas (recent and historical soil samples meeting POGW SCOs).

- **Excavation Area 2C** - The proposed excavation is limited to the area immediately surrounding boring B110. The limits are based on surrounding non-impacted borings B107, B108, B109, and B111. Given the lack of VOC impacts to the east, north and west, this exceedance appears to be a discrete and isolated occurrence and further southward extension of impacts beneath the paved area are unlikely. Further, the

asphalt serves as a cap to prevent infiltration of precipitation and leaching of VOCs; this cap will be maintained as a site cover system engineering control in accordance with the SMP.

Given the level of detail provided by the extensive delineation sampling, no confirmatory sampling will be performed.

5.0 Quality Assurance/Quality Control Evaluation

5.1 DATA USABILITY SUMMARY REPORTS

Copies of the analytical laboratory reports are provided in Appendix C. The data packages were provided by the laboratory and prepared as New York State "Analytical Services Protocol" "Category B" deliverables. The DUSRs, included in Appendix D, were completed in accordance with NYSDEC's "Guidance for the Development of Data Usability Summary Reports," revised 1997 and DER-10 (*Technical Guidance for Site Investigation and Remediation* [May 2010]). Stantec's data validator reviewed the analytical data for usability, including determining if the data were accurate, precise, representative, complete, and comparable. Valid data are data for which QA/QC review criteria have been met and are acceptable. Data were characterized as usable where QA/QC parameters were marginally outside acceptable limits (e.g., sample holding times were slightly exceeded), such that the data may be questionable, but still usable within limitation. The data usability review for the November-December 2015 data indicated that the analytical results were considered usable and, therefore, no data were rejected. The DUSR indicated that some additions of, or changes to, data qualifiers were required. The reviewed results described in the DUSRs have been incorporated into the various data summary report tables and figures, and the submitted NYSDEC EDDs.

The data usability review for the June 2016 data, however, identified issues with data quality resulting in the rejection of most of the results from the following three samples: B-AREA2-DUP5 (parent sample: B102-AREA2-S2); B104-AREA2-S2; and B111-AREA2-S2. Based on discussions with the lab regarding the data quality issues, TestAmerica determined that the internal standard responses for those rejected samples were outside quality control limits due to matrix interference resulting from the sample composition. The samples were made up of a silty clay soil. When soils are mixed with de-ionized water and the chemical standard for analysis, the fine particles typically remain suspended. These samples formed a hardened disc at the bottom of the vessel. If a sample solidifies it has the potential to trap the internal standards within that disk. This does not allow for an adequate purge to take place, thus resulting in incomplete internal standard recovery. The other samples in the batch, not associated with this site, immediately preceding and following these samples did not have the same internal standard issues, indicating the methodology was not the cause of the standard recovery being outside acceptable limits. Additionally, similar issues involving matrix interference with internal standard recoveries were observed with the November-December 2015 soil samples, although to a lesser extent; as discussed above, no data were rejected from the 2015 dataset. It should be noted that the rejection of data from the identified three samples did not materially affect the delineation.

The DUSR also indicated that additions of, or changes to, data qualifiers were required. The qualified results have been incorporated into the various data summary report tables and figures, and the submitted NYSDEC EDDs.

The data usability review for the October 2016 data indicated that the analytical results were considered usable and, therefore, no data were rejected. As with the November-December 2015 and June 2016 datasets, the DUSR indicated that some additions of, or changes to, data qualifiers were required. The reviewed results described in the DUSRs have been incorporated into the various data summary report tables and figures of this report, and will be reflected in the submitted NYSDEC EDDs.

5.2 QA/QC SAMPLES

QA/QC sample results including trip blanks and rinsate blanks are summarized in Table 10. No compounds were detected in trip blanks above laboratory reporting limits. The only rinsate blank detection was a low-level [estimated] concentration of carbon disulfide, which is not a site COC; this result was also flagged as "B" indicating the compound was detected in the sample and the blank.

6.0 Summary and Conclusions

The investigations described herein were performed to provide sufficient data to refine the limits of source-area excavations directed in NYSDEC's March 2015 SB document, and to facilitate remedial excavation design and implementation. Lockheed Martin considers the investigations for both the FNPD Area 2 and surface soil PCB exceedances to now be complete, as summarized herein. Lockheed Martin will proceed with preparation of the design and implementation plan for the soil excavation remedy, as discussed in Section 4.3, pending NYSDEC/NYSDOH's review of this report.

7.0 References

ARCADIS, 2009	*Corrective Measures Study Report, Solvent Dock Area, Former Northern Perimeter Ditch, Former Lockheed Martin French Road Facility, Utica, New York*. March 16, 2009.
ARCADIS, 2013	*Corrective Measures Study, Former Northern Perimeter Ditch, Solvent Dock Area, Former Lockheed Martin French Road Facility, Utica, New York*. December 2013.
BBL, 1995	*Phase I Environmental Site Assessment, French Road Facility*. October 1995.
NYSDEC, 2010	*DER-10, Technical Guidance for Site Investigation and Remediation*. May 3, 2010.
NYSDEC, 2015a	*Final Statement of Basis Corrective Measures Selection, Former Lockheed Martin-French Road Facility, Operable Units 01 & 02, Site No. 633036A, EPA ID No. NYD000521971, Utica, Oneida County*. March 31, 2015.
NYSDEC, 2015b	Letter from NYSDEC to Lockheed Martin: *Revised Work Plan for Excavation Initial Design Investigation, Former Lockheed Martin French Road Facility, Utica, Oneida County, New York, Site No. 633036A*. November 13, 2015.
NYSDEC, 2016a	Letter from NYSDEC to Lockheed Martin: *Supplemental Work Plan for Additional Surface Soil Sampling, Excavation Initial Design Investigation, Former Lockheed Martin French Road Facility, Utica, Oneida County, New York, Site No. 633036A*. January 21, 2016.
NYSDEC, 2016b	Letter from NYSDEC to Lockheed Martin: *Supplemental Work Plan for Additional Area 2 Subsurface Soil Sampling, Former Lockheed Martin French Road Facility, Utica, Oneida County, New York, Site No. 633036A*. April 15, 2016.
Stantec, 2015a	*Revised Work Plan for Excavation Initial Design Investigation, Former Lockheed Martin French Road Facility, Utica, New York*. November 3, 2015.

References

Stantec, 2016a — Letter from Stantec to NYSDEC: *Supplemental Work Plan for Additional Surface Soil Sampling, Excavation Initial Design Investigation, Former Lockheed Martin French Road Facility, Utica, Oneida County, New York, Site No. 633036A.* January 15, 2016.

Stantec, 2016b — Letter from Stantec to NYSDEC: *Supplemental Work Plan for Additional Area 2 Subsurface Soil Sampling, Excavation Initial Design Investigation, Former Lockheed Martin French Road Facility, Utica, Oneida County, New York, Site No. 633036A.* February 26, 2016.

Stantec, 2016c — Letter from Stantec to NYSDEC: *Second Supplemental Work Plan for Additional Surface Soil Sampling, Excavation Initial Design Investigation, Former Lockheed Martin French Road Facility, Utica, Oneida County, New York, Site No. 633036A.* September 29, 2016.

TABLES

Table 1
Field Events Summary
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
525 French Road, Utica, NY

Field Event	Locations	Start Date	End Date
Initial Mobilization			
MIP Investigation	MIP-01 through MIP-21; and MIP-23 through MIP-35	11/17/15	11/24/15
Surface Soil Sampling	SS7-1 through SS7-8; SS20-1 through SS20-8; and SS21-1 through SS21-8	11/17/15	11/20/15
Sump Pump-Out and Sampling	Pole barn sump	11/19/15	11/20/15
Soil Boring Program	B1 through B38	11/23/15	12/15/15
Drum Sampling	IDW	02/03/16	02/03/16
Additional Drum Sampling	IDW	04/07/16	04/07/16
Drum Disposal	IDW	05/05/16	05/06/16
Supplemental Mobilizations			
1st Supplemental Surface Soil Sampling Program	SS7-9 through SS7-15; SS20-9 through SS20-13; and SS21-9 through SS21-16	06/06/16	06/07/16
Soil Boring Program	B101 through B115	06/06/16	06/08/16
Drum Disposal	IDW	07/12/16	07/14/16
2nd Supplemental Surface Soil Sampling Program	SS7-16 through SS7-27	10/05/16	10/05/16

Table 2
Summary of Pole Barn Sump Samples
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
525 French Road, Utica, NY

Sample ID	Sample Date	Sample Depth (ft bgs)	Sample Type	Sample Description	Analysis - VOCs[1] (USEPA Method 8260)
SUMP-W	11/19/2015	-	water	sump water (pre-vac out)	x
SUMP-SED	11/20/2015	1.5	sediment	sump sediment (from sump bottom)	x
TRIP BLANK	11/19/2015	-	QC	-	x

Notes
[1] Ambient VOCs (measured using a multiRAE equipped with a 10.6 eV lamp) ranged from 0.5-5.0 ppm.

Key

eV = electrovolt
ft bgs = feet below ground surface
PCBs = Polychlorinated biphenyls
ppm = parts per million
QC = Quality control
SDG = Sample Delivery Group
SVOCs = Semivolatile organic compounds
VOCs = Volatile organic compounds

Table 3
Summary of Surface Soil Samples
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
525 French Road, Utica, NY

Sample Area[1]	Sample ID[2]	Sample Date	Sample Depth (ft bgs)	QC
LMCU-SS-07	SS7-1	11/17/15	0.3 - 0.5	
	SS7-2	11/17/15	0.3 - 0.5	
	SS7-3	11/17/15	0.3 - 0.5	
	SS7-4	11/17/15	0.3 - 0.5	
	SS7-5	11/17/15	0.3 - 0.5	MS/MSD
	SS7-6	11/17/15	0.3 - 0.5	
	SS7-7	11/17/15	0.3 - 0.5	
	SS7-8	11/17/15	0.3 - 0.5	
	SS7-9	06/07/16	0.3 - 0.5	
	SS7-10	06/07/16	0.3 - 0.5	
	SS7-11	06/07/16	0.3 - 0.5	
	SS7-12	06/07/16	0.3 - 0.5	
	SS7-13	06/07/16	0.3 - 0.5	
	SS7-14	06/07/16	0.3 - 0.5	
	SS7-15	06/07/16	0.3 - 0.5	MS/MSD
	SS7-16	10/05/16	0.5	
	SS7-17	10/05/16	0.5	
	SS7-18	10/05/16	0.5	
	SS7-19	10/05/16	0.5	
	SS7-20	10/05/16	0.5	
	SS7-21	10/05/16	0.5	
	SS7-22	10/05/16	0.5	
	SS7-23	10/05/16	0.5	
	SS7-24	10/05/16	0.5	
	SS7-25	10/05/16	0.5	
	SS7-26	10/05/16	0.5	
	SS7-27	10/05/16	0.5	
	SS7-Dup3	10/05/16	0.5	FD (parent sample: SS7-16)
LMCU-SS-20	SS20-1	11/17/15	0.3 - 0.5	
	SS20-2	11/20/15	0.7 - 0.8	
	SS20-3	11/20/15	1.2 - 1.3	
	SS20-4	11/17/15	0.3 - 0.5	
	SS20-5	11/17/15	0.3 - 0.5	
	SS20-6	11/20/15	1.3 - 1.5	
	SS20-7	11/17/15	1.3 - 1.4	
	SS20-8	11/17/15	0.3 - 0.5	
	SS20-9	06/06/16	0.3 - 0.5	
	SS20-10	06/06/16	0.3 - 0.5	
	SS20-11	06/06/16	0.3 - 0.5	
	SS20-12	06/06/16	0.3 - 0.5	
	SS20-13	06/06/16	0.3 - 0.5	
LMCU-SS-21	SS21-1	11/17/15	0.3 - 0.5	
	SS21-2	11/17/15	0.3 - 0.5	
	SS21-3	11/17/15	0.3 - 0.4	
	SS21-4	11/17/15	0.4 - 0.5	
	SS21-5	11/17/15	0.3 - 0.5	
	SS21-6	11/17/15	0.3 - 0.5	MS/MSD
	SS21-7	11/17/15	0.3 - 0.4	
	SS21-8	11/17/15	0.3 - 0.5	
	SS21-9	06/06/16	0.3 - 0.5	
	SS21-10	06/06/16	0.3 - 0.5	
	SS21-11	06/06/16	0.3 - 0.5	
	SS21-12	06/06/16	0.3 - 0.5	
	SS21-13	06/06/16	0.3 - 0.5	
	SS21-14	06/06/16	0.3 - 0.5	
	SS21-15	06/06/16	0.3 - 0.5	
	SS21-16	06/06/16	0.3 - 0.5	
QC Samples	SS7-DUP	11/17/15	0.3 - 0.5	FD (parent sample: SS7-3)
	SS7-DUP2	06/07/16	0.3 - 0.5	FD (parent sample: SS7-14)
	SS21-DUP	11/17/15	0.3 - 0.5	FD (parent sample: SS21-1)
	SS-RINSEBLANK	11/17/15	N/A	RB
	SS-RINSEBLANK2	06/07/16	N/A	RB

Notes
[1] Sample area refers to the three previous PCB surface soil sample locations (LMCU-SS-07, -20, and -21) exhibiting Commercial SCO exceedances (collected by ARCADIS in October 2013).
[2] All samples were analyzed for TCL PCBs (USEPA Method 8082).

Key
FD = Field Duplicate
ft bgs = feet below ground surface
MS/MSD = Matrix spike/matrix spike duplicate
PCBs = Polychlorinated biphenyls
QC = Quality Control
RB = Rinsate Blank
SS = Surface Soil

Table 4
Summary of Membrane Interface Probe Locations
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
525 French Road, Utica, NY

Location ID	Investigation Area	Date	MIP Log Depth (ft bgs)
MIP-01	Area 2	11/17/2015	13.8
MIP-02	Area 2	11/17/2015	14.1
MIP-03	Area 2	11/17/2015	13.3
MIP-04	Area 2	11/17/2015	14.3
MIP-05	Area 2	11/17/2015	14.8
MIP-06	Area 2	11/17/2015	13.7
MIP-07	Area 2	11/17/2015	15.1
MIP-08	Area 2	11/17/2015	13.5
MIP-09	Area 2	11/17/2015	15.5
MIP-10	Area 2	11/17/2015	13.3
MIP-11	Area 2	11/17/2015	12.1
MIP-12	Area 2	11/17/2015	13.5
MIP-13	Area 2	11/18/2015	14.9
MIP-14	Area 2	11/18/2015	13.9
MIP-15	Area 2	11/18/2015	15.0
MIP-16	Area 2	11/18/2015	13.9
MIP-17	Area 2	11/18/2015	12.9
MIP-18	Pole Barn	11/18/2015	15.1
MIP-19	Pole Barn	11/19/2015	11.2
MIP-20	Pole Barn	11/19/2015	14.7
MIP-21	Pole Barn	11/19/2015	14.5
MIP-23	Area 2	11/19/2015	14.6
MIP-24	Area 2	11/19/2015	13.4
MIP-25	Area 2	11/19/2015	11.6
MIP-26	Area 2	11/19/2015	15.2
MIP-27	Area 2	11/23/2015	12.3
MIP-28	Area 2	11/23/2015	12.9
MIP-29	Area 2	11/23/2015	12.1
MIP-30	Area 2	11/23/2015	13.7
MIP-31	Area 2	11/23/2015	11.8
MIP-32	Area 2	11/24/2015	13.0
MIP-33	Area 2	11/24/2015	13.3
MIP-34	Area 2	11/24/2015	11.6
MIP-35	Area 2	11/24/2015	10.4

Key

ft bgs = feet below ground surface
MIP = Membrane Interface Probe

Table 5
Summary of Soil Borings and Samples
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
525 French Road, Utica, NY

Soil Boring Information				Sample Information				
Location	Investigation Area	Date	Depth (ft bgs)	ID[1]	Date	Depth (ft bgs)	PID[2] (ppm)	QC
B1	Area 2	12/10/2015	15.0	B1-AREA2-s1	12/10/2015	9.7 - 10.0	0.3	
B2	Area 2	12/10/2015	15.0	B2-AREA2-s1	12/10/2015	9.7 - 10.0	1.8	
B3	Area 2	12/2/2015 - 12/3/2015	16.0	B3-AREA2-s1	12/2/2015	4.4 - 4.6	1647	
				B3-AREA2-s2	12/2/2015	10.3 - 10.4	0.5	
B4	Area 2	12/2/2015	19.0	B4-AREA2-s1	12/2/2015	5.3 - 5.5	180.6	
				B4-AREA2-s2	12/2/2015	8.0 - 8.1	0.2	
				B4-AREA2-s3	12/2/2015	15.2 - 15.4	0.2	
B5	Area 2	12/10/2015	15.0	B5-AREA2-s1	12/10/2015	13.2-13.5	0.0	
B6	Area 2	12/13/2015	16.0	B6-AREA2-s1	12/3/2015	6.4 - 6.5	0.2	
				B6-AREA2-s2	12/3/2015	13.5 - 13.7	0.0	
B7	Area 2	12/7/2015 - 12/8/2015	15.0	B7-AREA2-s1	12/7/2015	5.2 - 5.5	0.0	
B8	Area 2	12/4/2015	16.0	B8-AREA2-s1	12/4/2015	7.4 - 8.0	1.8 - 2.1	
B9	Area 2	12/4/2015	15.0	B9-AREA2-s1	12/4/2015	7.8 - 8.0	16.8	
				B9-AREA2-s2	12/4/2015	12.8 - 13.2	2.5	MS/MSD
B10	Area 2	12/7/2015	15.0	B10-AREA2-s1	12/7/2015	5.2 - 5.5	3.4	
				B10-AREA2-s2	12/7/2015	8.0 - 8.5	95.1	
				B10-AREA2-s3	12/7/2015	9.7 - 10.0	0.4	
B11	Area 2	12/7/2015	15.0	B11-AREA2-s1	12/7/2015	8.4 - 8.8	51.9	
B12	Area 2	12/7/2015	15.0	B12-AREA2-s1	12/7/2015	4.6 - 4.9	5.0	
				B12-AREA2-s2	12/7/2015	6.5 - 7.0	67.2	
				B12-AREA2-s3	12/7/2015	11.1 - 11.3	0.1	
B13	Area 2	12/7/2015	15.0	B13-AREA2-s1	12/7/2015	7.7 - 8.0	42.0	
				B13-AREA2-s2	12/7/2015	14.0 - 14.5	1.1	
B14	Area 2	12/7/2015	15.0	B14-AREA2-s1	12/7/2015	4.5 - 5.0	8.4	
				B14-AREA2-s2	12/7/2015	10.0 - 10.5	0.1	
B15	Area 2	12/7/2015	15.0	B15-AREA2-s1	12/7/2015	4.5 - 4.8	24.7	
				B15-AREA2-s2	12/7/2015	8.0 - 8.5	0.2	
B16	Area 2	12/7/2015	15.0	B16-AREA2-s1	12/7/2015	5.4 - 5.7	0.0	
				B16-AREA2-s2	12/7/2015	11.0 - 11.5	0.0	MS/MSD
B17	Area 2	12/8/2015	15.0	B17-AREA2-s1	12/8/2015	7.3 - 7.6	0.2	
				B17-AREA2-s2	12/8/2015	9.6 - 9.9	0.2	
B18	Pole Barn	12/14/2015	15.0	B18-POLEBARN-s1	12/14/2015	8.1 - 8.4	0.5	
				B18-POLEBARN-s2	12/14/2015	12.4 - 12.7	0.1	
B19	Pole Barn	12/14/2015	15.0	B19-POLEBARN-s1	12/14/2015	4.7 - 5.0	0.1	
				B19-POLEBARN-s2	12/14/2015	8.0 - 8.5	0.2	MS/MSD
B20	Pole Barn	12/14/2015	15.0	B20-POLEBARN-s1	12/14/2015	4.0 - 4.5	0.2	
				B20-POLEBARN-s2	12/14/2015	8.1 - 8.4	13.2	
				B20-POLEBARN-s3	12/14/2015	12.5 - 12.8	0.6	
B21	Pole Barn	12/14/2015	15.0	B21-POLEBARN-s1	12/14/2015	5.5 - 6.0	0.5	
				B21-POLEBARN-s2	12/14/2015	11.1 - 11.4	0.2	
B22	Pole Barn	11/24/2015	16.0	B22-POLEBARN-s1	11/24/2015	5.9 - 6.0	117.0	
				B22-POLEBARN-s2	11/24/2015	9.8 - 9.9	700.1	
				B22-POLEBARN-s3	11/24/2015	15.9 - 16.0	4.5	
B23	Area 2	11/23/2015	20.0	B23-AREA2-s1	11/23/2015	8.3 - 8.5	76.1	
				B23-AREA2-s2	11/23/2015	19.3 - 19.4	0.0	
B24	Area 2	11/23/2015	14.0	B24-AREA2-s1	11/23/2015	8.1 - 8.4	62.8	
				B24-AREA2-s2	11/23/2015	13.8 - 13.9	0.0	
B25	Area 2	12/3/2015	16.0	B25-AREA2-s1	12/3/2015	4.3 - 4.6	59.2	
				B25-AREA2-s2	12/3/2015	8.6 - 8.7	0.5	
				B25-AREA2-s3	12/3/2015	12.1 - 12.3	0.7	
B26	Area 2	12/4/2015	14.0	B26-AREA2-s1	12/4/2015	5.5 - 5.6	0.0	
B27	Area 2	12/8/2015	15.0	B27-AREA2-s1	12/8/2015	10.7 - 11.0	0.0	
				B27-AREA2-s2	12/8/2015	14.5 - 14.8	0.0	
B28	Area 2	12/8/2015	15.0	B28-AREA2-s1	12/8/2015	8.0 - 8.5	0.0	
				B28-AREA2-s2	12/8/2015	10.5 - 10.8	0.2	
B29	Area 2	12/8/2015	15.0	B29-AREA2-s1	12/8/2015	6.3 - 6.6	39.7	
				B29-AREA2-s2	12/8/2015	9.7 - 10.0	0.1	
B30	Area 2	12/8/2015	15.0	B30-AREA2-s1	12/8/2015	6.5 - 6.8	0.5	
				B30-AREA2-s2	12/8/2015	14.4 - 14.7	0.1	
B31	Area 2	12/8/2015	15.0	B31-AREA2-s1	12/8/2015	3.5 - 4.0	34.7	
				B31-AREA2-s2	12/8/2015	11.0 - 11.3	0.1	
B32	Area 2	12/10/2015	15.0	B32-AREA2-s1	12/10/2015	6.0 - 6.5	0.5	
				B32-AREA2-s2	12/10/2015	9.5 - 10.0	0.0	MS/MSD
B33	Area 2	12/10/2015	15.0	B33-AREA2-s1	12/10/2015	7.5 - 7.8	14.9	
				B33-AREA2-s2	12/10/2015	9.3 - 9.6	0.0	
B34	Area 2	12/10/2015	15.0	B34-AREA2-s1	12/10/2015	6.0 - 6.3	0.0	
B35	Area 2	12/8/2015	15.0	B35-AREA2-s1	12/8/2015	5.7 - 6.0	1.3	
				B35-AREA2-s2	12/8/2015	12.5 - 12.8	0.0	
B36	Pole Barn	12/15/2015	14.8	B36-POLEBARN-s1	12/15/2015	4.0 - 4.5	8.9	
				B36-POLEBARN-s2	12/15/2015	8.0 - 8.4	234.6	
				B36-POLEBARN-s3	12/15/2015	14.4 - 14.7	105.8 - 115.1	
B37	Pole Barn	12/14/2015	15.0	B37-POLEBARN-s1	12/14/2015	6.7 - 7.0	0.8	
				B37-POLEBARN-s2	12/14/2015	7.7 - 8.0	310.8	
				B37-POLEBARN-s3	12/14/2015	14.4 - 14.9	1.4	
B38	Pole Barn	12/14/2015	19.5	B38-POLEBARN-s1	12/14/2015	3.8 - 4.0	1.2	
				B38-POLEBARN-s2	12/14/2015	9.0 - 9.3	927.7	
				B38-POLEBARN-s3	12/14/2015	19.1 - 19.4	2.7	
QC Samples	-	-	-	B-AREA2-DUP1	12/4/2015	7.4 - 8.0	1.8 - 2.1	FD (parent sample: B8-AREA2-s1)
				B-AREA2-DUP2	12/7/2015	14.0 - 14.5	1.1	FD ('parent sample: B13-AREA2-s2)
				B-AREA2-DUP3	12/10/2015	9.7 - 10.0	0.3	FD (parent sample: B1-AREA2-s1)
				B-POLEBARN-DUP4	12/14/2015	14.4 - 14.9	1.4	FD (parent sample: B37-POLEBARN-s3)
				SB-RINSEBLANK1	11/24/2015	N/A	-	RB
				SB-RINSEBLANK2	12/3/2015	N/A	-	RB
				SB-RINSEBLANK3	12/8/2015	N/A	-	RB
				MIP-RINSEBLANK	11/19/2015	N/A	-	RB

See next page for notes

Table 5
Summary of Soil Borings and Samples
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
525 French Road, Utica, NY

Soil Boring Information				Sample Information				
Location	Investigation Area	Date	Depth (ft bgs)	ID[1]	Date	Depth (ft bgs)	PID[2] (ppm)	QC
Supplemental								
B101	Area 2	6/7/2016	9.5	B101-AREA2-s1	6/7/2016	7.0 - 7.5	0.0	
				B101-AREA2-s2	6/7/2016	9.0 - 9.5	-	
B102	Area 2	6/7/2016	14.0	B102-AREA2-s1	6/7/2016	6.0 - 6.5	270.1	
				B102-AREA2-s2	6/7/2016	12.0 - 12.5	0.0	
B103	Area 2	6/7/2016	9.6	B103-AREA2-s1	6/7/2016	4.5 - 5.0	481.3	
				B103-AREA2-s2	6/7/2016	9.0 - 9.5	0.6	
B104	Pole Barn	6/8/2016	9.5	B104-AREA2-s1	6/8/2016	4.5 - 5.0	0.0	
				B104-AREA2-s2	6/8/2016	8.5 - 9.0	0.0	
B105	Pole Barn	6/8/2016	9.0	B105-AREA2-s1	6/8/2016	4.5 - 5.0	51.3	
				B105-AREA2-s2	6/8/2016	8.5 - 9.0	0.2	
B106	Pole Barn	6/8/2016	9.0	B106-AREA2-s1	6/8/2016	4.5 - 5.0	0.0	
				B106-AREA2-s2	6/8/2016	8.5 - 9.0	0.0	
B107	Pole Barn	6/8/2016	13.5	B107-AREA2-s1	6/8/2016	5.5 - 6.0	0.0	
				B107-AREA2-s2	6/8/2016	13.0 - 13.5	0.0	MS/MSD
B108	Pole Barn	6/8/2016	14.0	B108-AREA2-s1	6/8/2016	7.5 - 8.0	0.0	MS/MSD
				B108-AREA2-s2	6/8/2016	13.5 - 14.0	0.0	
B109	Area 2	6/7/2016	15.0	B109-AREA2-s1	6/7/2016	7.0 - 7.5	0.0	
				B109-AREA2-s2	6/7/2016	11.0 - 11.5	0.0	
B110	Area 2	6/7/2016	14.5	B110-AREA2-s1	6/7/2016	5.0 - 5.5	33.0	
				B110-AREA2-s2	6/7/2016	9.0 - 9.5	0.0	
B110b	Area 2	6/8/2016	14.5	-	-	-	-	
B111	Area 2	6/7/2016	20.0	B111-AREA2-s1	6/7/2016	7.8 - 8.2	0.0	
				B111-AREA2-s2	6/7/2016	14.0 - 14.5	0.1	
B112	Area 2	6/7/2016	14.5	B112-AREA2-s1	6/7/2016	6.5 - 7.0	0.0	
				B112-AREA2-s2	6/7/2016	14.0 - 14.5	0.0	
B113	Area 2	6/7/2016	20.0	B113-AREA2-s1	6/7/2016	8.0 - 8.5	0.3	
				B113-AREA2-s2	6/7/2016	19.5 - 20.0	0.0	
B114	Area 2	6/6/2016 - 6/7/2016	19.5	B114-AREA2-s1	6/7/2016	8.0 - 8.5	0.2	
				B114-AREA2-s2	6/7/2016	15.0 - 15.5	0.0	
B115	Area 2	6/7/2016	15.0	B115-AREA2-s1	6/7/2016	6.0 - 6.5	22.5	
				B115-AREA2-s2	6/7/2016	9.0 - 9.5	0.0	
QC Samples	-	-	-	B-AREA2-DUP5	6/7/2016	12.0 - 12.5	0.0	FD (parent sample: B102-AREA2-s2)
				B-POLEBARN-DUP6	6/8/2016	8.5 - 9.0	0.2	FD (parent sample: B105-AREA2-s2)
				SB-RINSEBLANK4	6/8/2016	N/A	-	RB
				TRIP BLANK	6/8/2016	N/A	-	TB

Notes
[1] All samples were analyzed for TCL VOCs (USEPA Method 8260).
[2] multiRAE/miniRAE with 10.6 eV lamp.

Key
FD = Field Duplicate
eV = Electrovolt
ft bgs = feet below ground surface
MS/MSD = Matrix spike/matrix spike duplicate
PCBs = Polychlorinated biphenyls
PID = Photoionization detector
ppm = parts per million
QC = Quality Control
RB = Rinsate Blank
SB = Soil Boring
TB = Trip Blank
VOCs = Volatile organic compounds

Table 6
Summary of Sump Water Analytical Results
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
Utica, New York

Sample Location			SUMP
Sample Date			19-Nov-15
Sample ID			SUMP-W
Sampling Company			STANTEC
Laboratory			TALBUFF
Laboratory Work Order			480-91550-2
Laboratory Sample ID	Units	TOGS	480-91550-3
Volatile Organic Compounds			
1,1,1-Trichloroethane	µg/L	5[**B]	10 U
1,1,2,2-Tetrachloroethane	µg/L	5[**B]	10 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	µg/L	5[**B]	10 U
1,1,2-Trichloroethane	µg/L	1[B]	10 U
1,1-Dichloroethane	µg/L	5[**B]	10 U
1,1-Dichloroethene	µg/L	5[**B]	10 U
1,2,4-Trichlorobenzene	µg/L	5[**B]	10 U
1,2-Dibromo-3-Chloropropane	µg/L	0.04[B]	10 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	0.0006[B]	10 U
1,2-Dichlorobenzene	µg/L	3[B]	10 U
1,2-Dichloroethane	µg/L	0.6[B]	10 U
1,2-Dichloropropane	µg/L	1[B]	10 U
1,3-Dichlorobenzene	µg/L	3[B]	10 U
1,4-Dichlorobenzene	µg/L	3[B]	10 U
2-Hexanone	µg/L	50[A]	50 U
Acetone	µg/L	50[A]	100 U
Benzene	µg/L	1[B]	10 U
Bromodichloromethane	µg/L	50[A]	10 U
Bromoform	µg/L	50[A]	10 U
Bromomethane	µg/L	5[**B]	10 U J
Carbon Disulfide	µg/L	60[A]	10 U
Carbon Tetrachloride	µg/L	5[B]	10 U
Chlorobenzene	µg/L	5[**B]	10 U
Chloroethane	µg/L	5[**B]	10 U
Chloroform	µg/L	7[B]	10 U
Chloromethane	µg/L	5[**B]	10 U
Cis-1,2-Dichloroethylene	µg/L	5[**B]	10 U
Cis-1,3-Dichloropropene	µg/L	0.4[p,B]	10 U
Cyclohexane	µg/L	n/v	10 U
Dibromochloromethane	µg/L	50[A]	10 U
Dichlorodifluoromethane	µg/L	5[**B]	10 U
Ethylbenzene	µg/L	5[**B]	10 U
Isopropylbenzene (Cumene)	µg/L	5[**B]	10 U
Methyl Acetate	µg/L	n/v	25 U
Methyl Ethyl Ketone (2-Butanone)	µg/L	50[A]	100 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	µg/L	n/v	50 U
Methylcyclohexane	µg/L	n/v	10 U
Methylene Chloride	µg/L	5[**B]	10 U
Styrene	µg/L	5[**B]	10 U
Tert-Butyl Methyl Ether	µg/L	10[A]	10 U
Tetrachloroethylene (PCE)	µg/L	5[**B]	10 U
Toluene	µg/L	5[**B]	10 U
Trans-1,2-Dichloroethene	µg/L	5[**B]	10 U
Trans-1,3-Dichloropropene	µg/L	0.4[p,B]	10 U
Trichloroethylene (TCE)	µg/L	5[**B]	10 U
Trichlorofluoromethane	µg/L	5[**B]	10 U
Vinyl Chloride	µg/L	2[B]	10 U
Xylenes, Total	µg/L	n/v	20 U

Notes:

TOGS	NYSDEC TOGS 1.1.1 (Reissued June 1998 with errata in January 1999 and addenda in April 2000 and June 2004)
[A]	TOGS 1.1.1 - Table 1 - Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Guidance
[B]	TOGS 1.1.1 - Table 1 - Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Standards
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration was less than the applicable standard.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
**	The principal organic contaminant standard for groundwater of 5 ug/L (described elsewhere in the TOGS table) applies to this substance.
p	Applies to the sum of cis- and trans-1,3-dichloropropene.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Table 7
Summary of Sump Sediment Analytical Results
Excavation Initial Design Investigation
Former Lockheed Martin French Road Facility
Utica, New York

Sample Location			SUMP
Sample Date			20-Nov-15
Sample ID			SUMP-SED
Sample Depth			1.5 ft
Sampling Company			STANTEC
Laboratory			TALBUFF
Laboratory Work Order			480-91550-2
Laboratory Sample ID	Units	NYSDEC	480-91550-7
Volatile Organic Compounds			
1,1,1-Trichloroethane	µg/kg	680[A] 500000[c,B]	17 U
1,1,2,2-Tetrachloroethane	µg/kg	1000000[d,A] 500000[c,B]	17 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	µg/kg	1000000[d,A] 500000[c,B]	17 U
1,1,2-Trichloroethane	µg/kg	1000000[d,A] 500000[c,B]	17 U
1,1-Dichloroethane	µg/kg	270[A] 240000[B]	17 U
1,1-Dichloroethene	µg/kg	330[A] 500000[c,B]	17 U
1,2,4-Trichlorobenzene	µg/kg	1000000[d,A] 500000[c,B]	1.0 NJ
1,2-Dibromo-3-Chloropropane	µg/kg	n/v	17 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/kg	n/v	17 U
1,2-Dichlorobenzene	µg/kg	1100[A] 500000[c,B]	10 NJ
1,2-Dichloroethane	µg/kg	20[g,A] 30000[B]	17 U
1,2-Dichloropropane	µg/kg	1000000[d,A] 500000[c,B]	17 U
1,3-Dichlorobenzene	µg/kg	2400[A] 280000[B]	17 U
1,4-Dichlorobenzene	µg/kg	1800[A] 130000[B]	17 U
2-Hexanone	µg/kg	1000000[d,A] 500000[c,B]	86 U
Acetone	µg/kg	50[A] 500000[c,B]	**270 J[A]**
Benzene	µg/kg	60[A] 44000[B]	17 U
Bromodichloromethane	µg/kg	1000000[d,A] 500000[c,B]	17 U
Bromoform	µg/kg	1000000[d,A] 500000[c,B]	17 U
Bromomethane	µg/kg	1000000[d,A] 500000[c,B]	17 U
Carbon Disulfide	µg/kg	1000000[d,A] 500000[c,B]	17 U
Carbon Tetrachloride	µg/kg	760[A] 22000[B]	17 U
Chlorobenzene	µg/kg	1100[A] 500000[c,B]	17 U
Chloroethane	µg/kg	1000000[d,A] 500000[c,B]	17 U
Chloroform	µg/kg	370[A] 350000[B]	17 U
Chloromethane	µg/kg	1000000[d,A] 500000[c,B]	17 U
Cis-1,2-Dichloroethylene	µg/kg	250[A] 500000[c,B]	17 U
Cis-1,3-Dichloropropene	µg/kg	1000000[d,A] 500000[c,B]	17 U
Cyclohexane	µg/kg	n/v	17 U
Dibromochloromethane	µg/kg	1000000[d,A] 500000[c,B]	17 U
Dichlorodifluoromethane	µg/kg	n/v	17 UJ
Ethylbenzene	µg/kg	1000[A] 390000[B]	2.2 NJ
Isopropylbenzene (Cumene)	µg/kg	1000000[d,A] 500000[c,B]	17 U
Methyl Acetate	µg/kg	n/v	17 U
Methyl Ethyl Ketone (2-Butanone)	µg/kg	120[A] 500000[c,B]	48 NJ
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	µg/kg	1000000[d,A] 500000[c,B]	86 U
Methylcyclohexane	µg/kg	n/v	17 U
Methylene Chloride	µg/kg	50[A] 500000[c,B]	17 U
Styrene	µg/kg	1000000[d,A] 500000[c,B]	17 U
Tert-Butyl Methyl Ether	µg/kg	930[A] 500000[c,B]	17 U
Tetrachloroethylene (PCE)	µg/kg	1300[A] 150000[B]	10 NJ
Toluene	µg/kg	700[A] 500000[c,B]	2.0 NJ
Trans-1,2-Dichloroethene	µg/kg	190[A] 500000[c,B]	17 U
Trans-1,3-Dichloropropene	µg/kg	1000000[d,A] 500000[c,B]	17 U
Trichloroethylene (TCE)	µg/kg	470[A] 200000[B]	6.8 NJ
Trichlorofluoromethane	µg/kg	n/v	17 UJ
Vinyl Chloride	µg/kg	20[A] 13000[B]	17 U
Xylenes, Total	µg/kg	n/v	9.1 NJ

Notes:

NYSDEC	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
A	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Groundwater
B	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration was less than the applicable standard.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
c	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
d	The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 mg/kg (Organics) and 10000 mg/kg (Inorganics). See 6 NYCRR Part 375 TSD Section 9.3.
g	For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the DEC/DOH rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
N	Indicates presumptive evidence of a compound. This flag is usually used for tentatively identified compoun. Where the identification is based on a mass spectral library search.

Table 8
Summary of Surface Soil Analytical Results
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
Utica, New York

Area of Interest			LMCU-SS-07																
Sample Location			SS7-1	SS7-2	SS7-3		SS7-4	SS7-5	SS7-6	SS7-7	SS7-8	SS7-9	SS7-10	SS7-11	SS7-12	SS7-13	SS7-14		SS7-15
Sample Date			17-Nov-15	17-Nov-15	17-Nov-15	17-Nov-15	17-Nov-15	17-Nov-15	17-Nov-15	17-Nov-15	17-Nov-15	7-Jun-16	7-Jun-16	7-Jun-16	7-Jun-16	7-Jun-16	7-Jun-16	7-Jun-16	7-Jun-16
Sample ID			SS7-1	SS7-2	SS7-3	SS7-DUP	SS7-4	SS7-5	SS7-6	SS7-7	SS7-8	SS7-9	SS7-10	SS7-11	SS7-12	SS7-13	SS7-14	SS7-DUP2	SS7-15
Sample Depth			0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF
Laboratory Work Order			480-91253-1	480-91253-1	480-91253-1	480-91253-1	480-91253-1	480-91253-1	480-91253-1	480-91253-1	480-91253-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1
Laboratory Sample ID			480-91253-15	480-91253-16	480-91253-17	480-91253-23	480-91253-18	480-91253-19	480-91253-20	480-91253-21	480-91253-22	480-101258-14	480-101258-15	480-101258-16	480-101258-17	480-101258-18	480-101258-19	480-101258-21	480-101258-20
Sample Type	Units	NYSDEC				Field Duplicate												Field Duplicate	
Polychlorinated Biphenyls																			
PCB-1016 (Aroclor 1016)	mg/kg	[AB]°	0.19 U	0.22 U	0.23 U	0.23 U	0.20 U	0.26 U	0.22 U	0.23 U	0.23 U	0.29 U	0.29 U	0.23 U	0.27 U	0.27 U	0.25 U	0.27 U	0.21 U
PCB-1221 (Aroclor 1221)	mg/kg	[AB]°	0.19 U	0.22 U	0.23 U	0.23 U	0.20 U	0.26 U	0.22 U	0.23 U	0.23 U	0.29 U	0.29 U	0.23 U	0.27 U	0.27 U	0.25 U	0.27 U	0.21 U
PCB-1232 (Aroclor 1232)	mg/kg	[AB]°	0.19 U	0.22 U	0.23 U	0.23 U	0.20 U	0.26 U	0.22 U	0.23 U	0.23 U	0.29 U	0.29 U	0.23 U	0.27 U	0.27 U	0.25 U	0.27 U	0.21 U
PCB-1242 (Aroclor 1242)	mg/kg	[AB]°	0.19 U	0.22 U	0.23 U	0.23 U	0.20 U	0.26 U	0.22 U	0.23 U	0.23 U	0.29 U	0.29 U	0.23 U	0.27 U	0.27 U	0.25 U	0.27 U	0.21 U
PCB-1248 (Aroclor 1248)	mg/kg	[AB]°	0.19 U	0.22 U	0.23 U	0.23 U	0.20 U	0.26 U	0.22 U	0.23 U	0.23 U	0.29 U	0.29 U	0.23 U	0.27 U	0.27 U	0.25 U	0.27 U	0.21 U
PCB-1254 (Aroclor 1254)	mg/kg	[AB]°	0.12 NJ	0.22 U	0.23 U	0.23 U	3.9 J	0.45	0.23 J	1.2	2.2 J	1.2 J	0.23 NJ	3.6 J	0.38 J	0.71 J	1.9 J	3.7 J	0.55 J
PCB-1260 (Aroclor 1260)	mg/kg	[AB]°	0.19 U	0.22 U	0.23 U	0.23 U	0.20 U	0.26 U	0.22 U	0.23 U	0.23 U	0.29 U	0.29 U	0.23 U	0.27 U	0.27 U	0.25 U	0.27 U	0.21 U
Polychlorinated Biphenyl (PCBs)	mg/kg	[A] 1 25 [B]	0.12 NJ	ND	ND	ND	**3.9 J[A]**	0.45	0.23 J	**1.2[A]**	**2.2 J[A]**	**1.2 J [A]**	0.23 NJ	**3.6 J[A]**	0.38 J	0.71 J	**1.9 J[A]**	**3.7 J[A]**	0.55 J

Notes:

NYSDEC	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
A	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
B	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Industrial
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
°	Standard is applicable to total PCBs, and the individual Aroclors should be added for comparison.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
TALBUFF	Test America Laboratories, Inc., Amherst, NY

Table 8
Summary of Surface Soil Analytical Results
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
Utica, New York

Area of Interest			LMCU-SS-07												LMCU-SS-20				
Sample Location			SS7-16		SS7-17	SS7-18	SS7-19	SS7-20	SS7-21	SS7-22	SS7-23	SS7-24	SS7-25	SS7-26	SS7-27	SS20-1	SS20-2	SS20-3	SS20-4	SS20-5
Sample Date			5-Oct-16	5-Oct-16	5-Oct-16	5-Oct-16	5-Oct-16	5-Oct-16	5-Oct-16	5-Oct-16	5-Oct-16	5-Oct-16	5-Oct-16	5-Oct-16	5-Oct-16	17-Nov-15	20-Nov-15	20-Nov-15	17-Nov-15	17-Nov-15
Sample ID			SS7-16	SS7-DUP3	SS7-17	SS7-18	SS7-19	SS7-20	SS7-21	SS7-22	SS7-23	SS7-24	SS7-25	SS7-26	SS7-27	SS20-1	SS20-2	SS20-3	SS20-4	SS20-5
Sample Depth			0.5 ft	0.5 ft	0.5 ft	0.5 ft	0.5 ft	0.5 ft	0.5 ft	0.5 ft	0.5 ft	0.5 ft	0.5 ft	0.5 ft	0.5 ft	0.3 - 0.5 ft	0.7 - 0.8 ft	1.2 - 1.3 ft	0.3 - 0.5 ft	0.3 - 0.5 ft
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF
Laboratory Work Order			4801071001	4801071001	4801071001	4801071001	4801071001	4801071001	4801071001	4801071001	4801071001	4801071001	4801071001	4801071001	4801071001	480-91253-1	480-91550-1	480-91550-1	480-91253-1	480-91253-1
Laboratory Sample ID			480-107100-1	480-107100-13	480-107100-2	480-107100-3	480-107100-4	480-107100-5	480-107100-6	480-107100-7	480-107100-8	480-107100-9	480-107100-10	480-107100-11	480-107100-12	480-91253-1	480-91550-4	480-91550-5	480-91253-2	480-91253-3
Sample Type	Units	NYSDEC		Field Duplicate																
Polychlorinated Biphenyls																				
PCB-1016 (Aroclor 1016)	mg/kg	[AB]°	0.25 U	0.28 U	0.23 U	0.30 U	0.32 U	0.32 U	0.22 U	0.19 U	0.27 U	0.37 U	0.20 U	0.31 U	0.29 U	0.25 U	0.23 U	0.20 U	1.3 U	0.23 U
PCB-1221 (Aroclor 1221)	mg/kg	[AB]°	0.25 U	0.28 U	0.23 U	0.30 U	0.32 U	0.32 U	0.22 U	0.19 U	0.27 U	0.37 U	0.20 U	0.31 U	0.29 U	0.25 U	0.23 U	0.20 U	1.3 U	0.23 U
PCB-1232 (Aroclor 1232)	mg/kg	[AB]°	0.25 U	0.28 U	0.23 U	0.30 U	0.32 U	0.32 U	0.22 U	0.19 U	0.27 U	0.37 U	0.20 U	0.31 U	0.29 U	0.25 U	0.23 U	0.20 U	1.3 U	0.23 U
PCB-1242 (Aroclor 1242)	mg/kg	[AB]°	0.25 U	0.28 U	0.23 U	0.30 U	0.32 U	0.32 U	0.22 U	0.19 U	0.27 U	0.37 U	0.20 U	0.31 U	0.29 U	0.25 U	0.23 U	0.20 U	1.3 U	0.23 U
PCB-1248 (Aroclor 1248)	mg/kg	[AB]°	0.25 U	0.28 U	0.23 U	0.30 U	0.32 U	0.32 U	0.22 U	0.19 U	0.27 U	0.37 U	0.20 U	0.31 U	0.29 U	0.25 U	0.23 U	0.20 U	1.3 U	0.23 U
PCB-1254 (Aroclor 1254)	mg/kg	[AB]°	0.53 J	0.32 J	0.23 U	0.73 J	1.0 J	1.2	0.34 J	1.3 J	1.4 J	0.39 J	0.20 U	0.31 U	0.32 J	0.52 J	0.31 J	0.16 NJ	13 J	2.2 J
PCB-1260 (Aroclor 1260)	mg/kg	[AB]°	0.25 U	0.28 U	0.23 U	0.30 U	0.32 U	0.32 U	0.22 U	0.19 U	0.27 U	0.37 U	0.20 U	0.31 U	0.29 U	0.25 U	0.23 U	0.20 U	1.3 U	0.23 U
Polychlorinated Biphenyl (PCBs)	mg/kg	[A] 1 [B] 25	0.53 J	0.32 J	ND	0.73 J	1.0 J	**1.2 [A]**	0.34 J	**1.3 J [A]**	**1.4 J [A]**	0.39 J	ND	ND	0.32 J	0.52 J	0.31 J	0.16 NJ	**13 J [A]**	**2.2 J [A]**

Notes:

NYSDEC	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
A	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
B	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Industrial
6.5 [A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
°	Standard is applicable to total PCBs, and the individual Aroclors should be added for comparison.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
TALBUFF	Test America Laboratories, Inc., Amherst, NY

Table 8
Summary of Surface Soil Analytical Results
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
Utica, New York

Area of Interest			LMCU-SS-20								LMCU-SS-21								
Sample Location			SS20-6	SS20-7	SS20-8	SS20-9	SS20-10	SS20-11	SS20-12	SS20-13	SS21-1		SS21-2	SS21-3	SS21-4	SS21-5	SS21-6	SS21-7	SS21-8	SS21-9
Sample Date			20-Nov-15	17-Nov-15	17-Nov-15	6-Jun-16	6-Jun-16	6-Jun-16	6-Jun-16	6-Jun-16	17-Nov-15	17-Nov-15	17-Nov-15	17-Nov-15	17-Nov-15	17-Nov-15	17-Nov-15	17-Nov-15	17-Nov-15	6-Jun-16
Sample ID			SS20-6	SS20-7	SS20-8	SS20-9	SS20-10	SS20-11	SS20-12	SS20-13	SS21-1	SS21-DUP	SS21-2	SS21-3	SS21-4	SS21-5	SS21-6	SS21-7	SS21-8	SS21-9
Sample Depth			1.3 - 1.5 ft	1.3 - 1.4 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.4 ft	0.4 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.4 ft	0.3 - 0.5 ft	0.3 - 0.5 ft
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF
Laboratory Work Order			480-91550-1	480-91253-1	480-91253-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-91253-1	480-91253-1	480-91253-1	480-91253-1	480-91253-1	480-91253-1	480-91253-1	480-91253-1	480-91253-1	480-101258-1
Laboratory Sample ID			480-91550-6	480-91253-4	480-91253-5	480-101258-9	480-101258-10	480-101258-11	480-101258-12	480-101258-13	480-91253-6	480-91253-12	480-91253-7	480-91253-8	480-91253-9	480-91253-10	480-91253-11	480-91253-13	480-91253-14	480-101258-1
Sample Type	Units	NYSDEC										Field Duplicate								
Polychlorinated Biphenyls																				
PCB-1016 (Aroclor 1016)	mg/kg	[AB]°	0.24 U	0.25 U	0.27 U	0.21 U	0.47 U	0.26 U	0.27 U	0.24 U	0.30 U	0.30 U	0.30 U	0.24 U	0.22 U	0.22 U	0.25 U	0.30 U	0.27 U	0.32 U
PCB-1221 (Aroclor 1221)	mg/kg	[AB]°	0.24 U	0.25 U	0.27 U	0.21 U	0.47 U	0.26 U	0.27 U	0.24 U	0.30 U	0.30 U	0.30 U	0.24 U	0.22 U	0.22 U	0.25 U	0.30 U	0.27 U	0.32 U
PCB-1232 (Aroclor 1232)	mg/kg	[AB]°	0.24 U	0.25 U	0.27 U	0.21 U	0.47 U	0.26 U	0.27 U	0.24 U	0.30 U	0.30 U	0.30 U	0.24 U	0.22 U	0.22 U	0.25 U	0.30 U	0.27 U	0.32 U
PCB-1242 (Aroclor 1242)	mg/kg	[AB]°	0.24 U	0.25 U	0.27 U	0.21 U	0.47 U	0.26 U	0.27 U	0.24 U	0.30 U	0.30 U	0.30 U	0.24 U	0.22 U	0.22 U	0.25 U	0.30 U	0.27 U	0.32 U
PCB-1248 (Aroclor 1248)	mg/kg	[AB]°	0.24 U	0.25 U	0.27 U	0.21 U	0.47 U	0.26 U	0.27 U	0.24 U	0.30 U	0.30 U	0.30 U	0.24 U	0.22 U	0.22 U	0.25 U	0.30 U	0.27 U	0.32 U
PCB-1254 (Aroclor 1254)	mg/kg	[AB]°	0.19 NJ	0.25 U	1.1 J	3.6	3.3	1.9	1.0	1.8	1.2 J	1.1 J	1.5 J	1.2 J	0.82	1.6 J	0.87 J	2.5 J	0.75 J	1.0
PCB-1260 (Aroclor 1260)	mg/kg	[AB]°	0.24 U	0.25 U	0.27 U	0.21 U	0.47 U	0.26 U	0.27 U	0.24 U	0.30 U	0.30 U	0.30 U	0.24 U	0.22 U	0.22 U	0.25 U	0.30 U	0.27 U	0.32 U
Polychlorinated Biphenyl (PCBs)	mg/kg	[A] 1 [B] 25	0.19 NJ	ND	**1.1 J[A]**	**3.6[A]**	**3.3[A]**	**1.9[A]**	1.0	**1.8[A]**	**1.2 J[A]**	**1.1 J[A]**	**1.5 J[A]**	**1.2 J[A]**	0.82	**1.6 J[A]**	0.87 J	**2.5 J[A]**	0.75 J	1.0

Notes:

NYSDEC	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
A	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
B	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Industrial
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
°	Standard is applicable to total PCBs, and the individual Aroclors should be added for comparison.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
TALBUFF	Test America Laboratories, Inc., Amherst, NY

Table 8
Summary of Surface Soil Analytical Results
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
Utica, New York

Area of Interest			LMCU-SS-21						
Sample Location			SS21-10	SS21-11	SS21-12	SS21-13	SS21-14	SS21-15	SS21-16
Sample Date			6-Jun-16	6-Jun-16	6-Jun-16	6-Jun-16	6-Jun-16	6-Jun-16	6-Jun-16
Sample ID			SS21-10	SS21-11	SS21-12	SS21-13	SS21-14	SS21-15	SS21-16
Sample Depth			0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft	0.3 - 0.5 ft
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF
Laboratory Work Order			480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1
Laboratory Sample ID			480-101258-2	480-101258-3	480-101258-4	480-101258-5	480-101258-6	480-101258-7	480-101258-8
Sample Type	Units	NYSDEC							
Polychlorinated Biphenyls									
PCB-1016 (Aroclor 1016)	mg/kg	1[AB]° 25[B]°	0.29 U	0.32 U	0.27 U	0.30 U	0.34 U	0.31 U	0.28 U
PCB-1221 (Aroclor 1221)	mg/kg	1[AB]° 25[B]°	0.29 U	0.32 U	0.27 U	0.30 U	0.34 U	0.31 U	0.28 U
PCB-1232 (Aroclor 1232)	mg/kg	1[AB]° 25[B]°	0.29 U	0.32 U	0.27 U	0.30 U	0.34 U	0.31 U	0.28 U
PCB-1242 (Aroclor 1242)	mg/kg	1[AB]° 25[B]°	0.29 U	0.32 U	0.27 U	0.30 U	0.34 U	0.31 U	0.28 U
PCB-1248 (Aroclor 1248)	mg/kg	1[AB]° 25[B]°	0.29 U	0.32 U	0.27 U	0.30 U	0.34 U	0.31 U	0.28 U
PCB-1254 (Aroclor 1254)	mg/kg	1[AB]° 25[B]°	1.0	0.98	0.58	0.45	1.8	1.2	1.1
PCB-1260 (Aroclor 1260)	mg/kg	1[AB]° 25[B]°	0.29 U	0.32 U	0.27 U	0.30 U	0.34 U	0.31 U	0.28 U
Polychlorinated Biphenyl (PCBs)	mg/kg	1[A] 25[B]	1.0	0.98	0.58	0.45	**1.8[A]**	**1.2[A]**	**1.1[A]**

Notes:

NYSDEC	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
A	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
B	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Industrial
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
°	Standard is applicable to total PCBs, and the individual Aroclors should be added for comparison.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
TALBUFF	Test America Laboratories, Inc., Amherst, NY

Table 9
Summary of Subsurface Soil Analytical Results
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
Utica, New York

Sample Location			B1		B2	B3		B4			B5	B6		B7	B8		B9		B10		
Sample Date			10-Dec-15	10-Dec-15	10-Dec-15	2-Dec-15	2-Dec-15	2-Dec-15	2-Dec-15	2-Dec-15	10-Dec-15	3-Dec-15	3-Dec-15	7-Dec-15	4-Dec-15	4-Dec-15	4-Dec-15	4-Dec-15	7-Dec-15	7-Dec-15	7-Dec-15
Sample ID			B1-AREA2-S1	B-AREA2-DUP3	B2-AREA2-S1	B3-AREA2-S1	B3-AREA2-S2	B4-AREA2-S1	B4-AREA2-S2	B4-AREA2-S3	B5-AREA2-S1	B6-AREA2-S1	B6-AREA2-S2	B7-AREA2-S1	B8-AREA2-S1	B-AREA2-DUP1	B9-AREA2-S1	B9-AREA2-S2	B10-AREA2-S1	B10-AREA2-S2	B10-AREA2-S3
Sample Depth			9.7 - 10 ft	9.7 - 10 ft	9.7 - 10 ft	4.4 - 4.6 ft	10.3 - 10.4 ft	5.3 - 5.5 ft	8 - 8.1 ft	15.2 - 15.4 ft	13.2 - 13.5 ft	6.4 - 6.5 ft	13.5 - 13.7 ft	5.2 - 5.5 ft	7.4 - 8 ft	7.4 - 8 ft	7.8 - 8 ft	12.8 - 13.2 ft	5.2 - 5.5 ft	8 - 8.5 ft	9.7 - 10 ft
Sampling Company			Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec
Laboratory			TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF
Laboratory Work Order			480-92542-1	480-92542-1	480-92542-1	480-92213-1	480-92213-1	480-92213-1	480-92213-1	480-92213-1	480-92542-1	480-92213-1	480-92213-1	480-92332-1	480-92213-1	480-92213-1	480-92213-1	480-92213-1	480-92332-1	480-92332-1	480-92332-1
Laboratory Sample ID			480-92542-1	480-92542-9	480-92542-2	480-92213-1	480-92213-2	480-92213-3	480-92213-4	480-92213-5	480-92542-3	480-92213-9	480-92213-10	480-92332-1	480-92213-12	480-92213-15	480-92213-13	480-92213-14	480-92332-2	480-92332-3	480-92332-4
Sample Type	Units	NYSDEC		Field Duplicate												Field Duplicate					
Volatile Organic Compounds																					
1,1,1-Trichloroethane	µg/kg	680[A] 500,000[B]	5.3 U	5.2 U	5.8 U	890 U	5.2 U	5.2 U	5.8 U	5.4 U	5.2 U	5.3 U	6.4 U	5.4 U	5.5 U	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
1,1,2,2-Tetrachloroethane	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 UJ	5.8 U	890 U	5.2 UJ	5.2 U	5.8 U	5.4 U	5.2 UJ	5.3 UJ	6.4 UJ	5.4 U	5.5 UJ	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 U	5.8 U	890 U	5.2 U	5.2 U	5.8 U	5.4 U	5.2 U	5.3 U	6.4 U	5.4 U	5.5 U	5.6 U	51 U	18 J	5.5 U	45 U	5.4 U
1,1,2-Trichloroethane	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 UJ	5.8 U	890 U	5.2 UJ	5.2 U	5.8 U	5.4 U	5.2 UJ	5.3 U	6.4 UJ	5.4 U	5.5 UJ	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
1,1-Dichloroethane	µg/kg	270[A] 240000[B]	0.75 NJ	4.1 NJ	5.8 U	890 U	5.2 U	10	5.8 U	5.4 U	5.2 U	5.3 U	6.4 U	5.4 U	5.5 U	1.3 NJ	210	24 J	70	100	5.4 U
1,1-Dichloroethene	µg/kg	330[A] 500,000[B]	5.3 U	5.2 U	5.8 U	890 U	5.2 U	5.2 U	5.8 U	5.4 U	5.2 U	5.3 U	6.4 U	5.4 U	5.5 U	5.6 U	51 U	6.4 UJ	0.94 NJ	45 U	5.4 U
1,2,4-Trichlorobenzene	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 UJ	5.8 U	890 U	5.2 UJ	5.2 U	5.8 U	5.4 U	5.2 UJ	5.3 UJ	6.4 UJ	5.4 U	5.5 UJ	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
1,2-Dibromo-3-Chloropropane	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 UJ	5.8 U	890 U	5.2 UJ	5.2 U	5.8 U	5.4 U	5.2 UJ	5.3 UJ	6.4 UJ	5.4 U	5.5 UJ	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 UJ	5.8 U	890 U	5.2 UJ	5.2 U	5.8 U	5.4 U	5.2 UJ	5.3 U	6.4 UJ	5.4 U	5.5 UJ	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
1,2-Dichlorobenzene	µg/kg	1100[A] 500,000[B]	5.3 U	5.2 UJ	5.8 U	890 U	5.2 UJ	5.2 U	5.8 U	5.4 U	5.2 UJ	5.3 UJ	6.4 UJ	5.4 U	5.5 UJ	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
1,2-Dichloroethane	µg/kg	20[g][A] 30000[B]	5.3 U	5.2 U	5.8 U	890 U	5.2 U	5.2 U	5.8 U	5.4 U	5.2 U	5.3 U	6.4 U	5.4 U	5.5 U	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
1,2-Dichloropropane	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 U	5.8 U	890 U	5.2 U	5.2 U	5.8 U	5.4 U	5.2 U	5.3 U	6.4 U	5.4 U	5.5 U	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
1,3-Dichlorobenzene	µg/kg	2400[A] 280000[B]	5.3 U	5.2 UJ	5.8 U	890 U	5.2 UJ	5.2 U	5.8 U	5.4 U	5.2 UJ	5.3 UJ	6.4 UJ	5.4 U	5.5 UJ	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
1,4-Dichlorobenzene	µg/kg	1800[A] 130000[B]	5.3 U	5.2 UJ	5.8 U	890 U	5.2 UJ	5.2 U	5.8 U	5.4 U	5.2 UJ	5.3 UJ	6.4 UJ	5.4 U	5.5 UJ	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
2-Hexanone	µg/kg	1,000,000[d][A] 500,000[B]	27 U	26 UJ	29 U	4,500 U	26 UJ	26 U	29 U	27 U	26 UJ	26 U	32 UJ	27 U	27 UJ	28 UJ	260 U	32 UJ	28 U	230 U	27 U
Acetone	µg/kg	50[A] 500,000[B]	27 U	26 U	14 NJ	4,500 U	26 UJB	26 UJB	10 NJB	27 UJB	26 U	26 U	24 NJ	27 U	9.7 NJB	20 NJB	260 U	**340 J[A]**	28 U	230 U	7.1 NJB
Benzene	µg/kg	60[A] 44000[B]	5.3 U	5.2 U	5.8 U	890 U	5.2 U	5.2 U	5.8 U	5.4 U	5.2 U	5.3 U	6.4 U	5.4 U	5.5 U	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
Bromodichloromethane	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 U	5.8 U	890 U	5.2 U	5.2 U	5.8 U	5.4 U	5.2 U	5.3 U	6.4 U	5.4 U	5.5 U	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
Bromoform	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 UJ	5.8 U	890 U	5.2 UJ	5.2 U	5.8 U	5.4 U	5.2 UJ	5.3 U	6.4 UJ	5.4 U	5.5 UJ	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
Bromomethane	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 U	5.8 U	890 U	5.2 U	5.2 U	5.8 U	5.4 U	5.2 U	5.3 U	6.4 U	5.4 U	5.5 U	5.6 U	51 U	6.4 UJ	5.5 U	45 U	5.4 U
Carbon Disulfide	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 U	5.8 U	890 U	5.2 U	5.2 U	5.8 U	5.4 U	5.2 U	5.3 U	6.4 U	5.4 U	5.5 U	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
Carbon Tetrachloride	µg/kg	760[A] 22000[B]	5.3 U	5.2 U	5.8 U	890 U	5.2 U	5.2 U	5.8 U	5.4 U	5.2 U	5.3 U	6.4 U	5.4 U	5.5 U	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
Chlorobenzene	µg/kg	1100[A] 500,000[B]	5.3 U	5.2 UJ	5.8 U	890 U	5.2 UJ	5.2 U	5.8 U	5.4 U	5.2 UJ	5.3 U	6.4 UJ	5.4 U	5.5 UJ	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
Chloroethane	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 U	5.8 U	890 U	5.2 U	5.2 U	5.8 U	5.4 U	5.2 U	5.3 U	6.4 U	5.4 U	4.4 NJ	4.6 NJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
Chloroform	µg/kg	370[A] 350000[B]	5.3 U	5.2 U	5.8 U	890 U	5.2 U	0.32 NJ	5.8 U	0.69 NJ	5.2 U	5.3 U	6.4 U	5.4 U	0.42 NJ	1.9 J T	3.8 NJ	6.4 UJ	5.5 U	45 U	5.4 U
Chloromethane	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 U	5.8 U	890 U	5.2 U	5.2 U	5.8 U	5.4 U	5.2 U	5.3 U	6.4 U	5.4 U	5.5 U	5.6 U	51 U	6.4 UJ	5.5 U	45 U	5.4 U
Cis-1,2-Dichloroethylene	µg/kg	250[A] 500,000[B]	5.3 U	2.4 NJ	8.9	890 U	3.4 NJ	**2,500[A]**	1.2 NJ	6.9	5.2 U	1.5 NJ	6.4 U	5.4 U	5.5 U	0.72 NJ	**1,700[A]**	75 J	190	**6,800[A]**	5.8
Cis-1,3-Dichloropropene	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 U	5.8 U	890 U	5.2 U	5.2 U	5.8 U	5.4 U	5.2 U	5.3 U	6.4 U	5.4 U	5.5 U	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
Cyclohexane	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 U	5.8 U	890 U	5.2 U	5.2 U	5.8 U	5.4 U	5.2 U	5.3 U	6.4 U	5.4 U	5.5 U	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
Dibromochloromethane	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 UJ	5.8 U	890 U	5.2 UJ	5.2 U	5.8 U	5.4 U	5.2 UJ	5.3 U	6.4 UJ	5.4 U	5.5 UJ	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
Dichlorodifluoromethane	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 U	5.8 U	890 U	5.2 U	5.2 U	5.8 U	5.4 U	5.2 U	5.3 U	6.4 U	5.4 U	5.5 U	5.6 U	51 U	6.4 UJ	5.5 U	45 U	5.4 U
Ethylbenzene	µg/kg	1000[A] 390000[B]	5.3 U	5.2 UJ	5.8 U	**4,300[A]**	5.2 UJ	1.5 NJ	5.8 U	5.4 U	5.2 UJ	5.3 U	6.4 UJ	5.4 U	5.5 UJ	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
Isopropylbenzene (Cumene)	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 UJ	5.8 U	890 U	5.2 UJ	5.2 U	5.8 U	5.4 U	5.2 UJ	5.3 UJ	6.4 UJ	5.4 U	5.5 UJ	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
Methyl Acetate	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 U	5.8 U	890 U	5.2 U	5.2 U	5.8 U	5.4 U	5.2 U	5.3 U	6.4 U	5.4 U	5.5 U	5.6 U	51 U	6.4 UJ	5.5 U	45 U	5.4 U
Methyl Ethyl Ketone (2-Butanone)	µg/kg	120[A] 500,000[B]	27 U	26 U	29 U	4,500 U	26 U	26 U	29 U	27 U	26 U	26 U	32 U	27 U	27 U	28 UJ	260 U	12 NJ	28 U	230 U	27 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	µg/kg	1,000,000[d][A] 500,000[B]	27 U	26 UJ	29 U	4,500 U	26 UJ	26 U	29 U	27 U	26 UJ	26 U	32 UJ	27 U	27 UJ	28 UJ	260 U	32 UJ	28 U	230 U	27 U
Methylcyclohexane	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 U	5.8 U	890 U	5.2 U	5.2 U	5.8 U	5.4 U	5.2 U	5.3 U	6.4 U	5.4 U	5.5 U	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
Methylene Chloride	µg/kg	50[A] 500,000[B]	5.3 U	2.8 NJ	5.8 U	890 U	3.7 NJ	5.2 U	5.8 U	9.5	5.2 U	5.3 U	5.6 NJ	5.4 U	9.1 J	31 J	50 NJ	41 J	5.5 U	45 U	5.4 U
Styrene	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 UJ	5.8 U	890 U	5.2 UJ	5.2 U	5.8 U	5.4 U	5.2 UJ	5.3 U	6.4 UJ	5.4 U	5.5 UJ	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
Tert-Butyl Methyl Ether	µg/kg	930[A] 500,000[B]	5.3 U	5.2 U	5.8 U	890 U	5.2 U	5.2 U	5.8 U	5.4 U	5.2 U	5.3 U	6.4 U	5.4 U	5.5 U	5.6 U	51 U	6.4 UJ	5.5 U	45 U	5.4 U
Tetrachloroethylene (PCE)	µg/kg	1300[A] 150000[B]	5.3 U	5.2 UJ	7.7	**53,000[A]**	22 J	**13,000[A]**	2.6 NJ	21	5.2 UJ	8.7	9.7 J	5.4 U	5.5 UJ	5.6 UJ	51 U	7.5 J	5.5 U	44 NJ	5.4 U
Toluene	µg/kg	700[A] 500,000[B]	5.3 U	5.2 UJ	1.1 NJ	310 NJ	0.66 NJ	54	5.8 U	0.57 NJ	5.2 UJ	0.51 NJ	0.60 NJ	5.4 U	5.5 UJ	5.6 UJ	9.1 NJ	6.4 UJ	5.5 U	14 NJ	5.4 U
Trans-1,2-Dichloroethene	µg/kg	190[A] 500,000[B]	5.3 U	5.2 U	5.8 U	890 U	5.2 U	3.0 NJ	5.8 U	5.4 U	5.2 U	5.3 U	6.4 U	5.4 U	5.5 U	5.6 UJ	5.6 NJ	6.4 UJ	5.5 U	12 NJ	5.4 U
Trans-1,3-Dichloropropene	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 UJ	5.8 U	890 U	5.2 UJ	5.2 U	5.8 U	5.4 U	5.2 UJ	5.3 U	6.4 UJ	5.4 U	5.5 UJ	5.6 UJ	51 U	6.4 UJ	5.5 U	45 U	5.4 U
Trichloroethylene (TCE)	µg/kg	470[A] 200000[B]	5.3 U	2.7 NJ	2.5 NJ	360 NJ	1.9 NJ	**33,000[A]**	1.7 NJ	3.5 NJ	5.2 U	5.3 U	6.4 U	5.4 U	5.5 U	5.6 UJ	22 NJ	59 J	5.5 U	13 NJ	5.4 U
Trichlorofluoromethane	µg/kg	1,000,000[d][A] 500,000[B]	5.3 U	5.2 U	5.8 U	890 U	5.2 U	5.2 U	5.8 U	5.4 U	5.2 U	5.3 U	6.4 U	5.4 U	5.5 U	5.6 U	51 U	6.4 UJ	5.5 U	45 U	5.4 U
Vinyl Chloride	µg/kg	20[A] 13000[B]	5.3 U	5.2 U	5.8 U	890 U	5.2 U	5.2 U	5.8 U	5.4 U	5.2 U	5.3 U	6.4 U	5.4 U	5.5 U	5.6 U	13 NJ	6.4 UJ	5.5 U	45 U	5.4 U
Xylenes, Total	µg/kg	1600[A] 500,000[B]	11 U	10 UJ	12 U	**23,000[A]**	10 UJ	2.0 NJ	12 U	11 U	10 UJ	11 U	13 UJ	11 U	11 UJ	11 UJ	100 U	13 UJ	11 U	90 U	11 U

Notes:

NYSDEC	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
A	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Groundwater
B	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
c	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
d	The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 mg/kg (Organics) and 10000 mg/kg (Inorganics). See 6 NYCRR Part 375 TSD Section 9.3.
g	For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the DEC/DOH rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
T	QC recovery is outside acceptable limits.
R	The data is unusable. The analyte may or may not be present.
UJ	Indicates estimated non-detect.

Table 9
Summary of Subsurface Soil Analytical Results
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
Utica, New York

Sample Location			B11	B12			B13			B14		B15		B16		B17		B18		B19	
Sample Date			7-Dec-15	7-Dec-15	7-Dec-15	7-Dec-15	7-Dec-15	7-Dec-15	7-Dec-15	7-Dec-15	7-Dec-15	7-Dec-15	7-Dec-15	7-Dec-15	7-Dec-15	8-Dec-15	8-Dec-15	14-Dec-15	14-Dec-15	14-Dec-15	14-Dec-15
Sample ID			B11-AREA2-S1	B12-AREA2-S1	B12-AREA2-S2	B12-AREA2-S3	B13-AREA2-S1	B13-AREA2-S2	B-AREA2-DUP2	B14-AREA2-S1	B14-AREA2-S2	B15-AREA2-S1	B15-AREA2-S2	B16-AREA2-S1	B16-AREA2-S2	B17-AREA2-S1	B17-AREA2-S2	B18-POLEBARN-S1	B18-POLEBARN-S2	B19-POLEBARN-S1	B19-POLEBARN-S2
Sample Depth			8.4 - 8.8 ft	4.6 - 4.9 ft	6.5 - 7 ft	11.1 - 11.3 ft	7.7 - 8 ft	14 - 14.5 ft	14 - 14.5 ft	4.5 - 5 ft	10 - 10.5 ft	4.5 - 4.8 ft	8 - 8.5 ft	5.4 - 5.7 ft	11 - 11.5 ft	7.3 - 7.6 ft	9.6 - 9.9 ft	8.1 - 8.4 ft	12.4 - 12.7 ft	4.7 - 5 ft	8 - 8.5 ft
Sampling Company			Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec
Laboratory			TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF
Laboratory Work Order			480-92332-1	480-92332-1	480-92332-1	480-92332-1	480-92332-1	480-92332-1	480-92332-1	480-92332-1	480-92332-1	480-92332-1	480-92332-1	480-92332-1	480-92332-1	480-92332-1	480-92332-1	480-92744-1	480-92744-1	480-92744-1	480-92744-1
Laboratory Sample ID			480-92332-5	480-92332-6	480-92332-7	480-92332-8	480-92332-9	480-92332-10	480-92332-11	480-92332-12	480-92332-13	480-92332-14	480-92332-15	480-92332-16	480-92332-17	480-92332-18	480-92332-19	480-92744-1	480-92744-2	480-92744-3	480-92744-4
Sample Type	Units	NYSDEC							Field Duplicate												
Volatile Organic Compounds																					
1,1,1-Trichloroethane	µg/kg	680[A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 U	5.6 U	6.0 U	5.2 U	5.5 U	5.5 U	4.9 U
1,1,2,2-Tetrachloroethane	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 UJ	5.6 UJ	6.0 UJ	5.2 U	5.5 UJ	5.5 U	4.9 UJ
1,1,2-Trichloro-1,2,2-Trifluoroethane	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	110	15,000	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 U	5.6 U	6.0 U	5.2 U	5.5 U	5.5 U	1.1 J
1,1,2-Trichloroethane	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 UJ	5.6 UJ	6.0 U	5.2 U	5.5 UJ	5.5 U	4.9 UJ
1,1-Dichloroethane	µg/kg	270[A] 240000[B]	110	26 NJ	1,100 U	5.9 U	**1,900[A]**	110 J	**4,600 J[A]**	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 U	5.6 U	6.0 U	5.2 U	5.5 U	0.82 NJ	4.9 U
1,1-Dichloroethene	µg/kg	330[A] 500,000[B]	4.7 U	55 U	1,100 UJ	5.9 U	5.3 U	5.4 U	1.5 NJ	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 U	5.6 U	6.0 U	5.2 U	5.5 U	5.5 U	4.9 U
1,2,4-Trichlorobenzene	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 UJ	5.6 UJ	6.0 UJ	5.2 U	5.5 UJ	5.5 U	4.9 UJ
1,2-Dibromo-3-Chloropropane	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 UJ	5.6 UJ	6.0 UJ	5.2 U	5.5 UJ	5.5 U	4.9 UJ
1,2-Dibromoethane (Ethylene Dibromide)	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 UJ	5.6 UJ	6.0 U	5.2 U	5.5 UJ	5.5 U	4.9 UJ
1,2-Dichlorobenzene	µg/kg	1100[A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 UJ	5.6 UJ	6.0 UJ	5.2 U	5.5 UJ	5.5 U	4.9 UJ
1,2-Dichloroethane	µg/kg	20[g,A] 30000[B]	4.7 U	55 U	1,100 U	5.9 U	0.56 NJ	0.39 NJ	0.69 NJ	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 UJ	5.6 U	6.0 U	5.2 U	5.5 U	5.5 U	4.9 UJ
1,2-Dichloropropane	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 UJ	5.6 U	6.0 U	5.2 U	5.5 U	5.5 U	4.9 UJ
1,3-Dichlorobenzene	µg/kg	2400[A] 280000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 UJ	5.6 UJ	6.0 UJ	5.2 U	5.5 UJ	5.5 U	4.9 UJ
1,4-Dichlorobenzene	µg/kg	1800[A] 130000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 UJ	5.6 UJ	6.0 UJ	5.2 U	5.5 UJ	5.5 U	4.9 UJ
2-Hexanone	µg/kg	1,000,000[d,A] 500,000[B]	24 U	270 U	5,500 U	30 U	26 U	27 U	24 U	2,800 U	300 U	27 U	26 UJ	27 U	32 UJ	28 UJ	30 U	26 U	27 UJ	28 U	25 UJ
Acetone	µg/kg	50[A] 500,000[B]	24 U	270 U	5,500 U	27 NJ	26 U	6.7 NJB	6.7 NJB	2,800 U	300 U	13 NJB	26 UJ	27 U	32 U	28 UJB	8.2 NJB	26 U	11 NJB	28 UJB	25 U
Benzene	µg/kg	60[A] 44000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 UJ	5.6 U	6.0 U	5.2 U	5.5 U	5.5 U	4.9 U
Bromodichloromethane	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 UJ	5.6 U	6.0 U	5.2 U	5.5 U	5.5 U	4.9 UJ
Bromoform	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 UJ	5.6 UJ	6.0 U	5.2 U	5.5 UJ	5.5 U	4.9 UJ
Bromomethane	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 UJ	61 U	5.3 U	5.3 UJ	5.4 U	6.4 U	5.6 U	6.0 U	5.2 U	5.5 U	5.5 U	4.9 U
Carbon Disulfide	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	2.9 NJB	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 U	5.6 U	6.0 U	5.2 U	5.5 U	5.5 U	4.9 U
Carbon Tetrachloride	µg/kg	760[A] 22000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 U	5.6 U	6.0 U	5.2 U	5.5 U	5.5 U	4.9 U
Chlorobenzene	µg/kg	1100[A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 UJ	5.6 UJ	6.0 U	5.2 U	5.5 UJ	5.5 U	4.9 UJ
Chloroethane	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 U	5.6 U	6.0 U	5.2 U	5.5 U	5.5 U	4.9 U
Chloroform	µg/kg	370[A] 350000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 UJ	5.6 U	6.0 U	5.2 U	5.5 U	5.5 U	4.9 U
Chloromethane	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	55 U	1,100 UJ	5.9 U	5.3 U	5.4 U	4.8 U	550 UJ	61 U	5.3 U	5.3 UJ	5.4 U	6.4 U	5.6 U	6.0 U	5.2 U	5.5 U	5.5 U	4.9 U
Cis-1,2-Dichloroethylene	µg/kg	250[A] 500,000[B]	**12,000[A]**	**1,700[A]**	**3,200[A]**	6.2	**13,000[A]**	**1,800 J[A]**	**24,000 J[A]**	550 U	68	99	5.3 UJ	36	1.0 NJ	1.1 NJ	6.0 U	5.2 U	5.5 U	0.78 NJ	4.9 UJ
Cis-1,3-Dichloropropene	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 UJ	5.6 U	6.0 U	5.2 U	5.5 U	5.5 U	4.9 UJ
Cyclohexane	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 U	5.6 U	6.0 U	5.2 U	5.5 U	5.5 U	4.9 UJ
Dibromochloromethane	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 UJ	5.6 UJ	6.0 U	5.2 U	5.5 UJ	5.5 U	4.9 UJ
Dichlorodifluoromethane	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	55 U	1,100 UJ	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 U	5.6 U	6.0 U	5.2 U	5.5 U	5.5 U	4.9 U
Ethylbenzene	µg/kg	1000[A] 390000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	44	5.3 UJ	5.4 U	6.4 UJ	5.6 UJ	6.0 U	5.2 U	5.5 UJ	5.5 U	4.9 UJ
Isopropylbenzene (Cumene)	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 UJ	5.6 UJ	6.0 UJ	5.2 U	5.5 UJ	5.5 U	4.9 UJ
Methyl Acetate	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 U	5.6 U	6.0 U	5.2 U	5.5 U	5.5 U	4.9 U
Methyl Ethyl Ketone (2-Butanone)	µg/kg	120[A] 500,000[B]	24 U	270 U	5,500 U	30 U	26 U	27 U	24 U	2,800 U	300 U	27 U	26 UJ	27 U	32 UJ	28 U	30 U	26 U	27 U	28 U	25 UJ
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	µg/kg	1,000,000[d,A] 500,000[B]	24 U	270 U	5,500 U	30 U	26 U	27 U	24 U	2,800 U	300 U	27 U	26 UJ	27 U	32 UJ	28 UJ	30 U	26 U	27 UJ	28 U	25 UJ
Methylcyclohexane	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 U	5.6 U	6.0 U	5.2 U	5.5 U	5.5 U	4.9 UJ
Methylene Chloride	µg/kg	50[A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 U	5.6 U	6.0 U	5.2 U	5.5 U	5.5 U	4.9 U
Styrene	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 UJ	5.6 UJ	6.0 U	5.2 U	5.5 UJ	5.5 U	4.9 UJ
Tert-Butyl Methyl Ether	µg/kg	930[A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 U	5.6 U	6.0 U	5.2 U	5.5 U	5.5 U	4.9 U
Tetrachloroethylene (PCE)	µg/kg	1300[A] 150000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	**31,000[A]**	810 J	**39,000 J[A]**	5.0 NJ	5.4 U	6.4 UJ	5.6 UJ	6.0 U	5.2 U	5.5 UJ	2.5 NJ	4.9 UJ
Toluene	µg/kg	700[A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	**3,000[A]**	8.2 NJ	1.4 NJ	0.61 NJB	5.4 U	6.4 UJ	0.75 NJB	0.60 NJB	5.2 U	0.59 NJ	5.5 U	0.57 NJ
Trans-1,2-Dichloroethene	µg/kg	190[A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	0.81 NJ	5.4 U	0.71 NJ	550 U	61 U	0.84 NJ	5.3 UJ	5.4 U	6.4 UJ	5.6 U	6.0 U	5.2 U	5.5 U	5.5 U	4.9 UJ
Trans-1,3-Dichloropropene	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 UJ	5.6 UJ	6.0 U	5.2 U	5.5 UJ	5.5 U	4.9 UJ
Trichloroethylene (TCE)	µg/kg	470[A] 200000[B]	4.7 U	55 U	**37,000[A]**	2.1 NJ	5.3 U	1.3 NJ	4.2 NJ	**1,400[A]**	280	**2,900 J[A]**	5.3 UJ	5.4 U	6.4 UJ	5.6 U	6.0 U	9.9	5.5 U	5.9	4.9 UJ
Trichlorofluoromethane	µg/kg	1,000,000[d,A] 500,000[B]	4.7 U	55 U	1,100 U	5.9 U	5.3 U	5.4 U	4.8 U	550 U	61 U	5.3 U	5.3 UJ	5.4 U	6.4 U	5.6 U	6.0 U	5.2 U	5.5 U	5.5 U	4.9 U
Vinyl Chloride	µg/kg	20[A] 13000[B]	11	55 U	1,100 UJ	5.9 U	5.3 U	6.3 J	16 J	550 UJ	61 U	5.3 U	5.3 UJ	5.4 U	6.4 U	3.0 NJ	1.5 NJ	5.2 U	5.5 U	5.5 U	4.9 U
Xylenes, Total	µg/kg	1600[A] 500,000[B]	9.4 U	110 U	2,200 U	12 U	11 U	11 U	9.6 U	1,100 U	120 U	12	11 UJ	11 U	13 UJ	11 UJ	12 U	10 U	11 UJ	11 U	9.8 UJ

Notes:

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Former Lockheed Martin French Road Facility
Utica, New York

Sample Location			B20			B21		B22			B23		B24		B25			B26	B27	
Sample Date			14-Dec-15	14-Dec-15	14-Dec-15	14-Dec-15	14-Dec-15	24-Nov-15	24-Nov-15	24-Nov-15	23-Nov-15	23-Nov-15	23-Nov-15	23-Nov-15	3-Dec-15	3-Dec-15	3-Dec-15	4-Dec-15	8-Dec-15	8-Dec-15
Sample ID			B20-POLEBARN-S1	B20-POLEBARN-S2	B20-POLEBARN-S3	B21-POLEBARN-S1	B21-POLEBARN-S2	B22-POLEBARN-S1	B22-POLEBARN-S2	B22-POLEBARN-S3	B23-AREA2-S1	B23-AREA2-S2	B24-AREA2-S1	B24-AREA2-S2	B25-AREA2-S1	B25-AREA2-S2	B25-AREA2-S3	B26-AREA2-S1	B27-AREA2-S1	B27-AREA2-S2
Sample Depth			4 - 4.5 ft	8.1 - 8.4 ft	12.5 - 12.8 ft	5.5 - 6 ft	11.1 - 11.4 ft	5.9 - 6 ft	9.8 - 9.9 ft	15.9 - 16 ft	8.3 - 8.5 ft	19.3 - 19.4 ft	8.1 - 8.4 ft	13.8 - 13.9 ft	4.3 - 4.6 ft	8.6 - 8.7 ft	12.1 - 12.3 ft	5.5 - 5.6 ft	10.7 - 11 ft	14.5 - 14.8 ft
Sampling Company			Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec
Laboratory			TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF
Laboratory Work Order			480-92744-1	480-92744-1	480-92744-1	480-92744-1	480-92744-1	480-91710-1	480-91710-1	480-91710-1	480-91710-1	480-91710-1	480-91710-1	480-91710-1	480-92213-1	480-92213-1	480-92213-1	480-92213-1	480-92332-1	480-92332-1
Laboratory Sample ID			480-92744-5	480-92744-6	480-92744-7	480-92744-8	480-92744-9	480-91710-6	480-91710-7	480-91710-8	480-91710-2	480-91710-3	480-91710-4	480-91710-5	480-92213-6	480-92213-7	480-92213-8	480-92213-11	480-92332-20	480-92332-21
Sample Type	Units	NYSDEC																		
Volatile Organic Compounds																				
1,1,1-Trichloroethane	µg/kg	680[A] 500,000[B]	5.2 U	50 U	5.9 U	5.4 U	5.4 U	21 NJ	1,100 U	0.80 NJ	560 U	5.3 U	5.1 U	6.5 U	5.4 U	6.4 U	6.0 U	5.3 U	5.5 U	5.3 U
1,1,2,2-Tetrachloroethane	µg/kg	1,000,000[A] 500,000[B]	5.2 UJ	50 U	5.9 UJ	5.4 UJ	5.4 U	54 U	1,100 U	6.2 UJ	560 U	5.3 UJ	5.1 U	6.5 UJ	5.4 U	6.4 UJ	6.0 U	5.3 UJ	5.5 U	5.3 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	µg/kg	1,000,000[A] 500,000[B]	5.2 U	50 U	5.9 U	5.4 U	5.4 U	410	14,000	90	560 U	5.3 U	1.8 NJ	1.6 NJ	5.4 U	6.4 U	6.0 U	5.3 U	5.5 U	5.3 U
1,1,2-Trichloroethane	µg/kg	1,000,000[A] 500,000[B]	5.2 U	50 U	5.9 UJ	5.4 UJ	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	5.1 U	6.5 U	5.4 U	6.4 UJ	6.0 U	5.3 U	5.5 U	5.3 U
1,1-Dichloroethane	µg/kg	270[A] 240000[B]	5.2 U	**360[A]**	5.9 U	5.4 U	5.4 U	54 U	1,100 U	18	**4,400 J[A]**	5.3 U	140	6.5 U	13	6.4 U	6.0 U	5.3 U	1.9 NJ	5.3 U
1,1-Dichloroethene	µg/kg	330[A] 500,000[B]	5.2 U	50 U	5.9 U	5.4 U	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	1.0 NJ	6.5 U	5.4 U	6.4 U	6.0 U	5.3 U	5.5 U	5.3 U
1,2,4-Trichlorobenzene	µg/kg	1,000,000[A] 500,000[B]	5.2 UJ	50 U	5.9 UJ	5.4 UJ	5.4 U	54 U	1,100 U	6.2 UJ	560 U	5.3 UJ	5.1 U	6.5 UJ	5.4 U	6.4 UJ	6.0 U	5.3 UJ	5.5 U	5.3 U
1,2-Dibromo-3-Chloropropane	µg/kg	1,000,000[A] 500,000[B]	5.2 UJ	50 U	5.9 UJ	5.4 UJ	5.4 U	54 U	1,100 U	6.2 UJ	560 U	5.3 UJ	5.1 U	6.5 UJ	5.4 U	6.4 UJ	6.0 U	5.3 UJ	5.5 U	5.3 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/kg	1,000,000[A] 500,000[B]	5.2 U	50 U	5.9 UJ	5.4 UJ	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	5.1 U	6.5 U	5.4 U	6.4 UJ	6.0 U	5.3 U	5.5 U	5.3 U
1,2-Dichlorobenzene	µg/kg	1100[A] 500,000[B]	5.2 UJ	50 U	5.9 UJ	5.4 UJ	5.4 U	190	400 NJ	6.2 UJ	560 U	5.3 UJ	5.1 U	6.5 UJ	5.4 U	6.4 UJ	6.0 U	5.3 UJ	5.5 U	5.3 U
1,2-Dichloroethane	µg/kg	20[A] 30000[B]	5.2 U	50 U	5.9 U	5.4 U	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	5.1 U	6.5 U	5.4 U	6.4 U	6.0 U	5.3 U	5.5 U	5.3 U
1,2-Dichloropropane	µg/kg	1,000,000[A] 500,000[B]	5.2 U	50 U	5.9 U	5.4 U	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	5.1 U	6.5 U	5.4 U	6.4 U	6.0 U	5.3 U	5.5 U	5.3 U
1,3-Dichlorobenzene	µg/kg	2400[A] 280000[B]	5.2 UJ	50 U	5.9 UJ	5.4 UJ	5.4 U	54 U	1,100 U	6.2 UJ	560 U	5.3 UJ	5.1 U	6.5 UJ	5.4 U	6.4 UJ	6.0 U	5.3 UJ	5.5 U	5.3 U
1,4-Dichlorobenzene	µg/kg	1800[A] 130000[B]	5.2 UJ	50 U	5.9 UJ	5.4 UJ	5.4 U	9.8 NJ	1,100 U	6.2 UJ	560 U	5.3 UJ	5.1 U	6.5 UJ	5.4 U	6.4 UJ	6.0 U	5.3 UJ	5.5 U	5.3 U
2-Hexanone	µg/kg	1,000,000[A] 500,000[B]	26 U	250 U	30 UJ	27 UJ	27 U	270 U	5,700 U	31 U	2,800 U	27 U	25 U	33 U	27 U	32 UJ	30 U	27 U	27 U	26 U
Acetone	µg/kg	50[A] 500,000[B]	26 U	250 U	**51 JB[A]**	27 U	27 U	270 U	5,700 U	**84 JB[A]**	2,800 U	27 U	25 UJB	33 UJB	27 UJB	24 NJ	14 NJB	27 U	27 U	26 U
Benzene	µg/kg	60[A] 44000[B]	5.2 U	50 U	5.9 U	5.4 U	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	5.1 U	6.5 U	5.4 U	6.4 U	6.0 U	5.3 U	5.5 U	5.3 U
Bromodichloromethane	µg/kg	1,000,000[A] 500,000[B]	5.2 U	50 U	5.9 U	5.4 U	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	5.1 U	6.5 U	5.4 U	6.4 U	6.0 U	5.3 U	5.5 U	5.3 U
Bromoform	µg/kg	1,000,000[A] 500,000[B]	5.2 U	50 U	5.9 UJ	5.4 UJ	5.4 U	54 U	1,100 UJ	6.2 U	560 UJ	5.3 U	5.1 U	6.5 UJ	5.4 U	6.4 UJ	6.0 U	5.3 U	5.5 U	5.3 U
Bromomethane	µg/kg	1,000,000[A] 500,000[B]	5.2 U	50 U	5.9 U	5.4 U	5.4 U	54 U	1,100 UJ	6.2 U	560 UJ	5.3 U	5.1 U	6.5 UJ	5.4 U	6.4 U	6.0 U	5.3 U	5.5 U	5.3 U
Carbon Disulfide	µg/kg	1,000,000[A] 500,000[B]	5.2 U	50 U	5.9 U	5.4 U	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	5.1 U	6.5 U	11	6.4 U	6.0 U	5.3 U	5.5 U	5.3 U
Carbon Tetrachloride	µg/kg	760[A] 22000[B]	5.2 U	50 U	5.9 U	5.4 U	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	5.1 U	6.5 U	5.4 U	6.4 U	6.0 U	5.3 U	5.5 U	5.3 U
Chlorobenzene	µg/kg	1100[A] 500,000[B]	5.2 U	50 U	5.9 UJ	5.4 UJ	5.4 U	10 NJ	1,100 U	6.2 U	560 U	5.3 U	5.1 U	6.5 U	5.4 U	6.4 UJ	6.0 U	5.3 U	5.5 U	5.3 U
Chloroethane	µg/kg	1,000,000[A] 500,000[B]	5.2 U	50 U	5.9 U	5.4 U	5.4 U	54 U	1,100 UJ	6.2 U	560 UJ	5.3 U	5.1 U	6.5 UJ	5.4 U	6.4 U	6.0 U	5.3 U	5.5 U	5.3 U
Chloroform	µg/kg	370[A] 350000[B]	5.2 U	50 U	5.9 U	5.4 U	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	5.1 U	6.5 U	5.4 U	6.4 U	6.0 U	5.3 U	5.5 U	5.3 U
Chloromethane	µg/kg	1,000,000[A] 500,000[B]	5.2 U	50 U	5.9 U	5.4 U	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	5.1 U	6.5 U	5.4 U	6.4 U	6.0 U	5.3 U	5.5 U	5.3 U
Cis-1,2-Dichloroethylene	µg/kg	250[A] 500,000[B]	1.4 NJ	**1,500[A]**	5.9 U	5.4 U	5.4 U	240	1,100 U	17	**15,000[A]**	5.3 U	**1,500[A]**	2.9 NJ	**520[A]**	1.9 NJ	2.7 NJ	5.3 U	60	5.3 U
Cis-1,3-Dichloropropene	µg/kg	1,000,000[A] 500,000[B]	5.2 U	50 U	5.9 U	5.4 U	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	5.1 U	6.5 U	5.4 U	6.4 U	6.0 U	5.3 U	5.5 U	5.3 U
Cyclohexane	µg/kg	1,000,000[A] 500,000[B]	5.2 U	50 U	5.9 U	5.4 U	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	5.1 U	6.5 U	5.4 U	6.4 U	6.0 U	5.3 U	5.5 U	5.3 U
Dibromochloromethane	µg/kg	1,000,000[A] 500,000[B]	5.2 U	50 U	5.9 UJ	5.4 UJ	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	5.1 U	6.5 U	5.4 U	6.4 UJ	6.0 U	5.3 U	5.5 U	5.3 U
Dichlorodifluoromethane	µg/kg	1,000,000[A] 500,000[B]	5.2 U	50 U	5.9 U	5.4 U	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	5.1 U	6.5 U	5.4 U	6.4 U	6.0 U	5.3 U	5.5 U	5.3 U
Ethylbenzene	µg/kg	1000[A] 390000[B]	5.2 U	50 U	5.9 UJ	5.4 UJ	5.4 U	80	360 NJ	6.2 U	560 U	5.3 U	2.5 NJ	6.5 U	130	6.4 UJ	6.0 U	5.3 U	5.5 U	5.3 U
Isopropylbenzene (Cumene)	µg/kg	1,000,000[A] 500,000[B]	5.2 UJ	50 U	5.9 UJ	5.4 UJ	5.4 U	54 U	1,100 U	6.2 UJ	560 U	5.3 UJ	5.1 U	6.5 UJ	5.4 U	6.4 UJ	6.0 U	5.3 UJ	5.5 U	5.3 U
Methyl Acetate	µg/kg	1,000,000[A] 500,000[B]	5.2 U	50 U	5.9 U	5.4 U	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	5.1 U	6.5 U	5.4 U	6.4 U	6.0 U	5.3 U	5.5 U	5.3 U
Methyl Ethyl Ketone (2-Butanone)	µg/kg	120[A] 500,000[B]	26 U	250 U	30 U	27 U	27 U	270 U	5,700 UJ	31 U	2,800 UJ	27 U	25 U	33 UJ	27 U	32 U	30 U	27 U	27 U	26 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	µg/kg	1,000,000[A] 500,000[B]	26 U	250 U	30 UJ	27 UJ	27 U	270 U	5,700 U	31 U	2,800 U	27 U	25 U	33 U	27 U	32 UJ	30 U	27 U	27 U	26 U
Methylcyclohexane	µg/kg	1,000,000[A] 500,000[B]	5.2 U	50 U	5.9 U	5.4 U	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	5.1 U	6.5 U	5.4 U	6.4 U	6.0 U	5.3 U	5.5 U	5.3 U
Methylene Chloride	µg/kg	50[A] 500,000[B]	2.4 NJ	50 U	5.9 U	5.4 U	5.4 U	54 U	1,100 U	**61 JB[A]**	560 U	5.3 U	2.8 NJ	6.5 U	5.4 U	2.9 NJ	6.0 U	3.9 NJ	5.5 U	5.3 U
Styrene	µg/kg	1,000,000[A] 500,000[B]	5.2 U	50 U	5.9 UJ	5.4 UJ	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	5.1 U	6.5 U	5.4 U	6.4 UJ	6.0 U	5.3 U	5.5 U	5.3 U
Tert-Butyl Methyl Ether	µg/kg	930[A] 500,000[B]	5.2 U	50 U	5.9 U	5.4 U	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	5.1 U	6.5 U	5.4 U	6.4 U	6.0 U	5.3 U	5.5 U	5.3 U
Tetrachloroethylene (PCE)	µg/kg	1300[A] 150000[B]	1.5 NJ	50 U	5.9 UJ	5.4 UJ	5.4 U	**60,000[A]**	**45,000[A]**	74	320 NJ	1.4 NJB	**26,000[A]**	2.3 NJB	**26,000[A]**	5.5 NJ	9.1	5.3 U	5.5 U	5.3 U
Toluene	µg/kg	700[A] 500,000[B]	0.78 NJ	50 U	5.9 UJ	5.4 UJ	5.4 U	71	1,100 U	1.5 NJ	**3,200[A]**	5.3 U	11	6.5 U	4.5 NJ	6.4 UJ	6.0 U	5.3 U	5.5 U	5.3 U
Trans-1,2-Dichloroethene	µg/kg	190[A] 500,000[B]	5.2 U	50 U	5.9 U	5.4 U	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	3.2 NJ	6.5 U	2.7 NJ	6.4 U	6.0 U	5.3 U	5.5 U	5.3 U
Trans-1,3-Dichloropropene	µg/kg	1,000,000[A] 500,000[B]	5.2 U	50 U	5.9 UJ	5.4 UJ	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	5.1 U	6.5 U	5.4 U	6.4 UJ	6.0 U	5.3 U	5.5 U	5.3 U
Trichloroethylene (TCE)	µg/kg	470[A] 200000[B]	3.0 NJ	50 U	5.9 U	5.4 U	5.4 U	**4,700[A]**	**19,000[A]**	170	**1,700 T[A]**	5.3 U	**11,000[A]**	6.5 U	**2,200[A]**	6.4 U	1.4 NJ	5.3 U	5.5 U	5.3 U
Trichlorofluoromethane	µg/kg	1,000,000[A] 500,000[B]	5.2 U	50 U	5.9 U	5.4 U	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	5.1 U	6.5 U	5.4 U	6.4 U	6.0 U	5.3 U	5.5 U	5.3 U
Vinyl Chloride	µg/kg	20[A] 13000[B]	5.2 U	50 U	5.9 U	5.4 U	5.4 U	54 U	1,100 U	6.2 U	560 U	5.3 U	5.1 U	6.5 U	5.4 U	6.4 U	6.0 U	5.3 U	5.6	5.3 U
Xylenes, Total	µg/kg	1600[A] 500,000[B]	10 U	100 U	12 UJ	11 UJ	11 U	300	1,200 NJ	12 U	1,100 U	11 U	3.1 NJ	13 U	9.3 NJ	13 UJ	12 U	11 U	11 U	11 U

Notes:

NYSDEC	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
A	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Groundwater
B	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
c	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
d	The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 mg/kg (Organics) and 10000 mg/kg (Inorganics). See 6 NYCRR Part 375 TSD Section 9.3.
g	For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the DEC/DOH rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
T	QC recovery is outside acceptable limits.
R	The data is unusable. The analyte may or may not be present.
UJ	Indicates estimated non-detect.

Table 9
Summary of Subsurface Soil Analytical Results
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
Utica, New York

Sample Location			B28		B29		B30		B31		B32		B33		B34	B35		B36		
Sample Date			8-Dec-15	8-Dec-15	8-Dec-15	8-Dec-15	8-Dec-15	8-Dec-15	8-Dec-15	8-Dec-15	10-Dec-15	10-Dec-15	10-Dec-15	10-Dec-15	10-Dec-15	8-Dec-15	8-Dec-15	15-Dec-15	15-Dec-15	15-Dec-15
Sample ID			B28-AREA2-S1	B28-AREA2-S2	B29-AREA2-S1	B29-AREA2-S2	B30-AREA2-S1	B30-AREA2-S2	B31-AREA2-S1	B31-AREA2-S2	B32-AREA2-S1	B32-AREA2-S2	B33-AREA2-S1	B33-AREA2-S2	B34-AREA2-S1	B35-AREA2-S1	B35-AREA2-S2	B36-POLEBARN-S1	B36-POLEBARN-S2	B36-POLEBARN-S3
Sample Depth			8 - 8.5 ft	10.5 - 10.8 ft	6.3 - 6.6 ft	9.7 - 10 ft	6.5 - 6.8 ft	14.4 - 14.7 ft	3.5 - 4 ft	11 - 11.3 ft	6 - 6.5 ft	9.5 - 10 ft	7.5 - 7.8 ft	9.3 - 9.6 ft	6 - 6.3 ft	5.7 - 6 ft	12.5 - 12.8 ft	4 - 4.5 ft	8 - 8.4 ft	14.4 - 14.7 ft
Sampling Company			Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec
Laboratory			TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF
Laboratory Work Order			480-92332-1	480-92332-1	480-92332-1	480-92332-1	480-92332-1	480-92332-1	480-92332-1	480-92332-1	480-92542-1	480-92542-1	480-92542-1	480-92542-1	480-92542-1	480-92332-1	480-92332-1	480-92744-1	480-92744-1	480-92744-1
Laboratory Sample ID			480-92332-22	480-92332-23	480-92332-24	480-92332-25	480-92332-26	480-92332-27	480-92332-28	480-92332-29	480-92542-4	480-92542-5	480-92542-6	480-92542-7	480-92542-8	480-92332-30	480-92332-31	480-92744-17	480-92744-18	480-92744-19
Sample Type	Units	NYSDEC																		
Volatile Organic Compounds																				
1,1,1-Trichloroethane	µg/kg	680[A] 500,000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 UJ	110 U	5.2 U	5.2 U	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
1,1,2,2-Tetrachloroethane	µg/kg	1,000,000[A] 500,000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 UJ	5.1 U	5.5 U	32 UJ	5.2 UJ	5.3 UJ	110 U	5.2 UJ	5.2 UJ	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	µg/kg	1,000,000[A] 500,000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 UJ	110 U	5.2 U	5.2 U	1,100 U	5.3 UJ	49	160	6.6 U
1,1,2-Trichloroethane	µg/kg	1,000,000[A] 500,000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 UJ	5.3 UJ	110 U	5.2 UJ	5.2 UJ	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
1,1-Dichloroethane	µg/kg	270[A] 240000[B]	1.2 NJ	5.3 UJ	38	5.9 U	5.3 U	5.1 U	9.7	**550[A]**	5.2 U	5.3 UJ	**6,000[A]**	5.2 U	5.2 U	1,100 U	2.1 NJ	2.1 NJ	110	6.6 U
1,1-Dichloroethene	µg/kg	330[A] 500,000[C]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 UJ	110 UJ	5.2 U	5.2 U	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
1,2,4-Trichlorobenzene	µg/kg	1,000,000[A] 500,000[C]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 UJ	5.1 U	5.5 U	32 UJ	5.2 UJ	5.3 UJ	110 U	5.2 UJ	5.2 UJ	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
1,2-Dibromo-3-Chloropropane	µg/kg	1,000,000[A] 500,000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 UJ	5.1 U	5.5 U	32 UJ	5.2 UJ	5.3 UJ	110 UJ	5.2 UJ	5.2 UJ	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/kg	1,000,000[A] 500,000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 UJ	5.3 UJ	110 U	5.2 UJ	5.2 UJ	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
1,2-Dichlorobenzene	µg/kg	1100[A] 500,000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 UJ	5.1 U	5.5 U	32 UJ	5.2 UJ	5.3 UJ	110 U	5.2 UJ	5.2 UJ	1,100 U	5.3 UJ	5.5 U	6.5 NJ	6.6 U
1,2-Dichloroethane	µg/kg	20[g][A] 30000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 UJ	110 U	5.2 U	5.2 U	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
1,2-Dichloropropane	µg/kg	1,000,000[A] 500,000[C]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 UJ	110 U	5.2 U	5.2 U	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
1,3-Dichlorobenzene	µg/kg	2400[A] 280000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 UJ	5.1 U	5.5 U	32 UJ	5.2 UJ	5.3 UJ	110 U	5.2 UJ	5.2 UJ	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
1,4-Dichlorobenzene	µg/kg	1800[A] 130000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 UJ	5.1 U	5.5 U	32 UJ	5.2 UJ	5.3 UJ	110 U	5.2 UJ	5.2 UJ	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
2-Hexanone	µg/kg	1,000,000[A] 500,000[B]	28 U	26 UJ	26 U	29 U	26 U	26 U	28 U	160 U	26 UJ	27 UJ	550 U	26 UJ	26 UJ	5,500 U	26 UJ	28 U	280 U	33 U
Acetone	µg/kg	50[A] 500,000[B]	5.5 NJ	26 UJB	4.5 NJ	11 NJB	26 U	26 U	28 UJB	160 U	26 U	27 U	550 U	26 U	26 U	5,500 U	7.1 NJB	28 U	280 U	16 NJB
Benzene	µg/kg	60[A] 44000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 UJ	110 U	5.2 U	5.2 U	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
Bromodichloromethane	µg/kg	1,000,000[A] 500,000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 UJ	110 U	5.2 U	5.2 U	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
Bromoform	µg/kg	1,000,000[A] 500,000[C]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 UJ	5.3 UJ	110 U	5.2 UJ	5.2 UJ	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
Bromomethane	µg/kg	1,000,000[A] 500,000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 UJ	110 U	5.2 U	5.2 U	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
Carbon Disulfide	µg/kg	1,000,000[A] 500,000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 UJ	110 UJ	5.2 U	5.2 U	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
Carbon Tetrachloride	µg/kg	760[A] 22000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 UJ	110 U	5.2 U	5.2 U	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
Chlorobenzene	µg/kg	1100[A] 500,000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 UJ	5.3 UJ	110 U	5.2 UJ	5.2 UJ	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
Chloroethane	µg/kg	1,000,000[A] 500,000[C]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 UJ	110 UJ	5.2 U	5.2 U	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
Chloroform	µg/kg	370[A] 350000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 UJ	110 U	5.2 U	5.2 U	1,100 U	0.46 NJ	5.5 U	56 U	6.6 U
Chloromethane	µg/kg	1,000,000[A] 500,000[C]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 UJ	110 UJ	5.2 U	5.2 U	1,100 UJ	5.3 UJ	5.5 U	56 U	6.6 U
Cis-1,2-Dichloroethylene	µg/kg	250[A] 500,000[B]	3.9 NJ	0.91 NJ	79	5.9 U	5.3 U	5.1 U	39	25 NJ	5.2 U	5.3 UJ	**1,700[A]**	5.2 U	5.2 U	1,100 U	5.3 UJ	59	**800[A]**	4.1 NJ
Cis-1,3-Dichloropropene	µg/kg	1,000,000[A] 500,000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 UJ	110 U	5.2 U	5.2 U	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
Cyclohexane	µg/kg	1,000,000[A] 500,000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 UJ	110 U	5.2 U	5.2 U	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
Dibromochloromethane	µg/kg	1,000,000[A] 500,000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 UJ	5.3 UJ	110 U	5.2 UJ	5.2 UJ	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
Dichlorodifluoromethane	µg/kg	1,000,000[A] 500,000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 UJ	110 UJ	5.2 U	5.2 U	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
Ethylbenzene	µg/kg	1000[A] 390000[B]	5.5 U	5.3 UJ	6.1	5.9 U	5.3 U	5.1 U	11 J	2.8 NJ	5.2 UJ	5.3 UJ	110 U	5.2 UJ	5.2 UJ	400 NJ	5.3 UJ	5.5 U	8.5 NJ	6.6 U
Isopropylbenzene (Cumene)	µg/kg	1,000,000[A] 500,000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 UJ	5.1 U	5.5 U	32 UJ	5.2 UJ	5.3 UJ	110 U	5.2 UJ	5.2 UJ	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
Methyl Acetate	µg/kg	1,000,000[A] 500,000[C]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 UJ	110 U	5.2 U	5.2 U	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
Methyl Ethyl Ketone (2-Butanone)	µg/kg	120[A] 500,000[B]	28 U	26 UJ	26 U	29 U	26 U	26 U	28 U	160 U	26 U	27 UJ	550 U	26 U	26 U	5,500 U	26 UJ	28 U	280 U	33 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	µg/kg	1,000,000[A] 500,000[B]	28 U	26 UJ	26 U	29 U	26 U	26 U	28 U	160 U	26 UJ	27 UJ	550 U	26 UJ	26 UJ	5,500 U	26 UJ	28 U	280 U	33 U
Methylcyclohexane	µg/kg	1,000,000[A] 500,000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 UJ	110 U	5.2 U	5.2 U	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
Methylene Chloride	µg/kg	50[A] 500,000[B]	5.5 U	11 J	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 UJ	110 U	5.2 U	5.2 U	1,100 U	11 J	5.5 U	56 U	6.6 U
Styrene	µg/kg	1,000,000[A] 500,000[C]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 UJ	5.3 UJ	110 U	5.2 UJ	5.2 UJ	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
Tert-Butyl Methyl Ether	µg/kg	930[A] 500,000[C]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 U	110 U	5.2 U	5.2 U	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
Tetrachloroethylene (PCE)	µg/kg	1300[A] 150000[B]	5.5 U	2.1 NJ	**31,000 J[A]**	5.9 U	9.7	5.1 U	**12,000[A]**	400	5.2 UJ	5.3 UJ	110 U	5.2 UJ	5.2 UJ	**45,000[A]**	2.7 NJ	5.5 U	**1,900[A]**	6.6 U
Toluene	µg/kg	700[A] 500,000[B]	5.5 U	1.4 NJB	7.6	5.9 U	1.4 NJ	5.1 U	14 B	11 NJ	5.2 UJ	5.3 UJ	110 U	5.2 UJ	5.2 UJ	1,100 U	5.3 UJ	5.5 U	15 NJ	6.6 U
Trans-1,2-Dichloroethene	µg/kg	190[A] 500,000[B]	5.5 U	5.3 UJ	11	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 UJ	110 U	5.2 U	5.2 U	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
Trans-1,3-Dichloropropene	µg/kg	1,000,000[A] 500,000[C]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 UJ	5.3 UJ	110 U	5.2 UJ	5.2 UJ	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
Trichloroethylene (TCE)	µg/kg	470[A] 200000[B]	2.2 NJ	5.3 UJ	**18,000 J[A]**	2.6 NJ	2.8 NJ	5.1 U	55	14 NJ	5.2 U	5.3 UJ	**570[A]**	5.2 U	5.2 U	**2,500[A]**	5.3 UJ	5.5 U	410	6.6 U
Trichlorofluoromethane	µg/kg	1,000,000[A] 500,000[C]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 UJ	110 U	5.2 U	5.2 U	1,100 U	5.3 UJ	5.5 U	56 U	6.6 U
Vinyl Chloride	µg/kg	20[A] 13000[B]	5.5 U	5.3 UJ	5.2 U	5.9 U	5.3 U	5.1 U	5.5 U	32 U	5.2 U	5.3 UJ	110 UJ	5.2 U	5.2 U	1,100 UJ	5.3 UJ	**36[A]**	56 U	6.6 U
Xylenes, Total	µg/kg	1600[A] 500,000[B]	11 U	11 UJ	2.8 NJ	12 U	11 U	10 U	26	6.2 NJ	10 UJ	11 UJ	220 U	10 UJ	10 UJ	2,200 U	11 UJ	11 U	25 NJ	13 U

Notes:

NYSDEC	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
A	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Groundwater
B	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
C	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
D	The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 mg/kg (Organics) and 10000 mg/kg (Inorganics). See 6 NYCRR Part 375 TSD Section 9.3.
G	For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the DEC/DOH rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
T	QC recovery is outside acceptable limits.
R	The data is unusable. The analyte may or may not be present.
UJ	Indicates estimated non-detect.

Table 9
Summary of Subsurface Soil Analytical Results
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
Utica, New York

Sample Location			B37				B38			B101		B102			B103		B104		B105		
Sample Date			14-Dec-15	14-Dec-15	14-Dec-15	14-Dec-15	14-Dec-15	14-Dec-15	14-Dec-15	7-Jun-16	7-Jun-16	7-Jun-16	7-Jun-16	7-Jun-16	7-Jun-16	7-Jun-16	8-Jun-16	8-Jun-16	8-Jun-16	8-Jun-16	8-Jun-16
Sample ID			B37-POLEBARN-S1	B37-POLEBARN-S2	B37-POLEBARN-S3	B-POLEBARN-DUP4	B38-POLEBARN-S1	B38-POLEBARN-S2	B38-POLEBARN-S3	B101-AREA2-S1	B101-AREA2-S2	B102-AREA2-S1	B102-AREA2-S2	B-AREA2-DUP5	B103-AREA2-S1	B103-AREA2-S2	B104-AREA2-S1	B104-AREA2-S2	B105-AREA2-S1	B105-AREA2-S2	B-POLEBARN-DUP6
Sample Depth			6.7 - 7 ft	7.7 - 8 ft	14.4 - 14.9 ft	14.4 - 14.9 ft	3.8 - 4 ft	9 - 9.3 ft	19.1 - 19.4 ft	7 - 7.5 ft	9 - 9.5 ft	6 - 6.5 ft	12 - 12.5 ft	12 - 12.5 ft	4.5 - 5 ft	9 - 9.5 ft	4.5 - 5 ft	8.5 - 9 ft	4.5 - 5 ft	8.5 - 9 ft	8.5 - 9 ft
Sampling Company			Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec
Laboratory			TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF
Laboratory Work Order			480-92744-1	480-92744-1	480-92744-1	480-92744-1	480-92744-1	480-92744-1	480-92744-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-101358-1	480-101358-1	480-101358-1	480-101358-1	480-101358-1
Laboratory Sample ID			480-92744-10	480-92744-11	480-92744-12	480-92744-16	480-92744-13	480-92744-14	480-92744-15	480-101258-31	480-101258-32	480-101258-33	480-101258-34	480-101258-43	480-101258-35	480-101258-36	480-101358-3	480-101358-4	480-101358-5	480-101358-6	480-101358-11
Sample Type	Units	NYSDEC				Field Duplicate								Field Duplicate							Field Duplicate
Volatile Organic Compounds																					
1,1,1-Trichloroethane	µg/kg	680[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 U	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	3.3 NJ	0.64 NJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
1,1,2,2-Tetrachloroethane	µg/kg	1,000,000[A] 500,000[B]	5.5 UJ	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 UJ	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	µg/kg	1,000,000[A] 500,000[B]	5.5 U	640	6.3 U	2.0 NJ	510	4,200	10	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	2.0 NJ	3.8 NJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
1,1,2-Trichloroethane	µg/kg	1,000,000[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 UJ	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
1,1-Dichloroethane	µg/kg	270[A] 240000[B]	5.5 U	160	6.3 U	0.80 NJ	1.5 NJ	44 NJ	0.81 NJ	5.4 UJ	5.3 UJ	73 J	5.2 UJ	6.6 J	7.4 J	**560[A]**	5.4 UJ	R	110 U	5.5 UJ	5.4 U
1,1-Dichloroethene	µg/kg	330[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 U	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	2.1 NJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
1,2,4-Trichlorobenzene	µg/kg	1,000,000[A] 500,000[B]	5.5 UJ	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 UJ	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
1,2-Dibromo-3-Chloropropane	µg/kg	1,000,000[A] 500,000[B]	5.5 UJ	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 UJ	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/kg	1,000,000[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 UJ	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
1,2-Dichlorobenzene	µg/kg	1100[A] 500,000[B]	5.5 UJ	110 U	6.3 U	6.3 U	5.5 U	120	5.4 UJ	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
1,2-Dichloroethane	µg/kg	20[A] 30000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 U	5.4 UJ	5.3 UJ	0.43 NJ	5.2 UJ	R	0.67 NJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
1,2-Dichloropropane	µg/kg	1,000,000[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 U	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
1,3-Dichlorobenzene	µg/kg	2400[A] 280000[B]	5.5 UJ	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 UJ	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
1,4-Dichlorobenzene	µg/kg	1800[A] 130000[B]	5.5 UJ	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 UJ	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
2-Hexanone	µg/kg	1,000,000[A] 500,000[B]	28 U	550 U	31 U	31 U	27 U	540 U	27 UJ	27 UJ	26 UJ	27 UJ	26 UJ	R	27 UJ	27 UJ	27 UJ	R	570 U	28 UJ	27 U
Acetone	µg/kg	50[A] 500,000[B]	7.7 NJB	550 U	44 JB	40 JB	27 UJB	540 U	27 U	25 NJ	16 NJ	16 NJ	26 UJ	23 NJ	**250 J[A]**	27 UJ	27 UJ	R	570 U	28 UJ	27 U
Benzene	µg/kg	60[A] 44000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 U	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Bromodichloromethane	µg/kg	1,000,000[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 U	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Bromoform	µg/kg	1,000,000[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 UJ	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Bromomethane	µg/kg	1,000,000[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 U	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Carbon Disulfide	µg/kg	1,000,000[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.2 NJ	110 U	5.4 U	5.4 UJ	5.3 UJ	5.5 J	5.2 UJ	R	3.4 NJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Carbon Tetrachloride	µg/kg	760[A] 22000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 U	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Chlorobenzene	µg/kg	1100[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	31 NJ	5.4 UJ	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Chloroethane	µg/kg	1,000,000[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 U	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Chloroform	µg/kg	370[A] 350000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 U	1.5 NJ	5.3 UJ	5.4 UJ	5.2 UJ	1.6 NJ	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Chloromethane	µg/kg	1,000,000[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 U	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Cis-1,2-Dichloroethylene	µg/kg	250[A] 500,000[B]	2.5 NJ	**1,600[A]**	2.9 NJ	2.0 NJ	2.6 NJ	47 NJ	3.0 NJ	5.4 UJ	5.3 UJ	250 J	5.2 UJ	4.5 NJ	34 J	**2,100[A]**	5.4 UJ	R	170	5.5 UJ	5.4 U
Cis-1,3-Dichloropropene	µg/kg	1,000,000[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 U	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Cyclohexane	µg/kg	1,000,000[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 U	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Dibromochloromethane	µg/kg	1,000,000[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 UJ	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Dichlorodifluoromethane	µg/kg	1,000,000[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 U	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 UJ	5.5 UJ	5.4 UJ
Ethylbenzene	µg/kg	1000[A] 390000[B]	5.5 U	76 NJ	6.3 U	6.3 U	5.5 U	140	5.4 UJ	5.4 UJ	5.3 UJ	**1,300 NJ[A]**	5.2 UJ	R	**2,900[A]**	1.1 NJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Isopropylbenzene (Cumene)	µg/kg	1,000,000[A] 500,000[B]	5.5 UJ	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 UJ	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	1.4 J	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Methyl Acetate	µg/kg	1,000,000[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 U	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Methyl Ethyl Ketone (2-Butanone)	µg/kg	120[A] 500,000[B]	28 U	550 U	31 U	31 U	2.2 NJB	540 U	27 U	27 UJ	26 UJ	27 UJ	26 UJ	R	27 UJ	27 UJ	27 UJ	R	570 U	28 UJ	27 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	µg/kg	1,000,000[A] 500,000[B]	28 U	550 U	31 U	31 U	3.4 NJ	540 U	27 UJ	27 UJ	26 UJ	27 UJ	26 UJ	R	27 UJ	27 UJ	27 UJ	R	570 U	28 UJ	27 U
Methylcyclohexane	µg/kg	1,000,000[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 U	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Methylene Chloride	µg/kg	50[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	2.7 NJ	**78 J[A]**	**57 J[A]**	9.8 J	12 J	**120 J[A]**	7.9 J	19 J	3.6 NJ	6.1 J	110 U	10 J	5.4 J
Styrene	µg/kg	1,000,000[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 UJ	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Tert-Butyl Methyl Ether	µg/kg	930[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 U	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Tetrachloroethylene (PCE)	µg/kg	1300[A] 150000[B]	1.5 NJ	**17,000[A]**	4.2 NJ	4.0 NJ	1.4 NJ	**27,000[A]**	15 J	0.85 NJ	5.3 UJ	**93,000[A]**	1.4 NJ	R	**21,000[A]**	180	5.4 UJ	R	**86,000[A]**	15 J	5.4 UJ
Toluene	µg/kg	700[A] 500,000[B]	0.69 NJ	270	6.3 U	6.3 U	5.5 U	110	5.4 UJ	1.6 NJ	5.3 UJ	**2,900[A]**	5.2 UJ	R	**1,300[A]**	1.9 NJ	5.4 UJ	R	36 NJ	5.5 UJ	5.4 U
Trans-1,2-Dichloroethene	µg/kg	190[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 U	5.4 UJ	5.3 UJ	2.1 NJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Trans-1,3-Dichloropropene	µg/kg	1,000,000[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 UJ	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Trichloroethylene (TCE)	µg/kg	470[A] 200000[B]	3.3 NJ	**16,000[A]**	7.9	6.1 NJ	3.5 NJ	**8,400[A]**	14	5.4 UJ	5.3 UJ	**11,000[A]**	1.1 NJ	3.4 NJ	**6,300[A]**	**720[A]**	5.4 UJ	R	**2,000 J[A]**	5.5 UJ	5.4 U
Trichlorofluoromethane	µg/kg	1,000,000[A] 500,000[B]	5.5 U	110 U	6.3 U	6.3 U	5.5 U	110 U	5.4 U	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Vinyl Chloride	µg/kg	20[A] 13000[B]	5.5 U	110 U	6.3 U	6.3 U	6.4	110 U	5.4 U	5.4 UJ	5.3 UJ	5.4 UJ	5.2 UJ	R	5.4 UJ	5.3 UJ	5.4 UJ	R	110 U	5.5 UJ	5.4 U
Xylenes, Total	µg/kg	1600[A] 500,000[B]	11 U	220	13 U	13 U	11 U	520	11 UJ	1.3 NJ	11 UJ	**1,700 NJ[A]**	10 UJ	R	**16,000[A]**	6.1 NJ	11 UJ	R	230 U	11 UJ	11 U

Notes:

NYSDEC	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
A	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Groundwater
B	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
c	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
d	The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 mg/kg (Organics) and 10000 mg/kg (Inorganics). See 6 NYCRR Part 375 TSD Section 9.3.
g	For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the DEC/DOH rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
T	QC recovery is outside acceptable limits.
R	The data is unusable. The analyte may or may not be present.
UJ	Indicates estimated non-detect.

Table 9
Summary of Subsurface Soil Analytical Results
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
Utica, New York

Sample Location			B106		B107		B108		B109		B110		B111		B112		B113		B114		B115	
Sample Date			8-Jun-16	8-Jun-16	8-Jun-16	8-Jun-16	8-Jun-16	8-Jun-16	7-Jun-16	7-Jun-16	7-Jun-16	7-Jun-16	7-Jun-16	7-Jun-16	7-Jun-16	7-Jun-16	7-Jun-16	7-Jun-16	7-Jun-16	7-Jun-16	7-Jun-16	7-Jun-16
Sample ID			B106-AREA2-S1	B106-AREA2-S2	B107-AREA2-S1	B107-AREA2-S2	B108-AREA2-S1	B108-AREA2-S2	B109-AREA2-S1	B109-AREA2-S2	B110-AREA2-S1	B110-AREA2-S2	B111-AREA2-S1	B111-AREA2-S2	B112-AREA2-S1	B112-AREA2-S2	B113-AREA2-S1	B113-AREA2-S2	B114-AREA2-S1	B114-AREA2-S2	B115-AREA2-S1	B115-AREA2-S2
Sample Depth			4.5 - 5 ft	8.5 - 9 ft	5.5 - 6 ft	13 - 13.5 ft	7.5 - 8 ft	13.5 - 14 ft	7 - 7.5 ft	11 - 11.5 ft	5 - 5.5 ft	9 - 9.5 ft	7.8 - 8.2 ft	14 - 14.5 ft	6.5 - 7 ft	14 - 14.5 ft	8 - 8.5 ft	19.5 - 20 ft	8 - 8.5 ft	15 - 15.5 ft	6 - 6.5 ft	9 - 9.5 ft
Sampling Company			Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec	Stantec
Laboratory			TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF
Laboratory Work Order			480-101358-1	480-101358-1	480-101358-1	480-101358-1	480-101358-1	480-101358-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1	480-101258-1
Laboratory Sample ID			480-101358-7	480-101358-8	480-101358-9	480-101358-10	480-101358-12	480-101358-13	480-101258-37	480-101258-38	480-101258-39	480-101258-40	480-101258-23	480-101258-24	480-101258-25	480-101258-26	480-101258-27	480-101258-28	480-101258-29	480-101258-30	480-101258-41	480-101258-42
Sample Type	Units	NYSDEC																				
Volatile Organic Compounds																						
1,1,1-Trichloroethane	µg/kg	680[A] 500,000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
1,1,2,2-Tetrachloroethane	µg/kg	1,000,000[D][A] 500,000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
1,1,2-Trichloro-1,2,2-Trifluoroethane	µg/kg	1,000,000[D][A] 500,000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
1,1,2-Trichloroethane	µg/kg	1,000,000[D][A] 500,000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
1,1-Dichloroethane	µg/kg	270[A] 240000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.0 NJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	**2,000[A]**	4.6 NJ
1,1-Dichloroethene	µg/kg	330[A] 500,000[C]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	270	1.9 NJ
1,2,4-Trichlorobenzene	µg/kg	1,000,000[D][A] 500,000[C]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
1,2-Dibromo-3-Chloropropane	µg/kg	1,000,000[D][A] 500,000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
1,2-Dibromoethane (Ethylene Dibromide)	µg/kg	1,000,000[D][A] 500,000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
1,2-Dichlorobenzene	µg/kg	1100[A] 500,000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
1,2-Dichloroethane	µg/kg	20[g][A] 30000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	1.1 NJ	5.4 UJ
1,2-Dichloropropane	µg/kg	1,000,000[D][A] 500,000[C]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
1,3-Dichlorobenzene	µg/kg	2400[A] 280000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
1,4-Dichlorobenzene	µg/kg	1800[A] 130000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
2-Hexanone	µg/kg	1,000,000[D][A] 500,000[B]	27 UJ	26 UJ	27 U	31 UJ	27 U	30 U	27 UJ	28 U	27 UJ	26 U	27 UJ	28 UJ	27 UJ	26 UJ	26 UJ	R	28 UJ	31 U	27 U	27 UJ
Acetone	µg/kg	50[A] 500,000[B]	27 UJ	26 UJ	27 U	11 NJ	27 U	13 NJ	27 UJ	28 U	5.6 NJ	26 U	27 UJ	22 NJ	27 UJ	26 UJ	14 NJ	R	5.5 NJ	31 U	19 NJ	13 NJ
Benzene	µg/kg	60[A] 44000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
Bromodichloromethane	µg/kg	1,000,000[D][A] 500,000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
Bromoform	µg/kg	1,000,000[D][A] 500,000[C]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
Bromomethane	µg/kg	1,000,000[D][A] 500,000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
Carbon Disulfide	µg/kg	1,000,000[D][A] 500,000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	3.4 NJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
Carbon Tetrachloride	µg/kg	760[A] 22000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
Chlorobenzene	µg/kg	1100[A] 500,000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
Chloroethane	µg/kg	1,000,000[D][A] 500,000[C]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
Chloroform	µg/kg	370[A] 350000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	0.45 NJ	1.8 NJ	5.3 UJ	5.1 UJ	1.0 NJ	R	5.7 UJ	6.2 U	5.5 U	1.1 NJ
Chloromethane	µg/kg	1,000,000[D][A] 500,000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
Cis-1,2-Dichloroethylene	µg/kg	250[A] 500,000[B]	110 J	5.2 UJ	0.87 NJ	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	**3,000[A]**	4.1 NJ	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	**3,300[A]**	4.3 NJ
Cis-1,3-Dichloropropene	µg/kg	1,000,000[D][A] 500,000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
Cyclohexane	µg/kg	1,000,000[D][A] 500,000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
Dibromochloromethane	µg/kg	1,000,000[D][A] 500,000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
Dichlorodifluoromethane	µg/kg	1,000,000[D][A] 500,000[B]	5.5 UJ	5.2 UJ	5.5 UJ	6.2 UJ	5.5 UJ	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
Ethylbenzene	µg/kg	1000[A] 390000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	150	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
Isopropylbenzene (Cumene)	µg/kg	1,000,000[D][A] 500,000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
Methyl Acetate	µg/kg	1,000,000[D][A] 500,000[C]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
Methyl Ethyl Ketone (2-Butanone)	µg/kg	120[A] 500,000[B]	27 UJ	26 UJ	27 U	31 UJ	27 U	30 U	27 UJ	28 U	27 UJ	26 U	27 UJ	28 UJ	27 UJ	26 UJ	26 UJ	R	28 UJ	31 U	27 U	27 UJ
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	µg/kg	1,000,000[D][A] 500,000[B]	27 UJ	26 UJ	27 U	31 UJ	27 U	30 U	27 UJ	28 U	27 UJ	26 U	27 UJ	28 UJ	27 UJ	26 UJ	26 UJ	R	28 UJ	31 U	27 U	27 UJ
Methylcyclohexane	µg/kg	1,000,000[D][A] 500,000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
Methylene Chloride	µg/kg	50[A] 500,000[C]	5.5 UJ	5.6 J	5.5 U	11 J	5.5 U	10	8.9 J	17	11 J	16	26 J	**90 J[A]**	17 J	32 J	**51 J[A]**	50 J	12 J	6.2 U	19	**55 J[A]**
Styrene	µg/kg	1,000,000[D][A] 500,000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
Tert-Butyl Methyl Ether	µg/kg	930[A] 500,000[C]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	1.1 NJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
Tetrachloroethylene (PCE)	µg/kg	1300[A] 150000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	320	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	0.82 NJ	5.4 UJ
Toluene	µg/kg	700[A] 500,000[B]	5.5 UJ	0.86 NJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	**5,200[A]**	0.55 NJ	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	0.68 NJ	R	5.7 UJ	6.2 U	0.72 NJ	1.3 NJ
Trans-1,2-Dichloroethene	µg/kg	190[A] 500,000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.7 J	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
Trans-1,3-Dichloropropene	µg/kg	1,000,000[D][A] 500,000[C]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
Trichloroethylene (TCE)	µg/kg	470[A] 200000[B]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	240	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	4.3 NJ	5.4 UJ
Trichlorofluoromethane	µg/kg	1,000,000[D][A] 500,000[C]	5.5 UJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	5.5 U	5.4 UJ
Vinyl Chloride	µg/kg	20[A] 13000[B]	4.3 NJ	5.2 UJ	5.5 U	6.2 UJ	5.5 U	6.0 U	5.5 UJ	5.6 U	5.4 UJ	5.2 U	5.4 UJ	5.7 UJ	5.3 UJ	5.1 UJ	5.3 UJ	R	5.7 UJ	6.2 U	2.0 NJ	5.4 UJ
Xylenes, Total	µg/kg	1600[A] 500,000[B]	11 UJ	10 UJ	11 U	12 UJ	11 U	12 U	11 UJ	11 U	510	10 U	11 UJ	11 UJ	11 UJ	10 UJ	11 UJ	R	11 UJ	12 U	11 U	11 UJ

Notes:

NYSDEC	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
A	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Groundwater
B	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
C	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
D	The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 mg/kg (Organics) and 10000 mg/kg (Inorganics). See 6 NYCRR Part 375 TSD Section 9.3.
G	For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the DEC/DOH rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
T	QC recovery is outside acceptable limits.
R	The data is unusable. The analyte may or may not be present.
UJ	Indicates estimated non-detect.

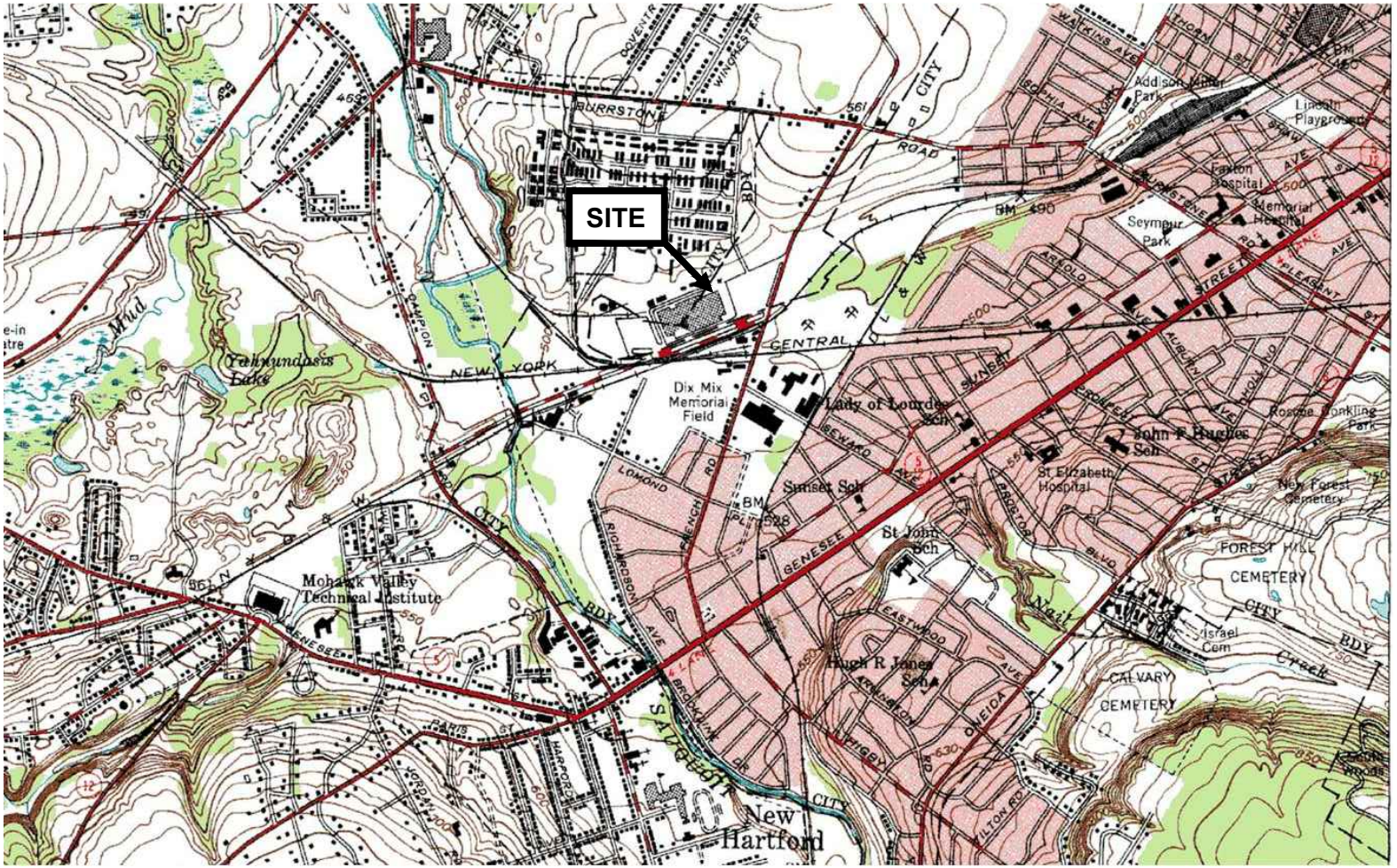
Table 10
Summary of Rinse Blank/Trip Blank Analytical Results
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
Utica, New York

Sample Location			RINSE BLANK							TRIP BLANK	
Sample Date			17-Nov-15	19-Nov-15	24-Nov-15	3-Dec-15	8-Dec-15	7-Jun-16	8-Jun-16	19-Nov-15	8-Jun-16
Sample ID			SS-RINSEBLANK	MIP-RINSEBLANK	SB-RINSEBLANK1	SB-RINSEBLANK2	SB-RINSEBLANK3	SS-RINSEBLANK2	SB-RINSEBLANK4	TRIP BLANK	TRIP BLANK
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF	TALBUFF
Laboratory Work Order			480-91253-1	480-91550-2	480-91710-2	480-92213-1	480-92332-1	480-101258-1	480-101358-1	480-91550-2	480-101358-1
Laboratory Sample ID			480-91253-24	480-91550-1	480-91710-1	480-92213-16	480-92332-32	480-101258-22	480-101358-1	480-91550-2	480-101358-2
Sample Type	Units	TOGS	MATERIAL RINSE BLANK	MATERIAL RINSE BLANK	MATERIAL RINSE BLANK	MATERIAL RINSE BLANK	MATERIAL RINSE BLANK	MATERIAL RINSE BLANK	MATERIAL RINSE BLANK	TRIP BLANK	TRIP BLANK
Polychlorinated Biphenyls											
PCB-1016 (Aroclor 1016)	µg/L	0.09[B]	0.48 U	-	-	-	-	0.50 U	-	-	-
PCB-1221 (Aroclor 1221)	µg/L	0.09[B]	0.48 U	-	-	-	-	0.50 U	-	-	-
PCB-1232 (Aroclor 1232)	µg/L	0.09[B]	0.48 U	-	-	-	-	0.50 U	-	-	-
PCB-1242 (Aroclor 1242)	µg/L	0.09[B]	0.48 U	-	-	-	-	0.50 U	-	-	-
PCB-1248 (Aroclor 1248)	µg/L	0.09[B]	0.48 U	-	-	-	-	0.50 U	-	-	-
PCB-1254 (Aroclor 1254)	µg/L	0.09[B]	0.48 U	-	-	-	-	0.50 U	-	-	-
PCB-1260 (Aroclor 1260)	µg/L	0.09[B]	0.48 U	-	-	-	-	0.50 U	-	-	-
Polychlorinated Biphenyl (PCBs)	µg/L	0.09$_b$[B]	ND	-	-	-	-	ND	-	-	-
Volatile Organic Compounds											
1,1,1-Trichloroethane	µg/L	5$_{**}$[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	5$_{**}$[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	µg/L	5$_{**}$[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	5$_{**}$[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	5$_{**}$[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	5$_{**}$[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	µg/L	0.04[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	0.0006[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	3[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	0.6[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	3[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	3[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
2-Hexanone	µg/L	50[A]	-	5.0 U	5.0 U	5.0 U	5.0 U	-	5.0 U	5.0 U	5.0 U
Acetone	µg/L	50[A]	-	10 U	10 U	10 U	10 U	-	10 U	10 U	10 U
Benzene	µg/L	1[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	50[A]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	50[A]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Bromomethane	µg/L	5$_{**}$[B]	-	1.0 UJ	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 UJ	1.0 U
Carbon Disulfide	µg/L	60[A]	-	1.0 U	1.0 U	1.0 U	0.45 NJB	-	1.0 U	1.0 U	1.0 U
Carbon Tetrachloride	µg/L	5[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	5$_{**}$[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	5$_{**}$[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Chloroform	µg/L	7[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Chloromethane	µg/L	5$_{**}$[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Cis-1,2-Dichloroethylene	µg/L	5$_{**}$[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Cis-1,3-Dichloropropene	µg/L	0.4$_p$[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	n/v	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	50[A]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	µg/L	5$_{**}$[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	5$_{**}$[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	µg/L	5$_{**}$[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Methyl Acetate	µg/L	n/v	-	2.5 U	2.5 U	2.5 U	2.5 U	-	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	µg/L	50[A]	-	10 U	10 U	10 U	10 U	-	10 U	10 U	10 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	µg/L	n/v	-	5.0 U	5.0 U	5.0 U	5.0 U	-	5.0 U	5.0 U	5.0 U
Methylcyclohexane	µg/L	n/v	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Methylene Chloride	µg/L	5$_{**}$[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Styrene	µg/L	5$_{**}$[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Tert-Butyl Methyl Ether	µg/L	10[A]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Tetrachloroethylene (PCE)	µg/L	5$_{**}$[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Toluene	µg/L	5$_{**}$[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Trans-1,2-Dichloroethene	µg/L	5$_{**}$[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Trans-1,3-Dichloropropene	µg/L	0.4$_p$[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Trichloroethylene (TCE)	µg/L	5$_{**}$[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	µg/L	5$_{**}$[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Vinyl Chloride	µg/L	2[B]	-	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	1.0 U
Xylenes, Total	µg/L	n/v	-	2.0 U	2.0 U	2.0 U	2.0 U	-	2.0 U	2.0 U	2.0 U

Notes:

TOGS	NYSDEC TOGS 1.1.1 (Reissued June 1998 with errata in January 1999 and addenda in April 2000 and June 2004)
[A]	TOGS 1.1.1 - Table 1 - Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Guidance
[B]	TOGS 1.1.1 - Table 1 - Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Standards
15.2	Measured concentration did not exceed the indicated standard.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
**	The principal organic contaminant standard for groundwater of 5 ug/L (described elsewhere in the TOGS table) applies to this substance.
b	Standard applies to the sum of all polychlorinated biphenyls.
p	Applies to the sum of cis- and trans-1,3-dichloropropene.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
ND	Not detected
UJ	Indicates estimated non-detect.

FIGURES



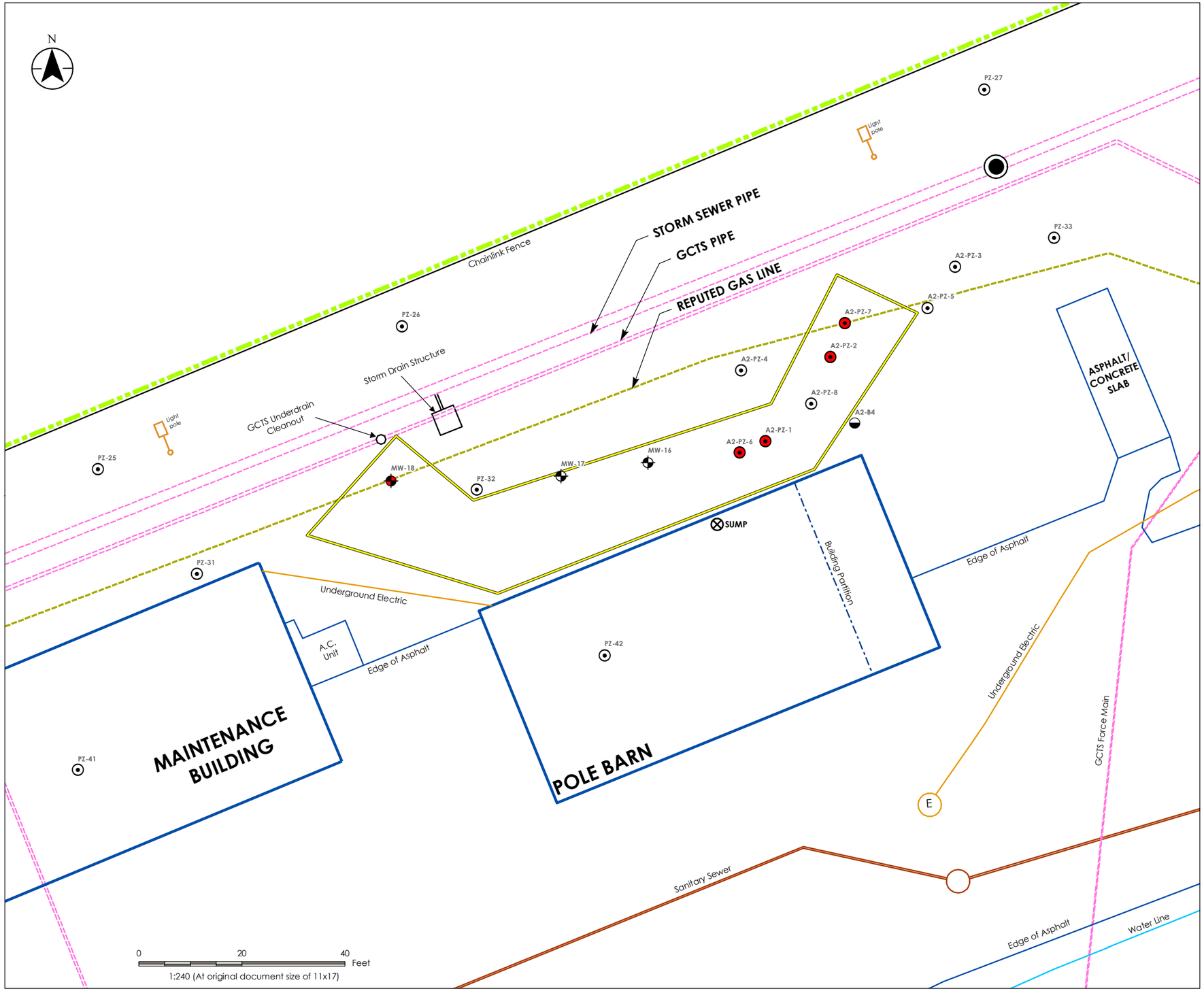
0 1000 2000
SCALE IN FEET

EXCAVATION
INITIAL DESIGN INVESTIGATION REPORT
FORMER LOCKHEED MARTIN FRENCH ROAD FACILITY
UTICA, NEW YORK

SITE LOCATION MAP

Stantec

1



Stantec

Legend

Previous Soil Investigation Locations

- Soil Boring with no POGW SCO soil exceedance(s)
- Monitoring Well Boring with POGW SCO exceedance(s)
- Monitoring Well Boring with no POGW SCO exceedance(s)
- Piezometer Boring with POGW SCO exceedance(s)
- Piezometer Boring with no POGW SCO exceedance(s)
- Statement of Basis Estimated Excavation Area Limits
- Property Boundary
- Floor Sump Location
- Catch Basin (CB-3)

Notes

1. Parcel boundaries taken from Sheet 2 of 8, Tax Map Overlay Former Lockheed Martin Facility Drawing, by Thew Associates, Dated 11/30/2007.
2. Utility and structural feature shapefiles from Topographic and Utility Survey (UK156-11-09 Utility Clearance.dwg), by Thew Associates, dated 11/30/2007.
3. Coordinate System: NAD 1983 StatePlane New York Central FIPS 3102 Feet
4. Previous estimated excavation area limits taken from NYSDEC's Final Statement of Basis (March 2015).
5. MIP = Membrane Interface Probe

Project Location:
525 French Road
Utica, Oneida County, NY

Prepared by LB on 2016-09-22
1st Technical Review by RJM on 2016-10-05
2nd Technical Review by PN on

190500800

Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
Utica, New York

Figure No.
2

Title
FNPD Area 2 and Pole Barn - Historical Investigation Locations

Stantec

Legend

- Surface Soil Sampling Location and PCB Concentration (October 2013)
- Property Boundary

0 300 600 Feet

1:3,600 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 StatePlane New York Central FIPS 3102 Feet
2. NYSDEC's Part 375 Commercial Use Soil Cleanup Objective for PCBs is 1 mg/kg.
3. Concentrations are provided in mg/kg.
4. Data Qualifiers:
   - J Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
   - NJ The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.

Project Location:
525 French Road
Utica, Oneida County, NY

Prepared by LB on 2016-09-22
1st Technical Review by RJM on 2016-10-05
2nd Technical Review by PN on 2016-10-16

190500800

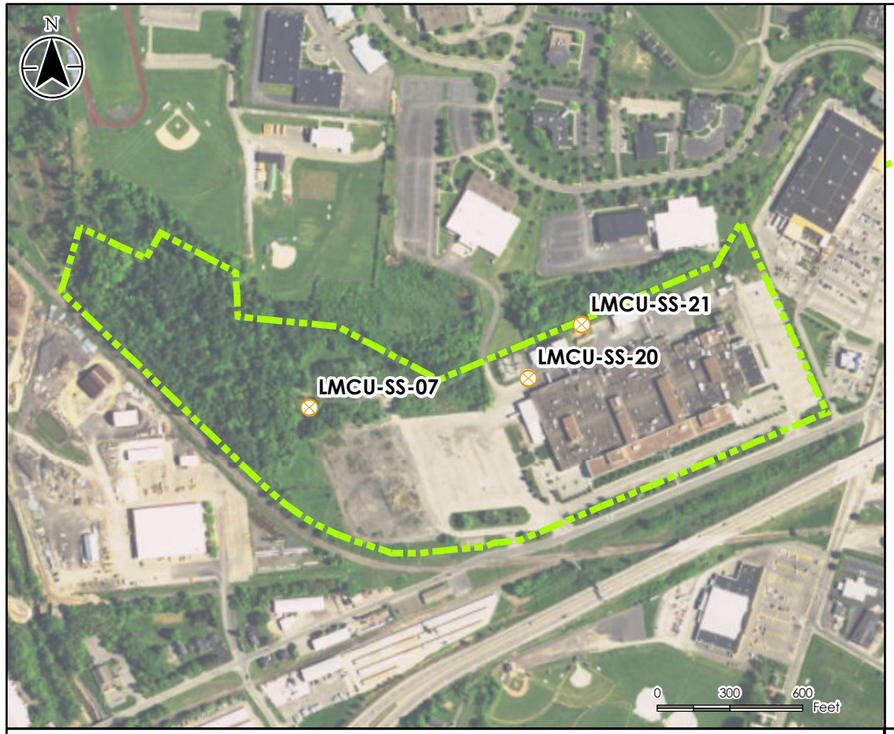
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
Utica, New York

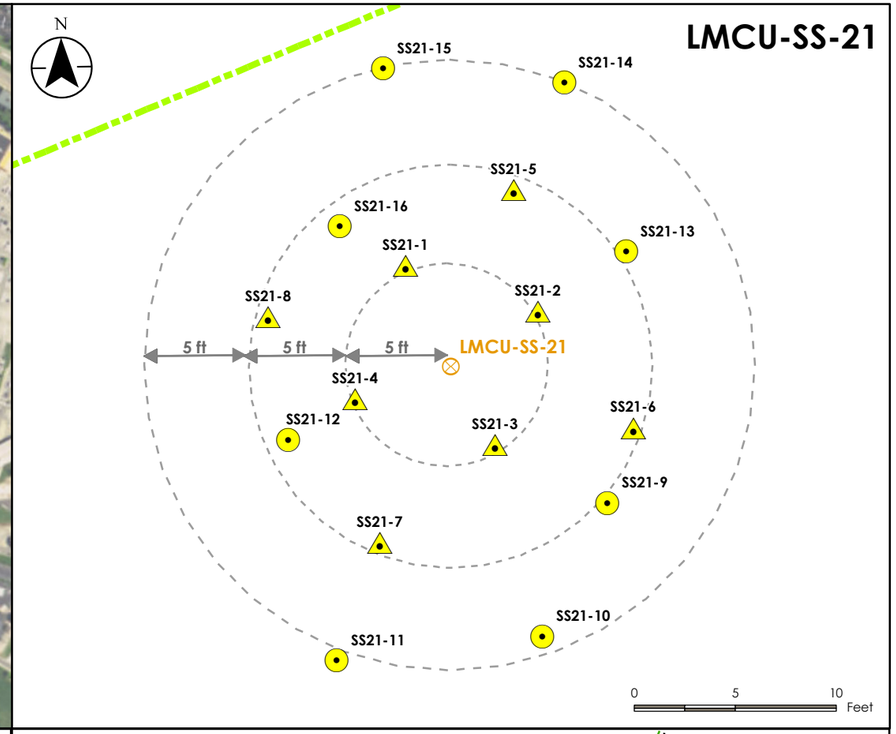
Figure No.
3

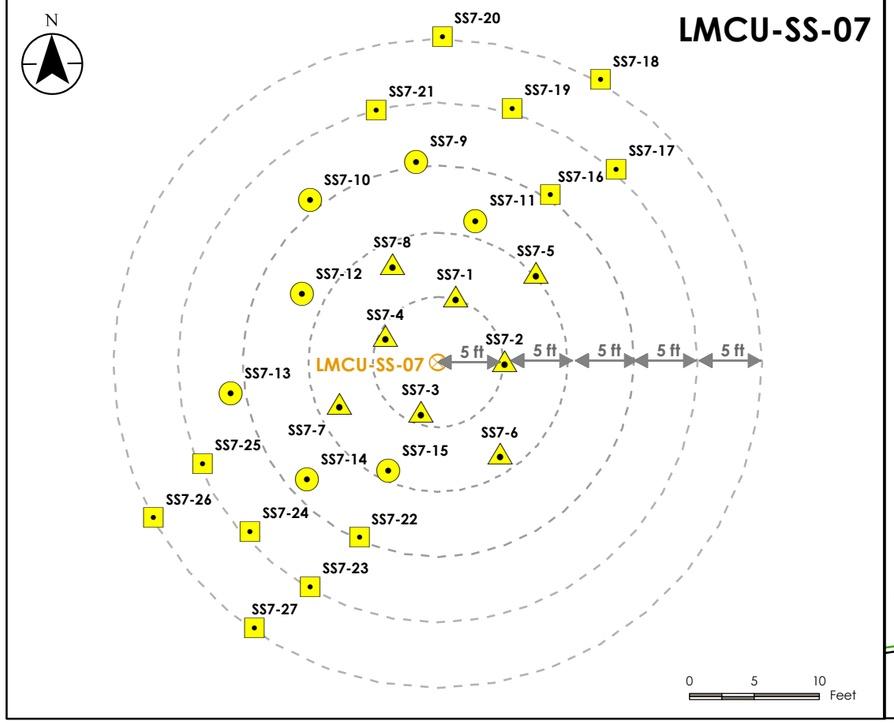
Title

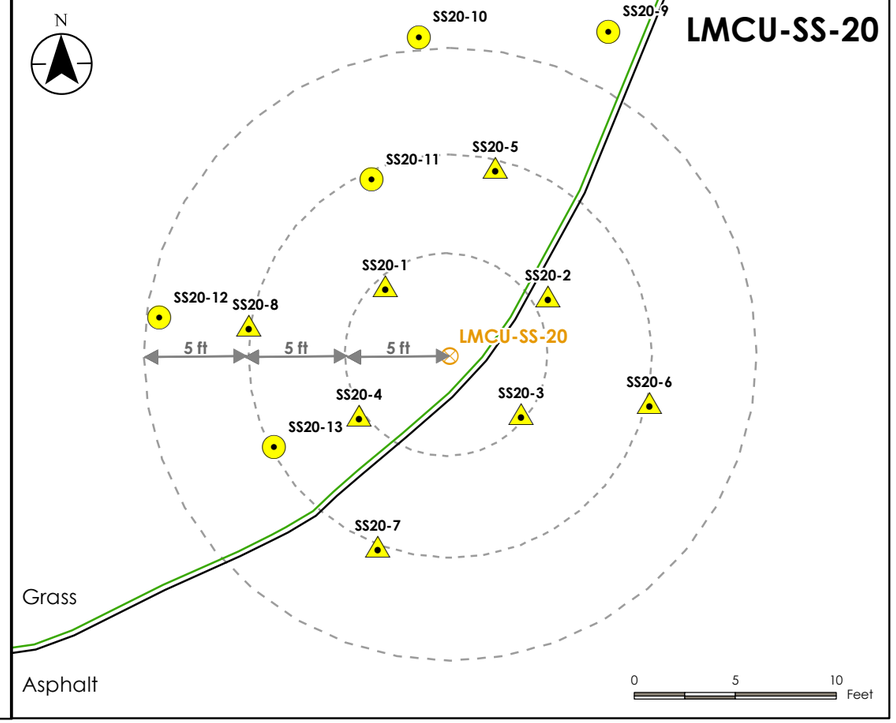
Previous Surface Soil PCB Exceedance Locations

U:\190500800\07_photos_maps_images\DRAWINGS\Report Figures\8- Pre-Excavation Work Plan\1 - Report Figures\mxd\Figure 3 - Previous Surface Soil PCB Exceedance Locations.mxd Revised: 2016-11-09 By: lbest









Stantec

Legend

- Surface Soil PCB Exceedance Locations (October 2013)
- Surface Soil PCB Sample Locations (November 2015)
- Supplemental Surface Soil PCB Sample Locations (June 2016)
- Second Supplemental Surface Soil PCB Sample Location and PCB Concentration (October 2016)
- Property Boundary

Notes

1. Coordinate System: NAD 1983 StatePlane New York Central FIPS 3102 Feet
2. October 2013 surface soil sampling was performed by ARCADIS on October 8-10, 2013. Exceedance locations are based on NYSDEC's Part 375 Commercial Use Soil Cleanup Objectives for PCBs (1 mg/kg).
3. November 2015 surface soil sampling was performed by Stantec on November 17 and 20, 2015.
4. Supplemental surface soil sampling was performed by Stantec on June 6 and 7, 2016; a second supplemental surface soil sampling program was performed on October 5, 2016.

Project Location:
525 French Road
Utica, Oneida County, NY

Prepared by LB on 2016-06-17
1st Technical Review by RJM on 2016-10-05
2nd Technical Review by PN on 2016-10-12

190500800

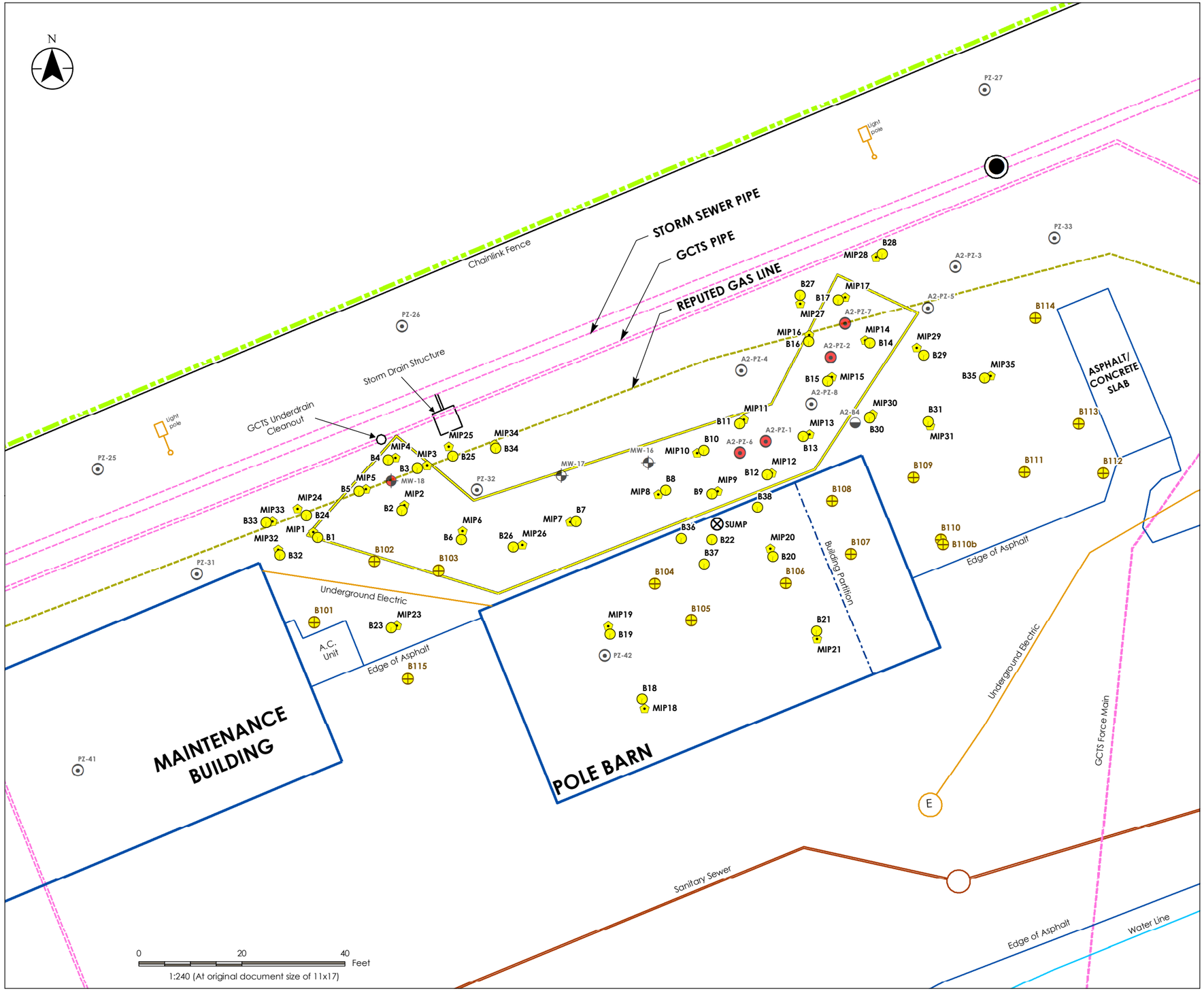
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
Utica, New York

Figure No.
4

Title

Surface Soil Sample Locations

U:\190500800\07_photos_maps_images\DRAWINGS\Report Figures\8- Pre-Excavation Work Plan\1 - Report Figures\mxd\Figure 4 - Surface Soil Sample Locations.mxd Revised: 2016-11-09 By: lbest



Stantec

Legend

- Supplemental Soil Boring Locations (June 2016)
- Initial Soil Boring Locations (November/December 2015)
- MIP Borehole Locations (November 2015)

Previous Soil Investigation Locations

- Soil Boring with no POGW SCO soil exceedance(s)
- Monitoring Well Boring with POGW SCO exceedance(s)
- Monitoring Well Boring with no POGW SCO exceedance(s)
- Piezometer Boring with POGW SCO exceedance(s)
- Piezometer Boring with no POGW SCO exceedance(s)
- Statement of Basis Estimated Excavation Area Limits
- Property Boundary
- Floor Sump Location
- Catch Basin (CB-3)

Notes

1. Parcel boundaries taken from Sheet 2 of 8, Tax Map Overlay Former Lockheed Martin Facility Drawing, by Thew Associates, Dated 11/30/2007.
2. Utility and structural feature shapefiles from Topographic and Utility Survey (UK156-11-09 Utility Clearance.dwg), by Thew Associates, dated 11/30/2007.
3. Coordinate System: NAD 1983 StatePlane New York Central FIPS 3102 Feet
4. Previous estimated excavation area limits taken from NYSDEC's Final Statement of Basis (March 2015).
5. MIP = Membrane Interface Probe

Project Location:
525 French Road
Utica, Oneida County, NY

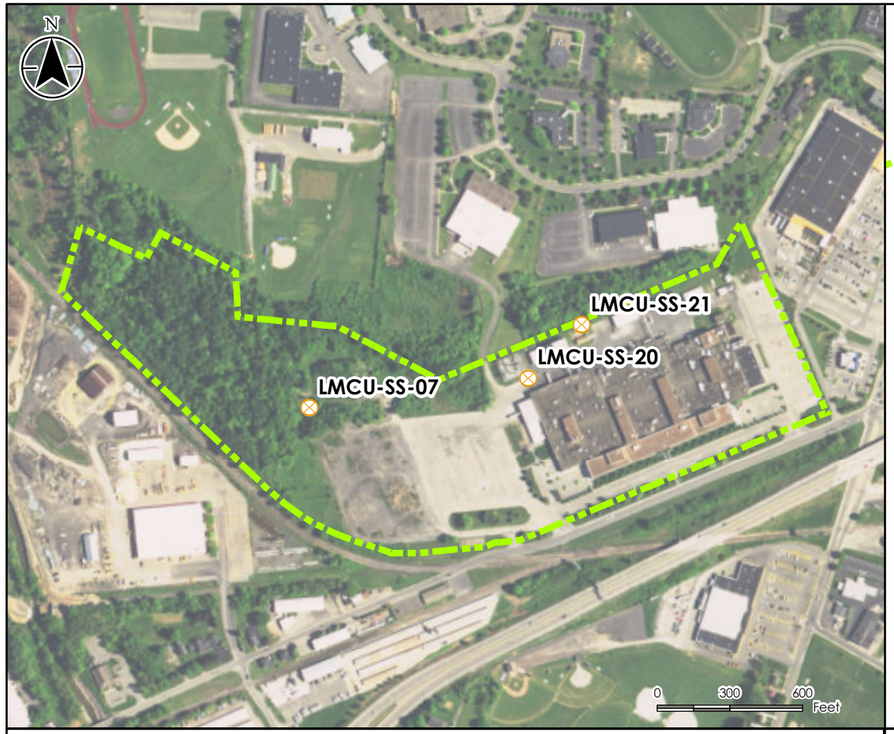
Prepared by LB on 2016-07-18
1st Technical Review by RJM on 2016-10-07
2nd Technical Review by PN on 2016-10-12

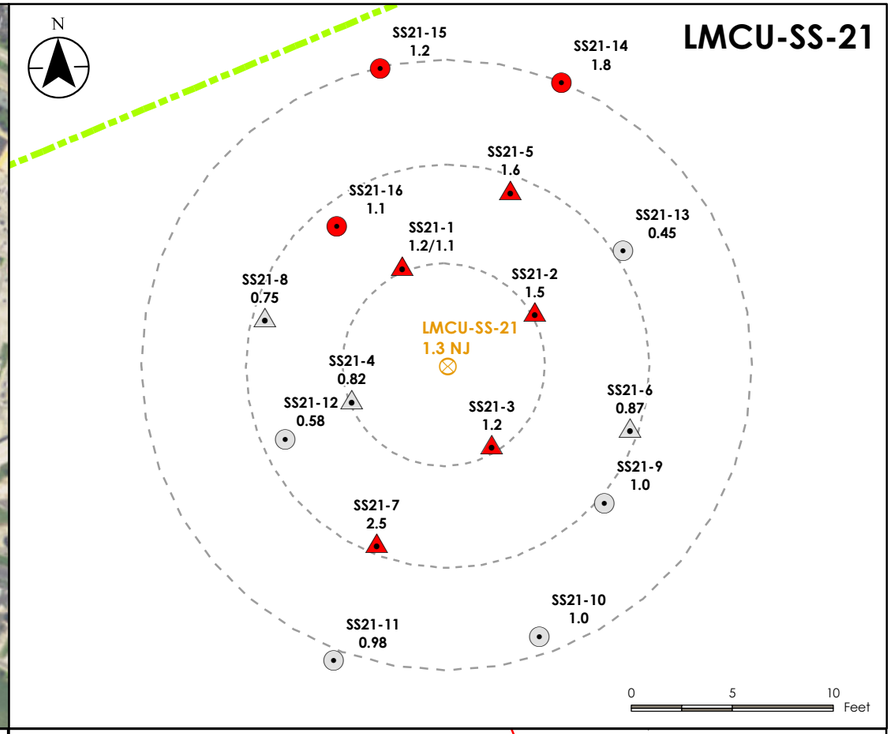
190500800

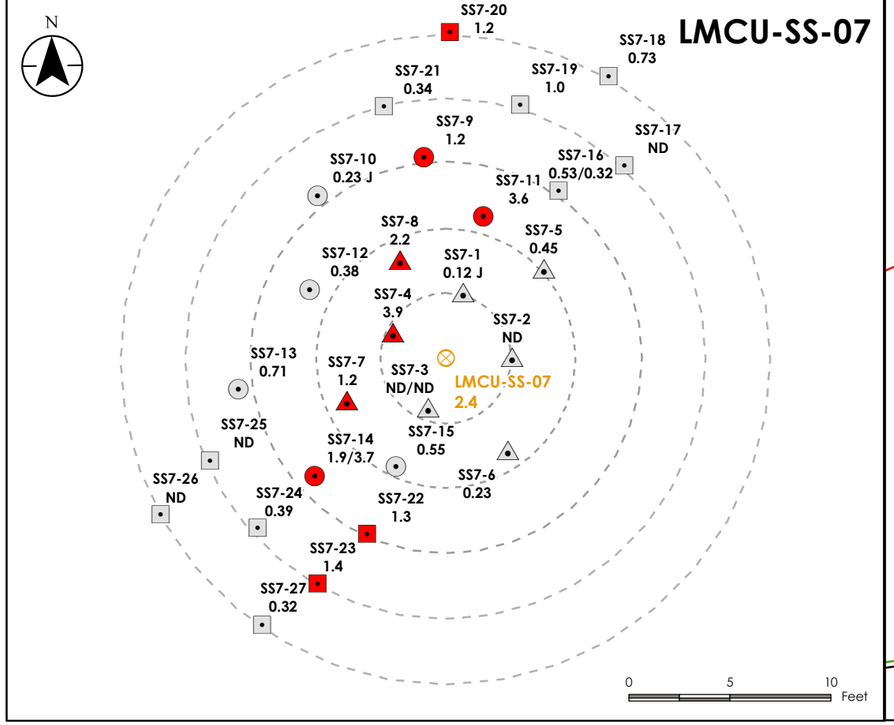
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
Utica, New York

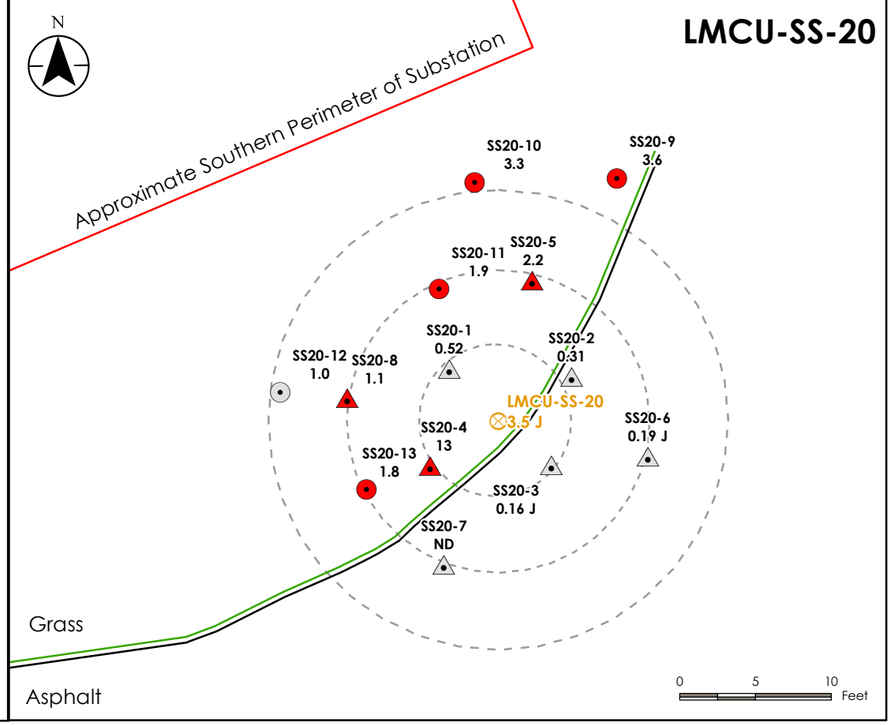
Figure No.
5

Title
FNPD Area 2 and Pole Barn Investigation Locations









Stantec

Legend

- October 2013 Surface Soil Sampling Location and PCB Exceedance Concentration
- November 2015 Surface Soil Sampling Location without PCB Exceedance of Commercial Use SCO
- November 2015 Surface Soil Sampling Location with PCB Exceedance of Commercial Use SCO
- June 2016 Surface Soil Sampling Location without PCB Exceedance of Commercial Use SCO
- June 2016 Surface Soil Sampling Location with PCB Exceedance of Commercial Use SCO
- October 2016 Surface Soil Sampling Location without PCB Exceedance of Commercial Use SCO
- October 2016 Surface Soil Sampling Location with PCB Exceedance of Commercial Use SCO
- Property Boundary

Notes

1. Coordinate System: NAD 1983 StatePlane New York Central FIPS 3102 Feet
2. Concentrations are provided in mg/kg.
3. NYSDEC's Part 375 Commercial Use Soil Cleanup Objective (SCO) for PCBs is 1 mg/kg.
4. October 2013 surface soil sampling was performed by ARCADIS on October 8-10, 2013.
5. November 2015 surface soil sampling was performed by Stantec on November 17 and 20, 2015.
6. Supplemental surface soil sampling was performed by Stantec on June 6 and 7, 2016; a second supplemental surface soil sampling event was performed by Stantec on October 5, 2016.
7. Data Qualifiers:
   - J Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
   - NJ The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
8. Non-detect results are depicted as "ND".

Project Location:
525 French Road
Utica, Oneida County, NY

Prepared by LB on 2016-09-22
1st Technical Review by RJM on 2016-10-05
2nd Technical Review by PN on 2016-10-12

190500800

Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
Utica, New York

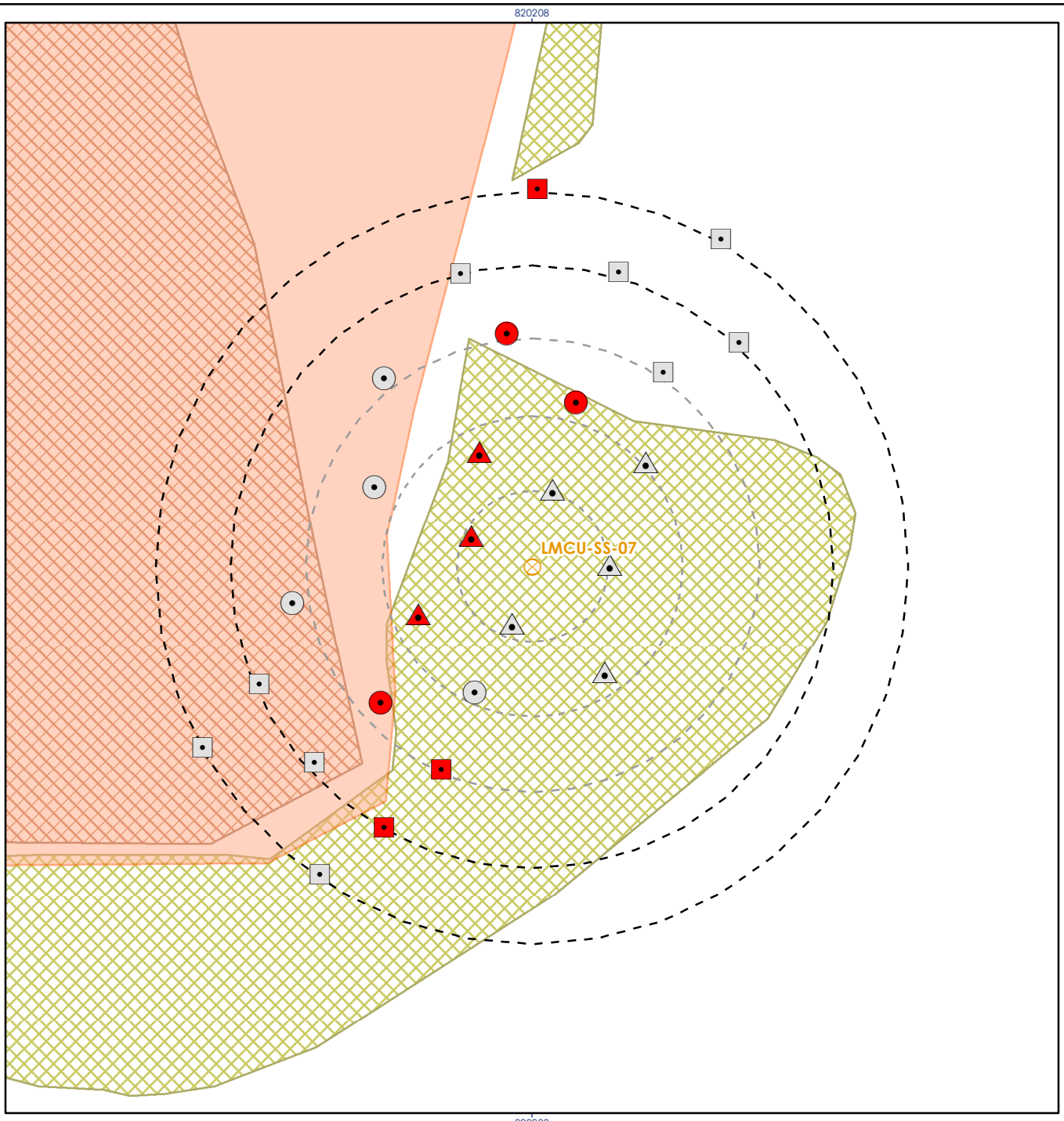
Figure No.
6

Title

Surface Soil Analytical Results

U:\190500800\07_photos_maps_images\DRAWINGS\Report Figures\8- Pre-Excavation Work Plan\1 - Report Figures\mxd\Figure 6 - Surface Soil Sample Results.mxd Revised: 2016-11-09 By: lbest

U:\1905900800\07_photos_maps_images\DRAWINGS\Report Figures\8_Pre-Excavation Work Plan\1 - Report Figures\mxd\Figure 7 - Former Burn Pit Area Excavations .mxd Revised: 2016-11-09 By: tbest



Notes

1. Coordinate System: NAD 1983 StatePlane New York Central FIPS 3102 Feet
2. NYSDEC's Part 375 Commercial Use Soil Cleanup Objective (SCO) for PCBs is 1 mg/kg.
4. October 2013: ARCADIS, October 8-10, 2013.
5. November 2015: Stantec, November 17 and 20, 2015.
6. Supplemental surface soil sampling: Stantec on June 6 and 7, 2016.
7. Second supplemental surface soil sampling: Stantec on October 5, 2016.
8. Locations of former burn pit area excavations are approximate only.

Legend

Surface Soil Sampling Location and PCB Concentration (October 2013)
- Exceedance of Commercial Use SCO

Surface Soil Sampling Location and PCB Concentration (November 2015)
- Below Commercial Use SCO
- Exceedance of Commercial Use SCO

Surface Soil Sampling Location and PCB Concentration (June 2016)
- Below Commercial Use SCO
- Exceedance of Commercial Use SCO

Surface Soil Sampling Location and PCB Concentration (October 2016)
- Below Commercial Use SCO
- Exceedance of Commercial Use SCO

- Fomer Burn Pit Area
- Fomer Burn Pit Excavation Area (2005)
- Fomer Burn Pit Excavation Areas (1999)

0 3 6 Feet

1:90 (at original document size of 8.5x11)

Stantec

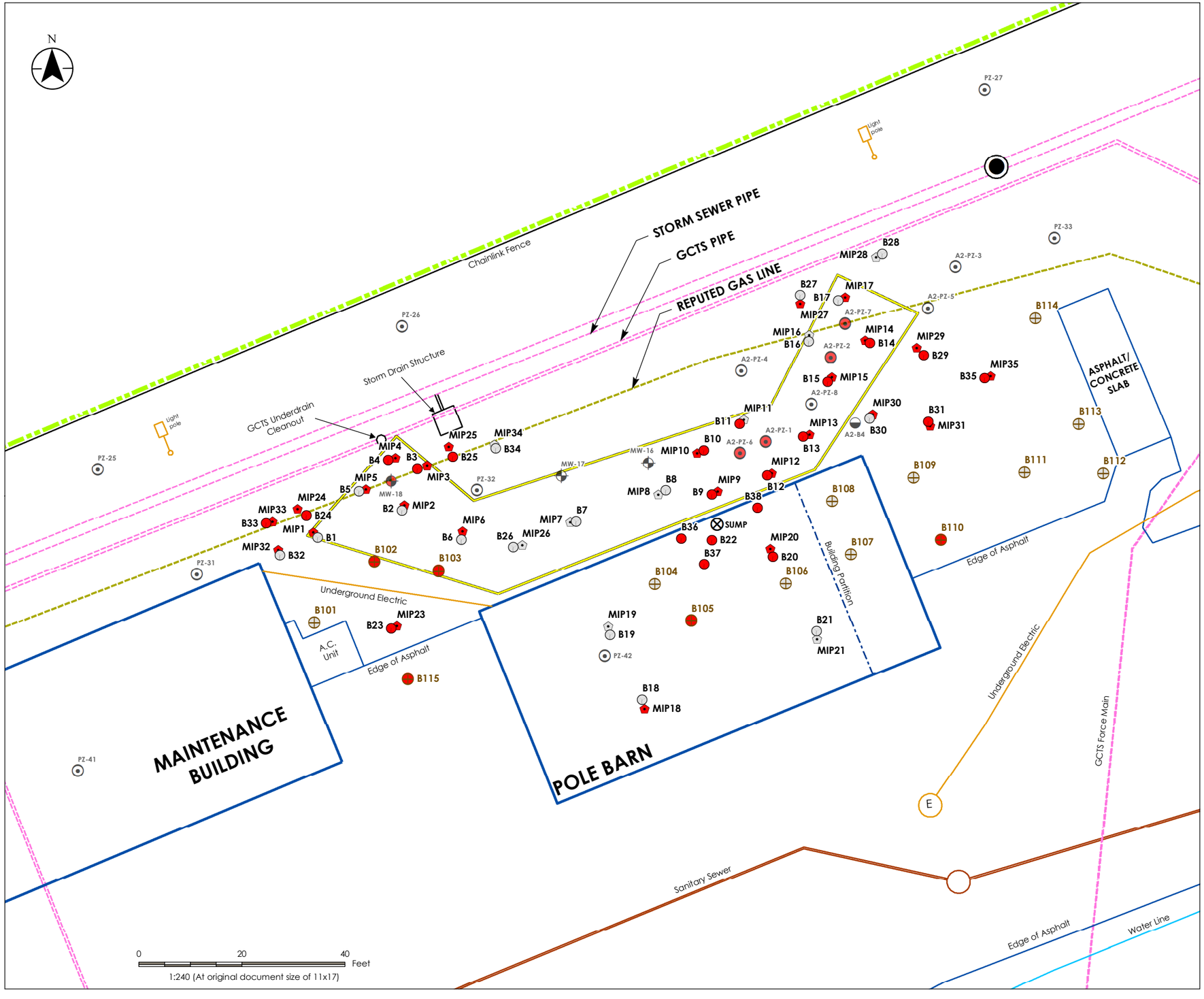
Project Location
525 French Road,
Utica, Oneida County, NY

Prepared by LB on 2016-09-22
1st Technical Review by RJM on 2016-10-07
2nd Technical Review by PN on 2016-10-12

Client/Project
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
Utica, New York

Figure No.
7

Title
Former Burn Pit Area Excavations SS-7 Sampling Area



Stantec

Legend

Supplemental Soil Boring Locations (June 2016)
- Soil Boring Location with POGW SCO Exceedance(s)
- Soil Boring Location without POGW SCO Exceedance(s)

Initial Soil Boring Locations (November/December 2015)
- Soil Boring Location with POGW SCO Exceedance(s)
- Soil Boring Location without POGW SCO Exceedance(s)

MIP Borehole Locations (November 2015)
- MIP Borehole Location with ECD Peak(s)
- MIP Borehole Location without ECD Peak(s)

Previous Soil Investigation Locations
- Soil Boring with no POGW SCO soil exceedance(s)
- Monitoring Well Boring with POGW SCO exceedance(s)
- Monitoring Well Boring with no POGW SCO exceedance(s)
- Piezometer Boring with POGW SCO exceedance(s)
- Piezometer Boring with no POGW SCO exceedance(s)
- Statement of Basis Estimated Excavation Area Limits
- Property Boundary
- Floor Sump Location
- Catch Basin (CB-3)

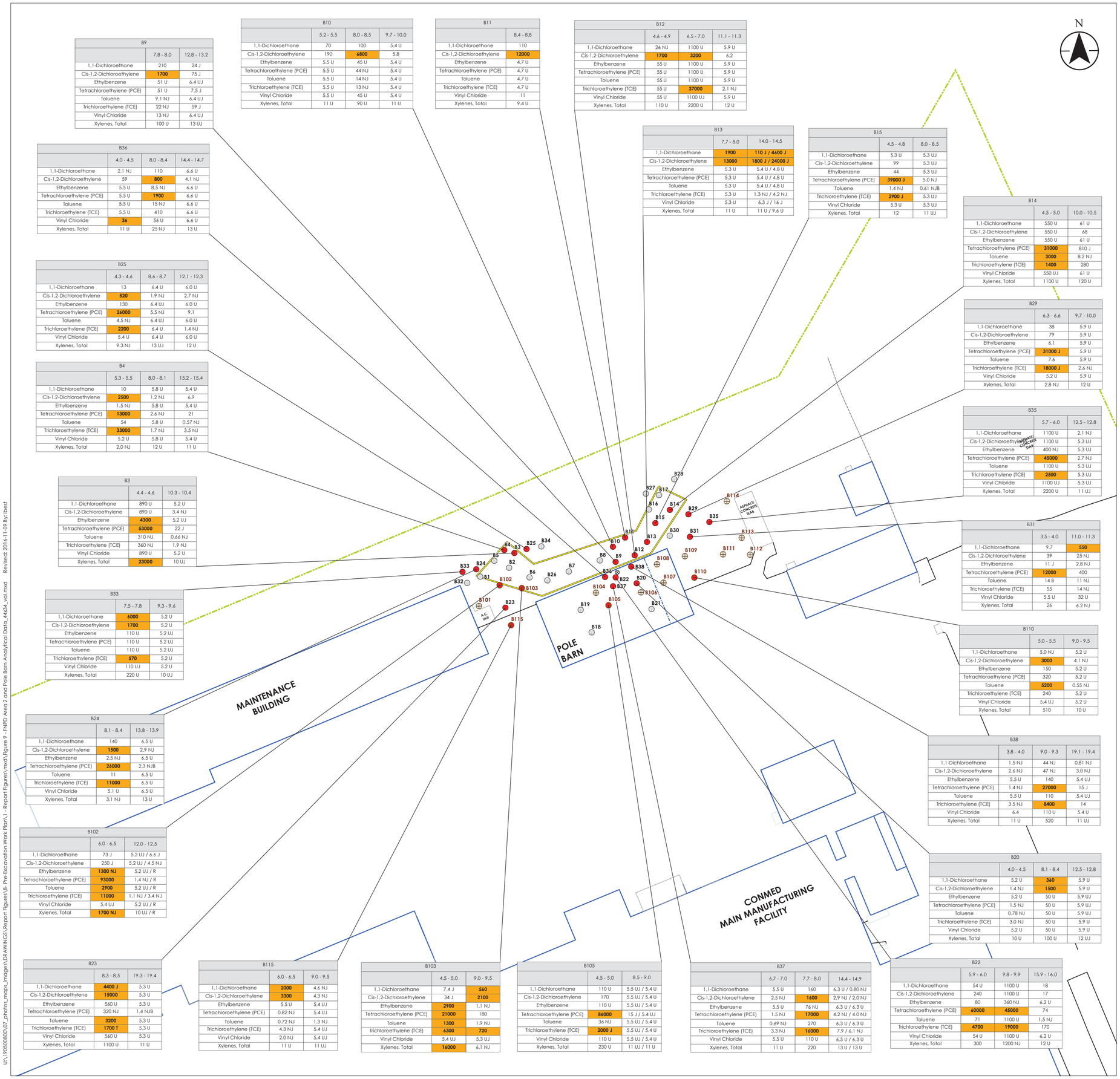
Notes
1. Parcel boundaries taken from Sheet 2 of 8, Tax Map Overlay Former Lockheed Martin Facility Drawing, by Thew Associates, Dated 11/30/2007.
2. Utility and structural feature shapefiles from Topographic and Utility Survey (UK156-11-09 Utility Clearance.dwg), by Thew Associates, dated 11/30/2007.
3. Previous estimated excavation area limits taken from NYSDEC's Final Statement of Basis (March 2015).
4. Coordinate System: NAD 1983 StatePlane New York Central FIPS 3102 Feet
5. POGW SCO = NYSDEC Part 375 Soil Cleanup Objectives for Protection of Groundwater.
6. See text description for analytical exceedance and ECD peak criteria. Note that methylene chloride and acetone are not site COCs; locations exhibiting POGW SCO exceedances of only one or both of those compounds are not considered exceedance locations.

Project Location:	Prepared by	LB on 2016-07-18
525 French Road	1st Technical Review by	RJM on 2016-10-05
Utica, Oneida County, NY	2nd Technical Review by	PN on 2016-10-12
	190500800	

Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
Utica, New York

Figure No.
8

Title
FNPD Area 2 and Pole Barn Investigation Results



B9			
	7.8 - 8.0	12.8 - 13.2	
1,1-Dichloroethane	210	24 J	
Cis-1,2-Dichloroethylene	**1700**	75 J	
Ethylbenzene	51 U	6.4 UJ	
Tetrachloroethylene (PCE)	51 U	7.5 J	
Toluene	9.1 NJ	6.4 UJ	
Trichloroethylene (TCE)	22 NJ	59 J	
Vinyl Chloride	13 NJ	6.4 UJ	
Xylenes, Total	100 U	13 UJ	

B10			
	5.2 - 5.5	8.0 - 8.5	9.7 - 10.0
1,1-Dichloroethane	70	100	5.4 U
Cis-1,2-Dichloroethylene	190	**6800**	5.8
Ethylbenzene	5.5 U	45 U	5.4 U
Tetrachloroethylene (PCE)	5.5 U	44 NJ	5.4 U
Toluene	5.5 U	14 NJ	5.4 U
Trichloroethylene (TCE)	5.5 U	13 NJ	5.4 U
Vinyl Chloride	5.5 U	45 U	5.4 U
Xylenes, Total	11 U	90 U	11 U

B11		
	8.4 - 8.8	
1,1-Dichloroethane	110	
Cis-1,2-Dichloroethylene	**12000**	
Ethylbenzene	4.7 U	
Tetrachloroethylene (PCE)	4.7 U	
Toluene	4.7 U	
Trichloroethylene (TCE)	4.7 U	
Vinyl Chloride	11	
Xylenes, Total	9.4 U	

B12			
	4.6 - 4.9	6.5 - 7.0	11.1 - 11.3
1,1-Dichloroethane	26 NJ	1100 U	5.9 U
Cis-1,2-Dichloroethylene	**1700**	**3200**	6.2
Ethylbenzene	55 U	1100 U	5.9 U
Tetrachloroethylene (PCE)	55 U	1100 U	5.9 U
Toluene	55 U	1100 U	5.9 U
Trichloroethylene (TCE)	55 U	**37000**	2.1 NJ
Vinyl Chloride	55 U	1100 UJ	5.9 U
Xylenes, Total	110 U	2200 U	12 U

B13		
	7.7 - 8.0	14.0 - 14.5
1,1-Dichloroethane	**1900**	**110 J / 4400 J**
Cis-1,2-Dichloroethylene	**13000**	**1800 J / 24000 J**
Ethylbenzene	5.3 U	5.4 U / 4.8 U
Tetrachloroethylene (PCE)	5.3 U	5.4 U / 4.8 U
Toluene	5.3 U	5.4 U / 4.8 U
Trichloroethylene (TCE)	5.3 U	1.3 NJ / 4.2 NJ
Vinyl Chloride	5.3 U	6.3 J / 16 J
Xylenes, Total	11 U	11 U / 9.6 U

B15		
	4.5 - 4.8	8.0 - 8.5
1,1-Dichloroethane	5.3 U	5.3 UJ
Cis-1,2-Dichloroethylene	99	5.3 UJ
Ethylbenzene	44	5.3 UJ
Tetrachloroethylene (PCE)	**39000 J**	5.0 NJ
Toluene	1.4 NJ	0.61 NJB
Trichloroethylene (TCE)	**2900 J**	5.3 UJ
Vinyl Chloride	5.3 U	5.3 UJ
Xylenes, Total	12	11 UJ

B14		
	4.5 - 5.0	10.0 - 10.5
1,1-Dichloroethane	550 U	61 U
Cis-1,2-Dichloroethylene	550 U	68
Ethylbenzene	550 U	61 U
Tetrachloroethylene (PCE)	**31000**	810 J
Toluene	**3000**	8.2 NJ
Trichloroethylene (TCE)	**1400**	280
Vinyl Chloride	550 UJ	61 U
Xylenes, Total	1100 U	120 U

B29		
	6.3 - 6.6	9.7 - 10.0
1,1-Dichloroethane	38	5.9 U
Cis-1,2-Dichloroethylene	79	5.9 U
Ethylbenzene	6.1	5.9 U
Tetrachloroethylene (PCE)	**31000 J**	5.9 U
Toluene	7.6	5.9 U
Trichloroethylene (TCE)	**18000 J**	2.6 NJ
Vinyl Chloride	5.2 U	5.9 U
Xylenes, Total	2.8 NJ	12 U

B35		
	5.7 - 6.0	12.5 - 12.8
1,1-Dichloroethane	1100 U	2.1 NJ
Cis-1,2-Dichloroethylene	1100 U	5.3 UJ
Ethylbenzene	400 NJ	5.3 UJ
Tetrachloroethylene (PCE)	**45000**	2.7 NJ
Toluene	1100 U	5.3 UJ
Trichloroethylene (TCE)	**2500**	5.3 UJ
Vinyl Chloride	1100 UJ	5.3 UJ
Xylenes, Total	2200 U	11 UJ

B31		
	3.5 - 4.0	11.0 - 11.3
1,1-Dichloroethane	9.7	**550**
Cis-1,2-Dichloroethylene	39	25 NJ
Ethylbenzene	11 J	2.8 NJ
Tetrachloroethylene (PCE)	**12000**	400
Toluene	14 B	11 NJ
Trichloroethylene (TCE)	55	14 NJ
Vinyl Chloride	5.5 U	32 U
Xylenes, Total	26	6.2 NJ

B110		
	5.0 - 5.5	9.0 - 9.5
1,1-Dichloroethane	5.0 NJ	5.2 U
Cis-1,2-Dichloroethylene	**3000**	4.1 NJ
Ethylbenzene	150	5.2 U
Tetrachloroethylene (PCE)	320	5.2 U
Toluene	**5200**	0.55 NJ
Trichloroethylene (TCE)	240	5.2 U
Vinyl Chloride	5.4 UJ	5.2 U
Xylenes, Total	510	10 U

B38			
	3.8 - 4.0	9.0 - 9.3	19.1 - 19.4
1,1-Dichloroethane	1.5 NJ	44 NJ	0.81 NJ
Cis-1,2-Dichloroethylene	2.6 NJ	47 NJ	3.0 NJ
Ethylbenzene	5.5 U	140	5.4 UJ
Tetrachloroethylene (PCE)	1.4 NJ	**27000**	15 J
Toluene	5.5 U	110	5.4 UJ
Trichloroethylene (TCE)	3.5 NJ	**8400**	14
Vinyl Chloride	6.4	110 U	5.4 U
Xylenes, Total	11 U	520	11 UJ

B20			
	4.0 - 4.5	8.1 - 8.4	12.5 - 12.8
1,1-Dichloroethane	5.2 U	**360**	5.9 U
Cis-1,2-Dichloroethylene	1.4 NJ	**1500**	5.9 U
Ethylbenzene	5.2 U	50 U	5.9 UJ
Tetrachloroethylene (PCE)	1.5 NJ	50 U	5.9 UJ
Toluene	0.78 NJ	50 U	5.9 UJ
Trichloroethylene (TCE)	3.0 NJ	50 U	5.9 U
Vinyl Chloride	5.2 U	50 U	5.9 U
Xylenes, Total	10 U	100 U	12 UJ

B22			
	5.9 - 6.0	9.8 - 9.9	15.9 - 16.0
1,1-Dichloroethane	54 U	1100 U	18
Cis-1,2-Dichloroethylene	240	1100 U	17
Ethylbenzene	80	360 NJ	6.2 U
Tetrachloroethylene (PCE)	**60000**	**45000**	74
Toluene	71	1100 U	1.5 NJ
Trichloroethylene (TCE)	**4700**	**19000**	170
Vinyl Chloride	54 U	1100 U	6.2 U
Xylenes, Total	300	1200 NJ	12 U

B37			
	6.7 - 7.0	7.7 - 8.0	14.4 - 14.9
1,1-Dichloroethane	5.5 U	160	6.3 U / 0.80 NJ
Cis-1,2-Dichloroethylene	2.5 NJ	**1600**	2.9 NJ / 2.0 NJ
Ethylbenzene	5.5 U	76 NJ	6.3 U / 6.3 U
Tetrachloroethylene (PCE)	1.5 NJ	**17000**	4.2 NJ / 4.0 NJ
Toluene	0.69 NJ	270	6.3 U / 6.3 U
Trichloroethylene (TCE)	3.3 NJ	**16000**	7.9 / 6.1 NJ
Vinyl Chloride	5.5 U	110 U	6.3 U / 6.3 U
Xylenes, Total	11 U	220	13 U / 13 U

B105		
	4.5 - 5.0	8.5 - 9.0
1,1-Dichloroethane	110 U	5.5 UJ / 5.4 U
Cis-1,2-Dichloroethylene	170	5.5 UJ / 5.4 U
Ethylbenzene	110 U	5.5 UJ / 5.4 U
Tetrachloroethylene (PCE)	**86000**	15 J / 5.4 UJ
Toluene	36 NJ	5.5 UJ / 5.4 U
Trichloroethylene (TCE)	**2000 J**	5.5 UJ / 5.4 U
Vinyl Chloride	110 U	5.5 UJ / 5.4 U
Xylenes, Total	230 U	11 UJ / 11 U

B103		
	4.5 - 5.0	9.0 - 9.5
1,1-Dichloroethane	7.4 J	**560**
Cis-1,2-Dichloroethylene	34 J	**2100**
Ethylbenzene	**2900**	1.1 NJ
Tetrachloroethylene (PCE)	**21000**	180
Toluene	**1300**	1.9 NJ
Trichloroethylene (TCE)	**6300**	**720**
Vinyl Chloride	5.4 UJ	5.3 UJ
Xylenes, Total	**16000**	6.1 NJ

B115		
	6.0 - 6.5	9.0 - 9.5
1,1-Dichloroethane	**2000**	4.6 NJ
Cis-1,2-Dichloroethylene	**3300**	4.3 NJ
Ethylbenzene	5.5 U	5.4 UJ
Tetrachloroethylene (PCE)	0.82 NJ	5.4 UJ
Toluene	0.72 NJ	1.3 NJ
Trichloroethylene (TCE)	4.3 NJ	5.4 UJ
Vinyl Chloride	2.0 NJ	5.4 UJ
Xylenes, Total	11 U	11 UJ

B23		
	8.3 - 8.5	19.3 - 19.4
1,1-Dichloroethane	**4400 J**	5.3 U
Cis-1,2-Dichloroethylene	**15000**	5.3 U
Ethylbenzene	560 U	5.3 U
Tetrachloroethylene (PCE)	320 NJ	1.4 NJB
Toluene	**3200**	5.3 U
Trichloroethylene (TCE)	**1700 T**	5.3 U
Vinyl Chloride	560 U	5.3 U
Xylenes, Total	1100 U	11 U

B102		
	6.0 - 6.5	12.0 - 12.5
1,1-Dichloroethane	73 J	5.2 UJ / 6.6 J
Cis-1,2-Dichloroethylene	250 J	5.2 UJ / 4.5 NJ
Ethylbenzene	**1300 NJ**	5.2 UJ / R
Tetrachloroethylene (PCE)	**93000**	1.4 NJ / R
Toluene	**2900**	5.2 UJ / R
Trichloroethylene (TCE)	**11000**	1.1 NJ / 3.4 NJ
Vinyl Chloride	5.4 UJ	5.2 UJ / R
Xylenes, Total	**1700 NJ**	10 UJ / R

B24		
	8.1 - 8.4	13.8 - 13.9
1,1-Dichloroethane	140	6.5 U
Cis-1,2-Dichloroethylene	**1500**	2.9 NJ
Ethylbenzene	2.5 NJ	6.5 U
Tetrachloroethylene (PCE)	**26000**	2.3 NJB
Toluene	11	6.5 U
Trichloroethylene (TCE)	**11000**	6.5 U
Vinyl Chloride	5.1 U	6.5 U
Xylenes, Total	3.1 NJ	13 U

B33		
	7.5 - 7.8	9.3 - 9.6
1,1-Dichloroethane	**6000**	5.2 U
Cis-1,2-Dichloroethylene	**1700**	5.2 U
Ethylbenzene	110 U	5.2 UJ
Tetrachloroethylene (PCE)	110 U	5.2 UJ
Toluene	110 U	5.2 UJ
Trichloroethylene (TCE)	**570**	5.2 U
Vinyl Chloride	110 UJ	5.2 U
Xylenes, Total	220 U	10 UJ

B36			
	4.0 - 4.5	8.0 - 8.4	14.4 - 14.7
1,1-Dichloroethane	2.1 NJ	110	6.6 U
Cis-1,2-Dichloroethylene	59	**800**	4.1 NJ
Ethylbenzene	5.5 U	8.5 NJ	6.6 U
Tetrachloroethylene (PCE)	5.5 U	**1900**	6.6 U
Toluene	5.5 U	15 NJ	6.6 U
Trichloroethylene (TCE)	5.5 U	410	6.6 U
Vinyl Chloride	**36**	56 U	6.6 U
Xylenes, Total	11 U	25 NJ	13 U

B25			
	4.3 - 4.6	8.6 - 8.7	12.1 - 12.3
1,1-Dichloroethane	13	6.4 U	6.0 U
Cis-1,2-Dichloroethylene	**520**	1.9 NJ	2.7 NJ
Ethylbenzene	130	6.4 UJ	6.0 U
Tetrachloroethylene (PCE)	**26000**	5.5 NJ	9.1
Toluene	4.5 NJ	6.4 UJ	6.0 U
Trichloroethylene (TCE)	**2200**	6.4 U	1.4 NJ
Vinyl Chloride	5.4 U	6.4 U	6.0 U
Xylenes, Total	9.3 NJ	13 UJ	12 U

B4			
	5.3 - 5.5	8.0 - 8.1	15.2 - 15.4
1,1-Dichloroethane	10	5.8 U	5.4 U
Cis-1,2-Dichloroethylene	**2500**	1.2 NJ	6.9
Ethylbenzene	1.5 NJ	5.8 U	5.4 U
Tetrachloroethylene (PCE)	**13000**	2.6 NJ	21
Toluene	54	5.8 U	0.57 NJ
Trichloroethylene (TCE)	**33000**	1.7 NJ	3.5 NJ
Vinyl Chloride	5.2 U	5.8 U	5.4 U
Xylenes, Total	2.0 NJ	12 U	11 U

B3			
	4.4 - 4.6	10.3 - 10.4	
1,1-Dichloroethane	890 U	5.2 U	
Cis-1,2-Dichloroethylene	890 U	3.4 NJ	
Ethylbenzene	**4300**	5.2 UJ	
Tetrachloroethylene (PCE)	**53000**	22 J	
Toluene	310 NJ	0.66 NJ	
Trichloroethylene (TCE)	360 NJ	1.9 NJ	
Vinyl Chloride	890 U	5.2 U	
Xylenes, Total	**23000**	10 UJ	

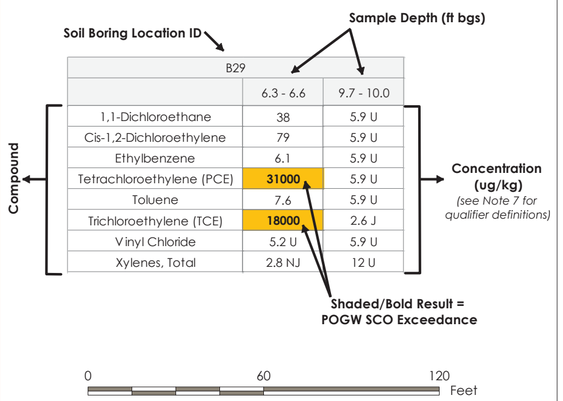
Legend

Supplemental Soil Boring Locations (June 2016)

- Soil Boring Location with POGW SCO Exceedances
- Soil Boring Location without POGW SCO Exceedances

Initial Soil Boring Locations (November/December 2015)

- Soil Boring Location with POGW SCO Exceedances
- Soil Boring Location without POGW SCO Exceedances
- Statement of Basis Estimated Excavation Area Limits
- Floor Sump Location
- Catch Basin (CB-3)
- Property Boundary



Notes

1. Parcel boundaries taken from Sheet 2 of 8, Tax Map Overlay, Former Lockheed Martin Facility Drawing, by Thew Associates, Dated 11/30/2007.
2. Utility and structural feature shapefiles from Topographic and Utility Survey (UK156-11-09 Utility Clearance.dwg), by Thew Associates, dated 11/30/2007.
3. Previously estimated excavation area limits taken from NYSDEC's Final Statement of Basis (March 2015).
4. Coordinate System: NAD 1983 StatePlane New York Central FIPS 3102 Feet
5. POGW SCO = NYSDEC Part 375 Soil Cleanup Objectives for Protection of Groundwater.
6. Analytical results for locations with POGW exceedances are shown. This does not include locations that only exhibited POGW exceedances of methylene chloride and/or acetone; neither of these compounds is a site COC, and both are common laboratory contaminants.
7. Data Qualifiers:
   - B - Compound was found in the blank and sample.
   - J - Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
   - NJ - The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
   - T - QC recovery is outside acceptance limits.
   - U - Compound was not detected above the indicated reporting limit
8. Data depicted have been qualified to reflect DUSR recommendations.

Project Location:
525 French Road
Utica, Oneida County, NY

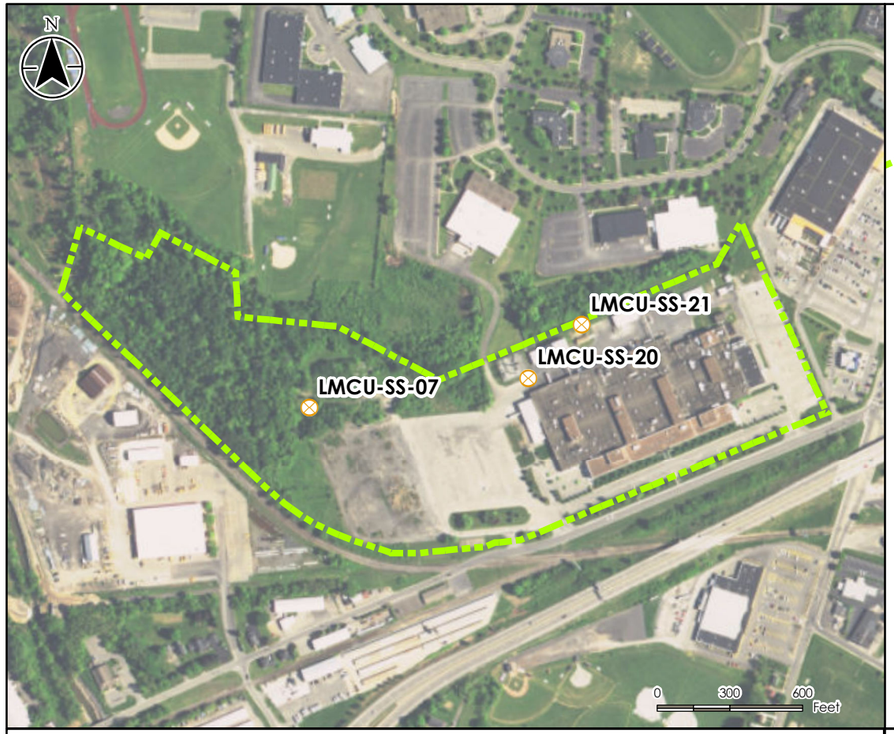
Prepared by LB on 2016-09-30
1st Technical Review by RJM on 2016-10-05
2nd Technical Review by PN on 2016-10-12
190500800

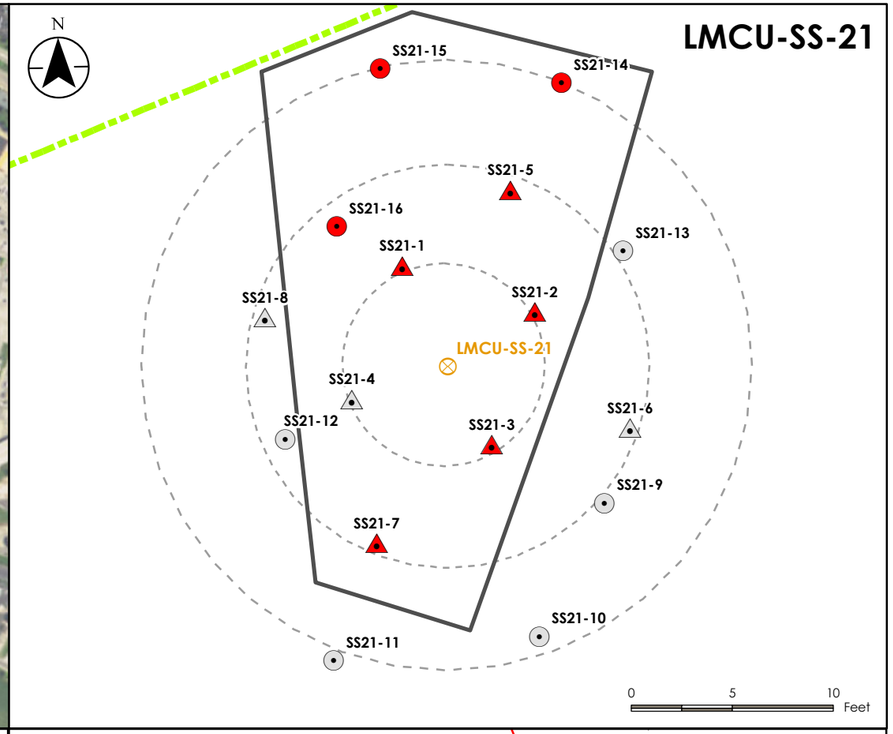
Client/Project
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
Utica, New York

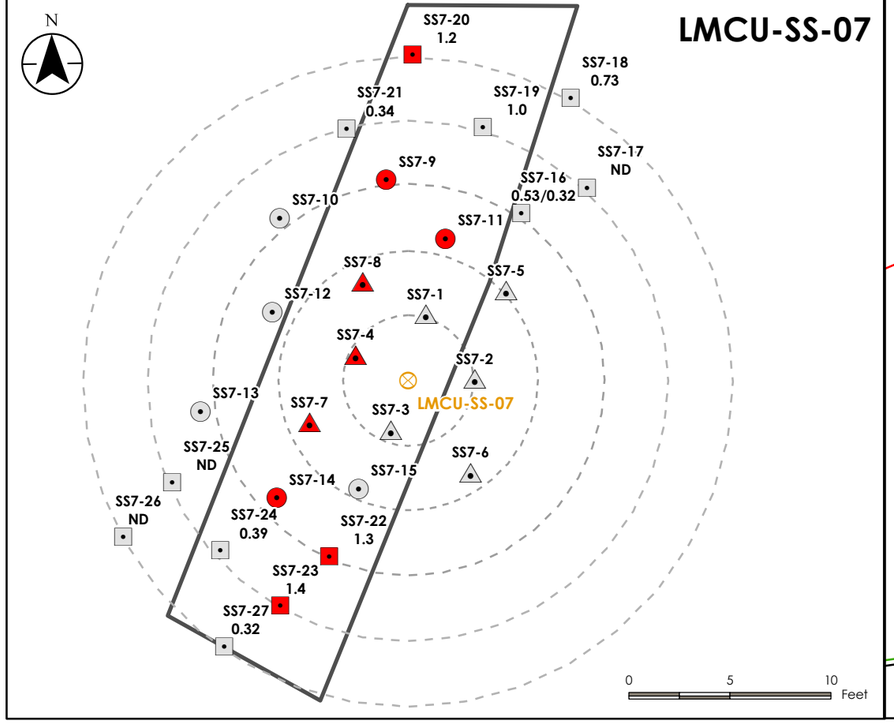
Figure No.
9

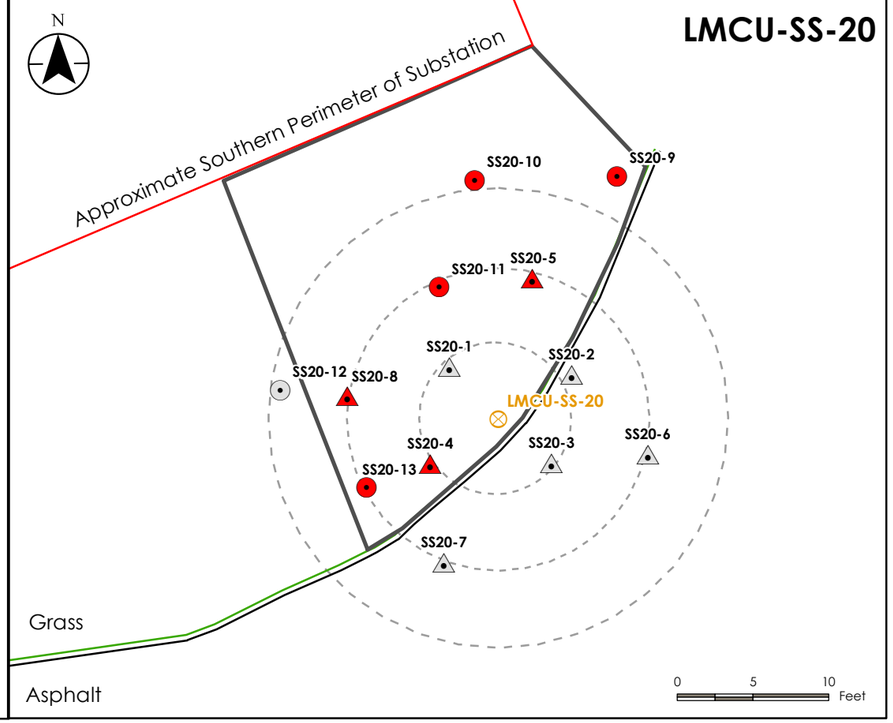
Title
FNPD Area 2 and Pole Barn Subsurface Soil Analytical Results (POGW SCO Exceedance Locations)

U:\190500800\07_photos_maps_images\DRAWINGS\Report Figures\8- Pre-Excavation Work Plan\1 - Report Figures\mxd\ Figure 9 - FNPD Area 2 and Pole Barn Analytical Data_44x34_v01.mxd Revised: 2016-11-09 By: tbest









Stantec

Legend

- Proposed Surface Soil Removal Limits
- October 2013 Surface Soil Sampling Location and PCB Exceedance Concentration
- November 2015 Surface Soil Sampling Location without PCB Exceedance of Commercial Use SCO
- November 2015 Surface Soil Sampling Location with PCB Exceedance of Commercial Use SCO
- June 2016 Surface Soil Sampling Location without PCB Exceedance of Commercial Use SCO
- June 2016 Surface Soil Sampling Location with PCB Exceedance of Commercial Use SCO
- October 2016 Surface Soil Sampling Location without PCB Exceedance of Commercial Use SCO
- October 2016 Surface Soil Sampling Location with PCB Exceedance of Commercial Use SCO
- Property Boundary

Notes

1. Coordinate System: NAD 1983 StatePlane New York Central FIPS 3102 Feet
2. Concentrations are provided in mg/kg.
3. NYSDEC's Part 375 Commercial Use Soil Cleanup Objective (SCO) for PCBs is 1 mg/kg.
4. October 2013 surface soil sampling was performed by ARCADIS on October 8-10, 2013.
5. November 2015 surface soil sampling was performed by Stantec on November 17 and 20, 2015.
6. Supplemental surface soil sampling was performed by Stantec on June 6 and 7, 2016; a second supplemental surface soil sampling event was performed by Stantec on October 5, 2016..

Project Location:
525 French Road
Utica, Oneida County, NY

Prepared by LB on 2016-09-22
1st Technical Review by RJM on 2016-10-05
2nd Technical Review by PN on 2016-10-12

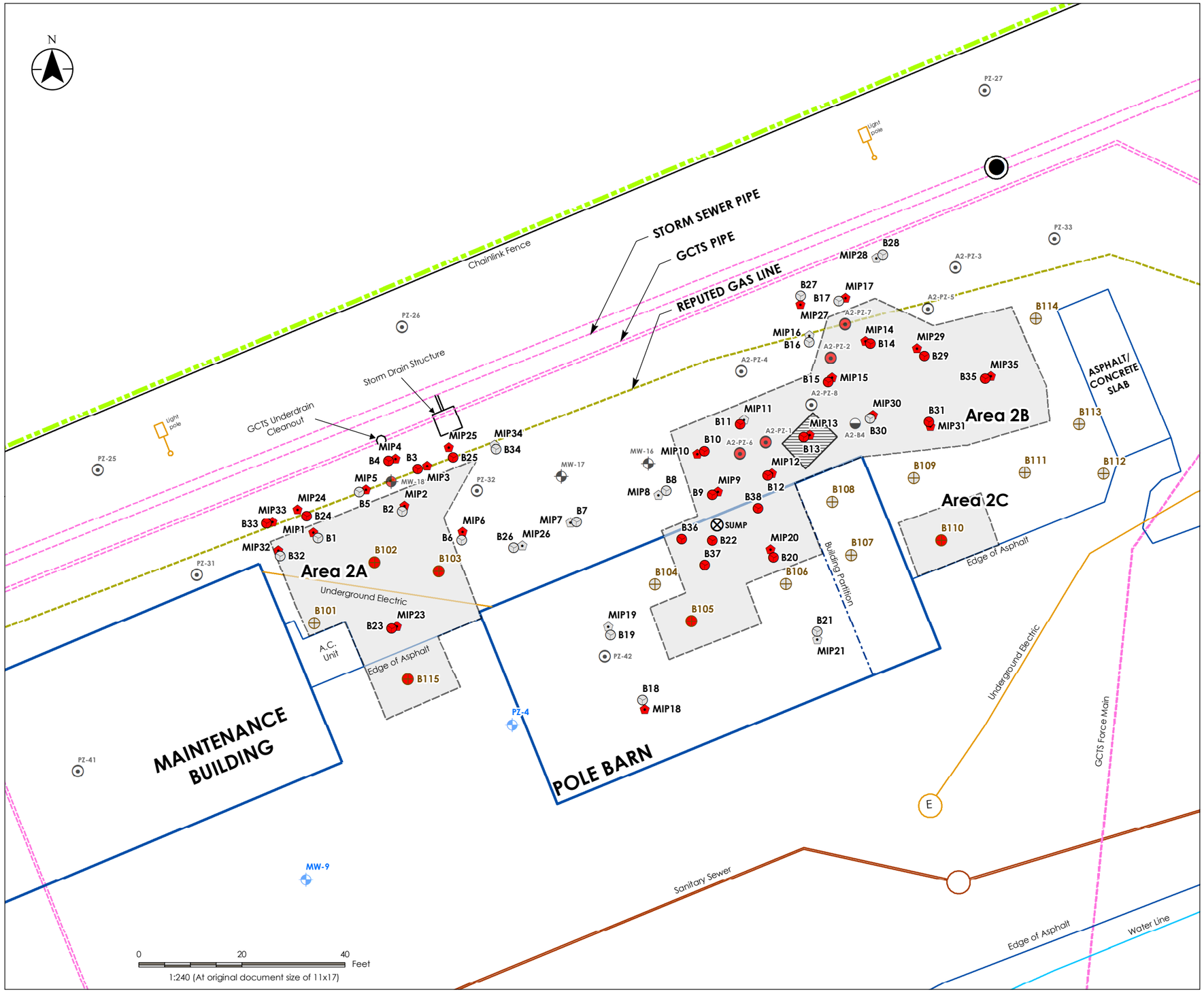
190500800

Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
Utica, New York

Figure No.
10

Title
Proposed Limits of Soil Removal for PCB-impacted Surface Soil

U:\190500800\07_photos_maps_images\DRAWINGS\Report Figures\8- Pre-Excavation Work Plan\1 - Report Figures\mxd\Figure 10 - Proposed Limits of Soil Removal for PCB-impacted Soil.mxd Revised: 2016-11-09 By: lbest



Stantec

Legend

- Proposed Limits of Excavation (Depth = 10 ft)
- Proposed Limits of Deeper Excavation (Depth = 15 ft)

Supplemental Soil Boring Locations (June 2016)

- Soil Boring Location with POGW SCO Exceedance(s)
- Soil Boring Location without POGW SCO Exceedance(s)

Initial Soil Boring Locations (November/December 2015)

- Soil Boring Location with POGW SCO Exceedance(s)
- Soil Boring Location without POGW SCO Exceedance(s)

MIP Borehole Locations (November 2015)

- MIP Borehole Location with ECD Peak(s)
- MIP Borehole Location without ECD Peak(s)

Previous Soil Investigation Locations

- Soil Boring with no POGW SCO soil exceedance(s)
- Monitoring Well Boring with POGW SCO exceedance(s)
- Monitoring Well Boring with no POGW SCO exceedance(s)
- Piezometer Boring with POGW SCO exceedance(s)
- Piezometer Boring with no POGW SCO exceedance(s)
- Monitoring Well or Piezometer Location with Historical Groundwater Sampling Data
- Property Boundary
- Floor Sump Location
- Catch Basin (CB-3)

Notes

1. Parcel boundaries taken from Sheet 2 of 8, Tax Map Overlay Former Lockheed Martin Facility Drawing, by Thew Associates, Dated 11/30/2007.
2. Utility and structural feature shapefiles from Topographic and Utility Survey (UK156-11-09 Utility Clearance.dwg), by Thew Associates, dated 11/30/2007.
3. Previous estimated excavation area limits taken from NYSDEC's Final Statement of Basis (March 2015).
4. Coordinate System: NAD 1983 StatePlane New York Central FIPS 3102 Feet
5. POGW SCO = NYSDEC Part 375 Soil Cleanup Objectives for Protection of Groundwater.
6. See text description for analytical exceedance and ECD peak criteria. Note that methylene chloride and acetone are not site COCs; locations exhibiting POGW SCO exceedances of only one or both of those compounds are not considered exceedance locations.

Project Location:
525 French Road
Utica, Oneida County, NY

Prepared by LB on 2016-07-18
1st Technical Review by RJM on 2016-10-05
2nd Technical Review by PN on 2016-10-12

190500800

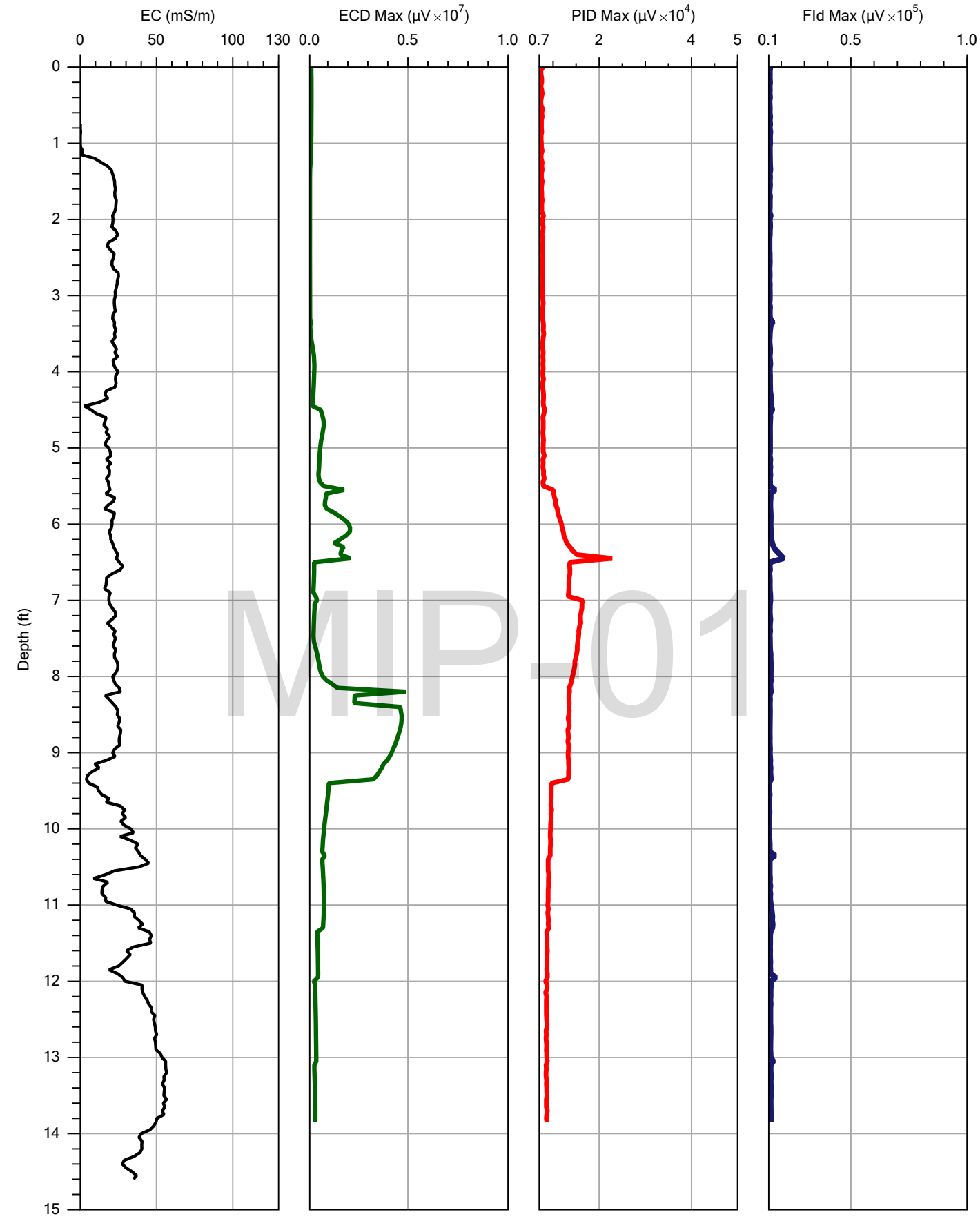
Excavation Initial Design Investigation Report
Former Lockheed Martin French Road Facility
Utica, New York

Figure No.
11

Title
Proposed Limits of Excavation for VOC-impacted Subsurface Soil

APPENDIX A

Membrane Interface Probe (MIP) Logs



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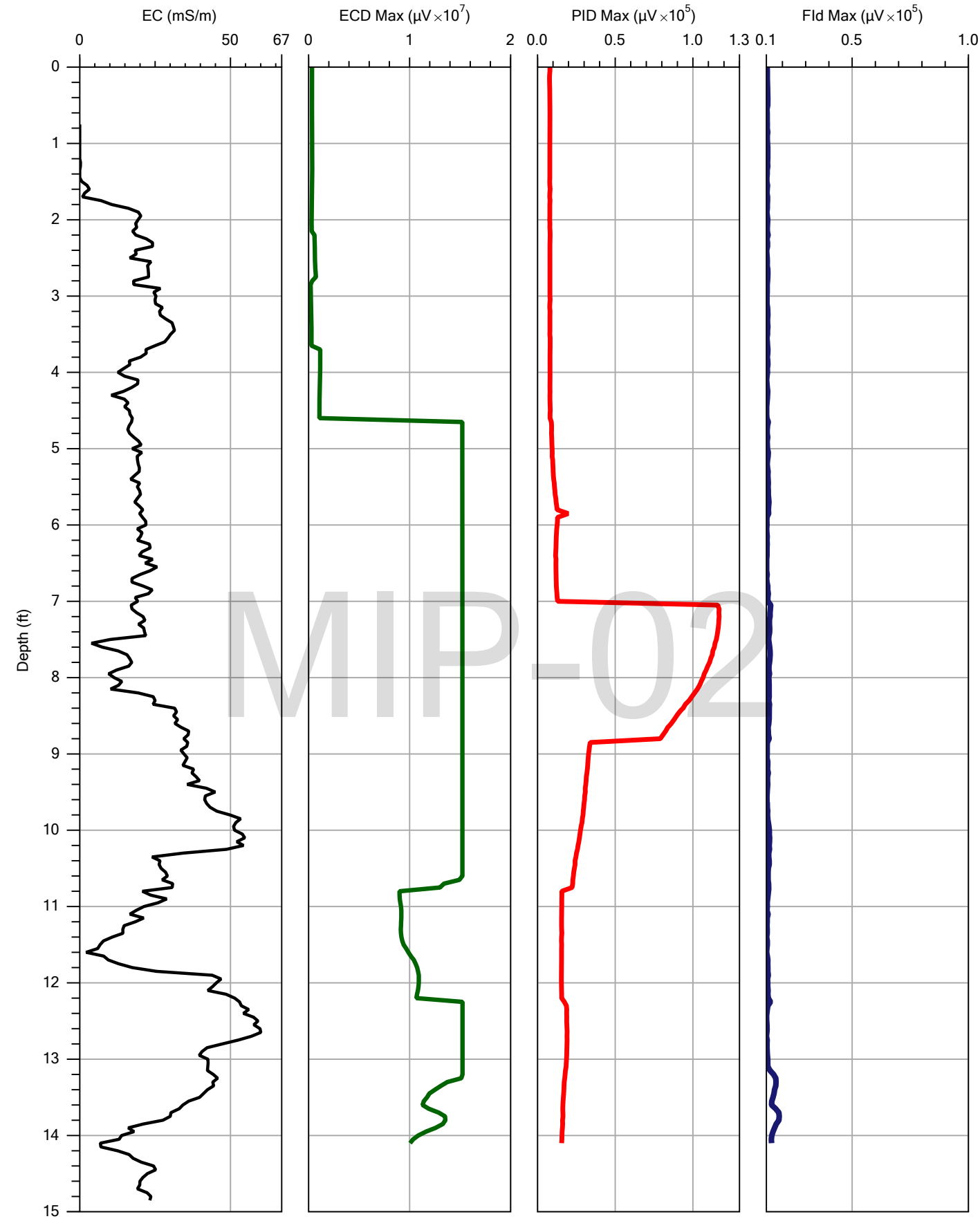

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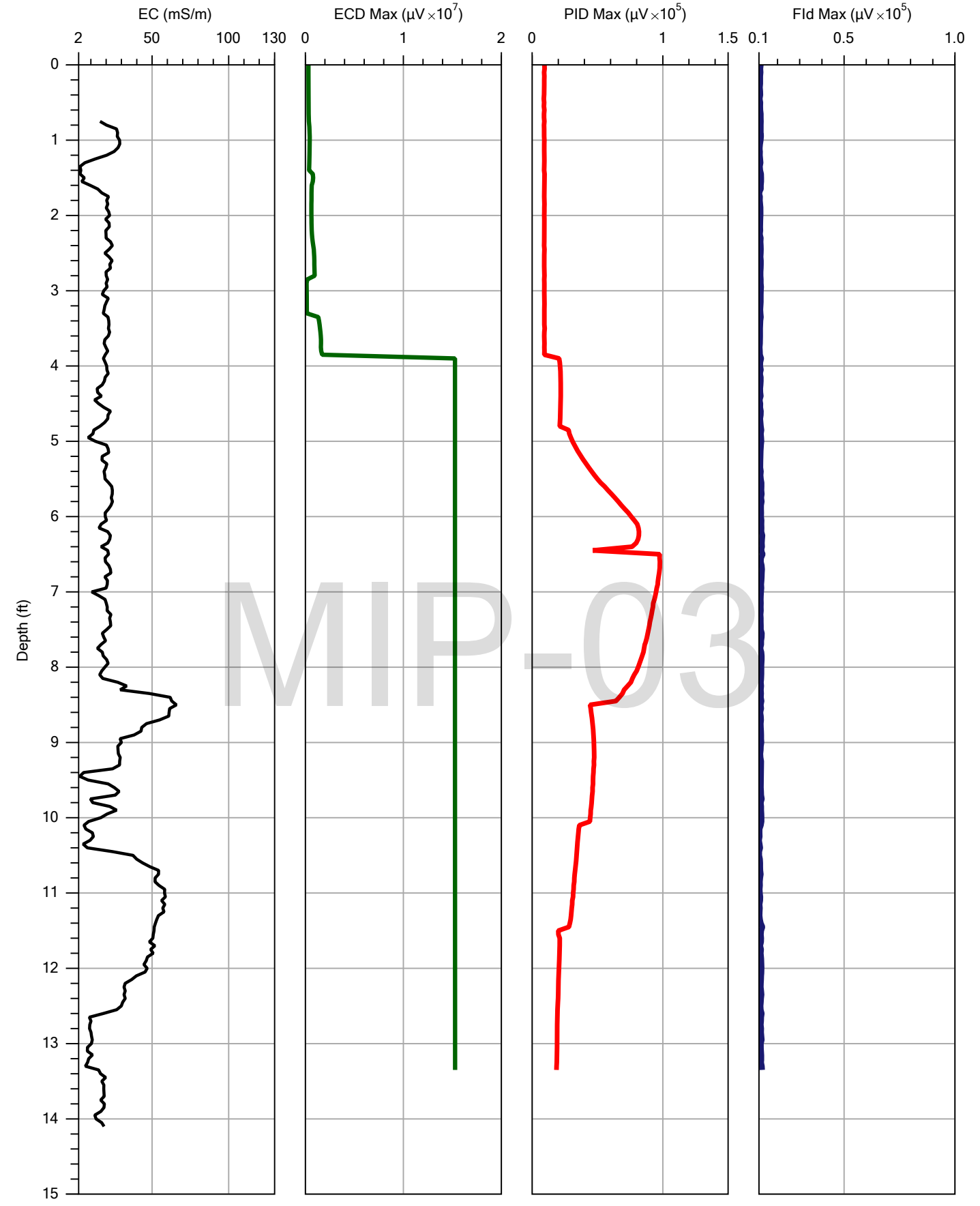

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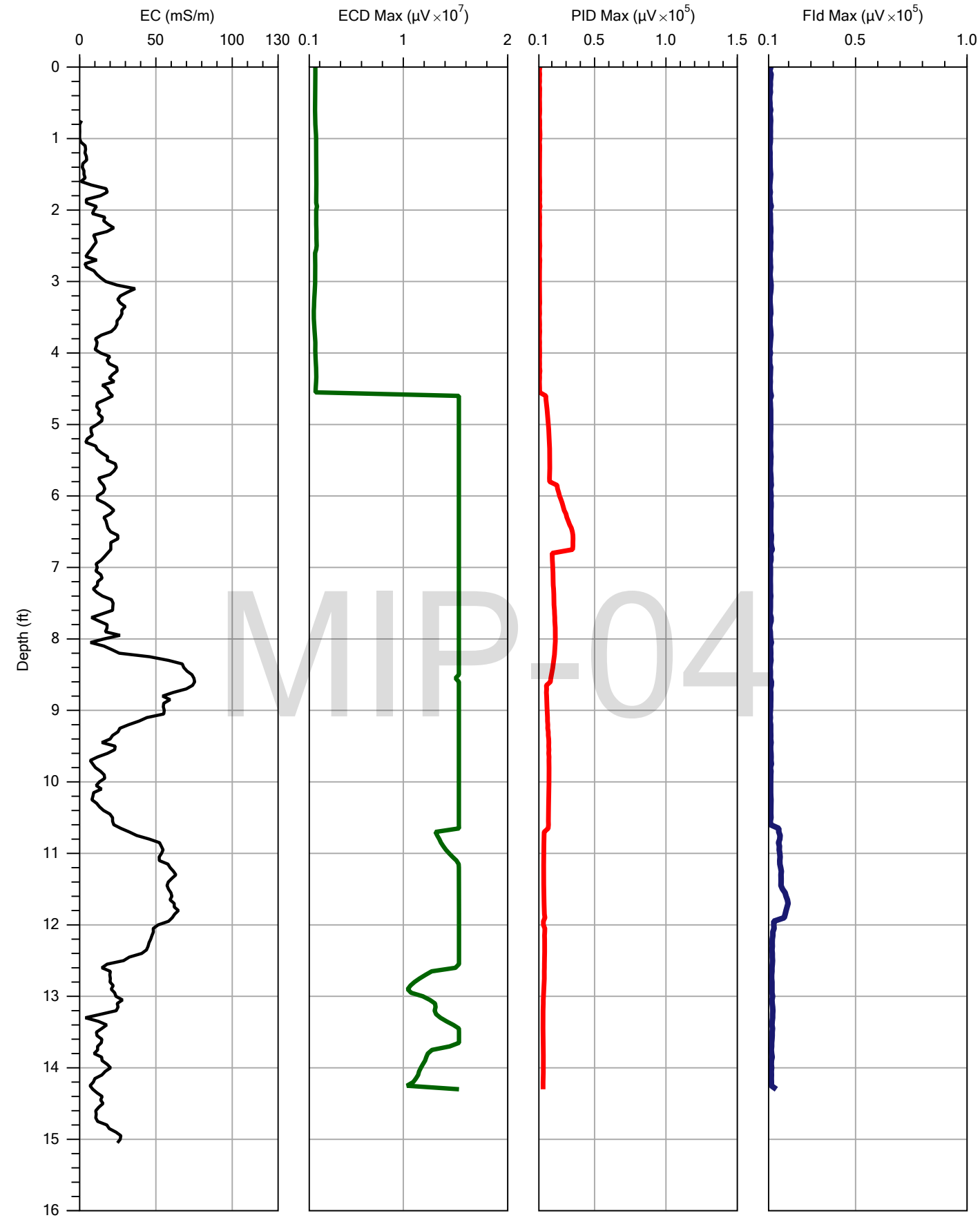

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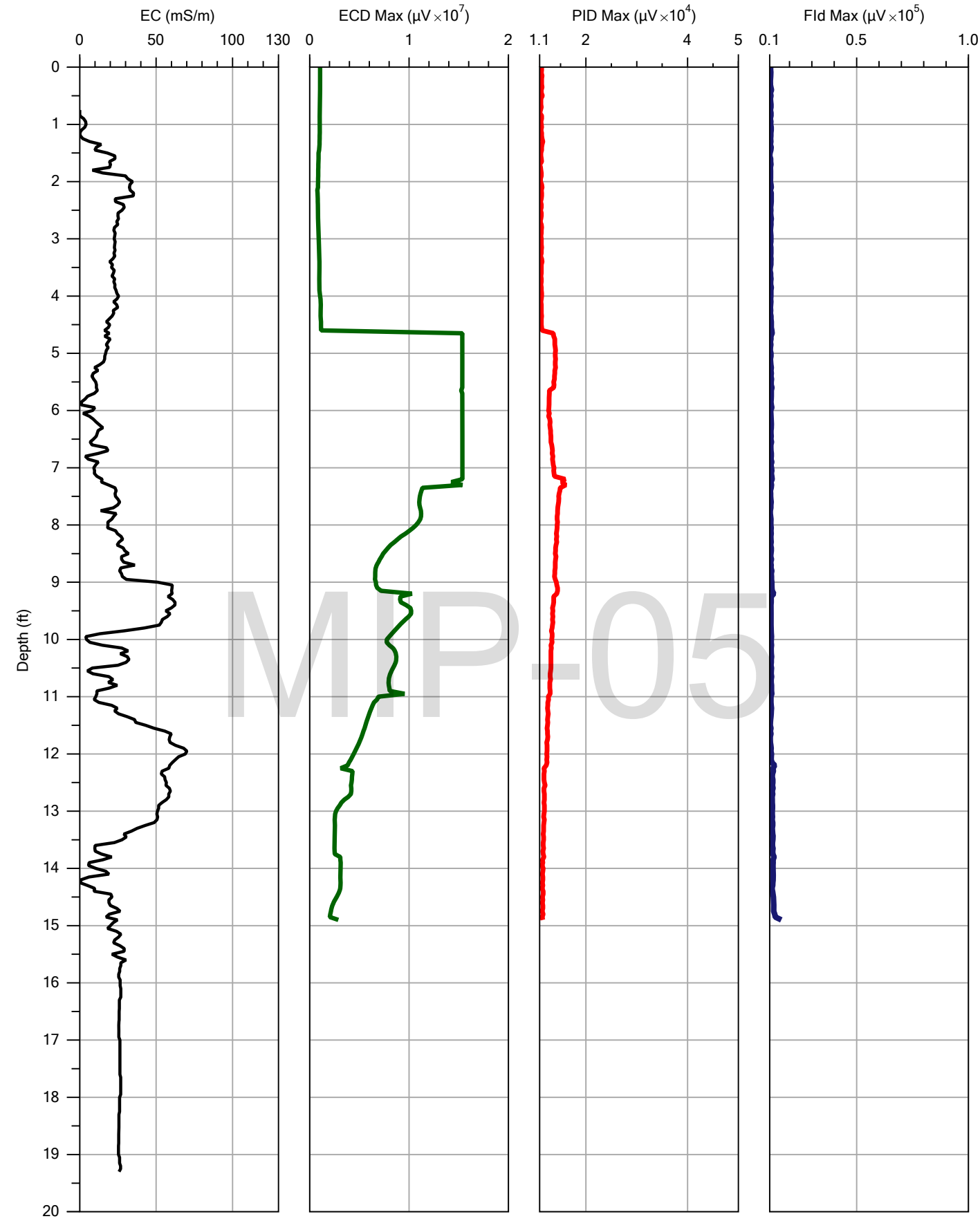

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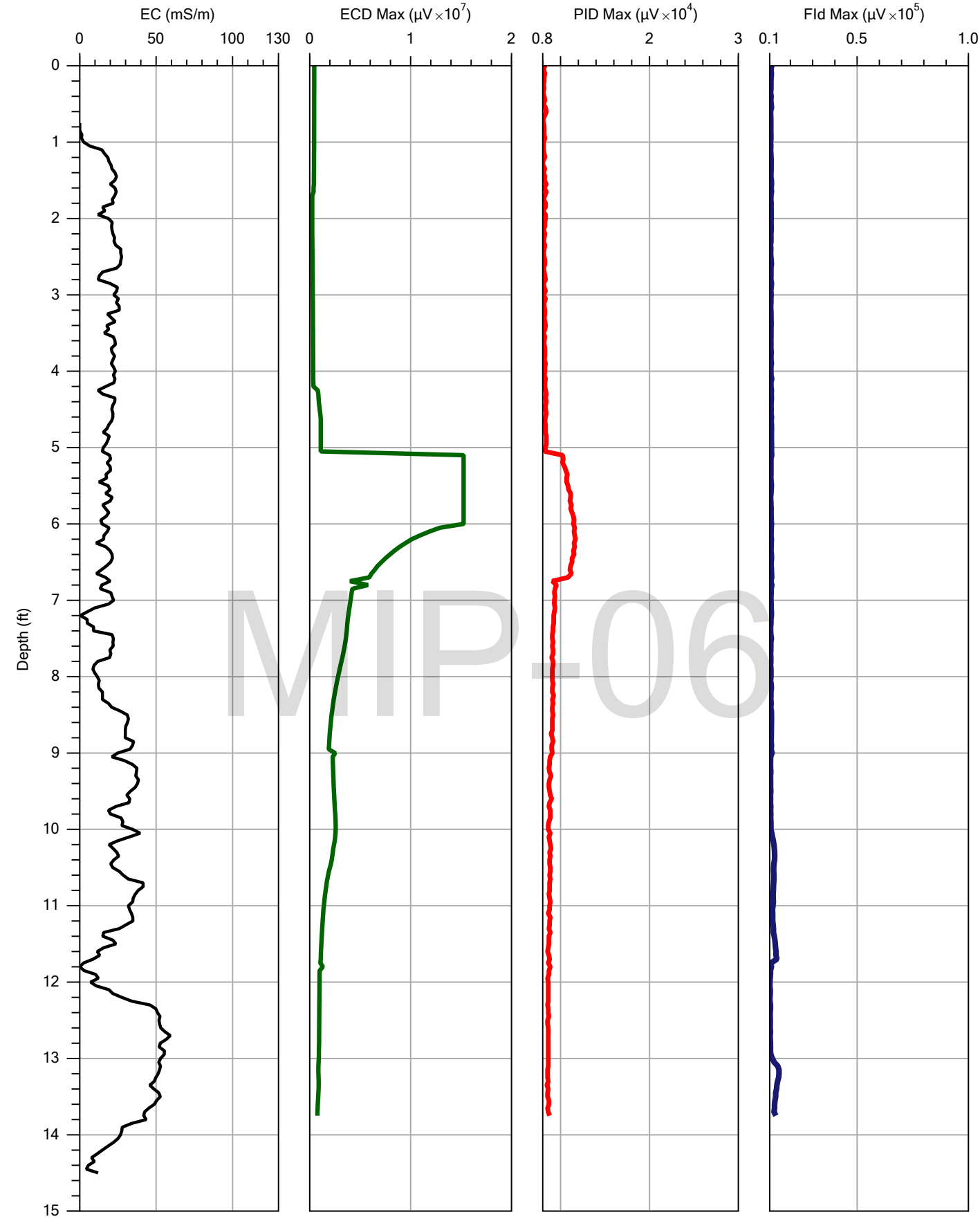

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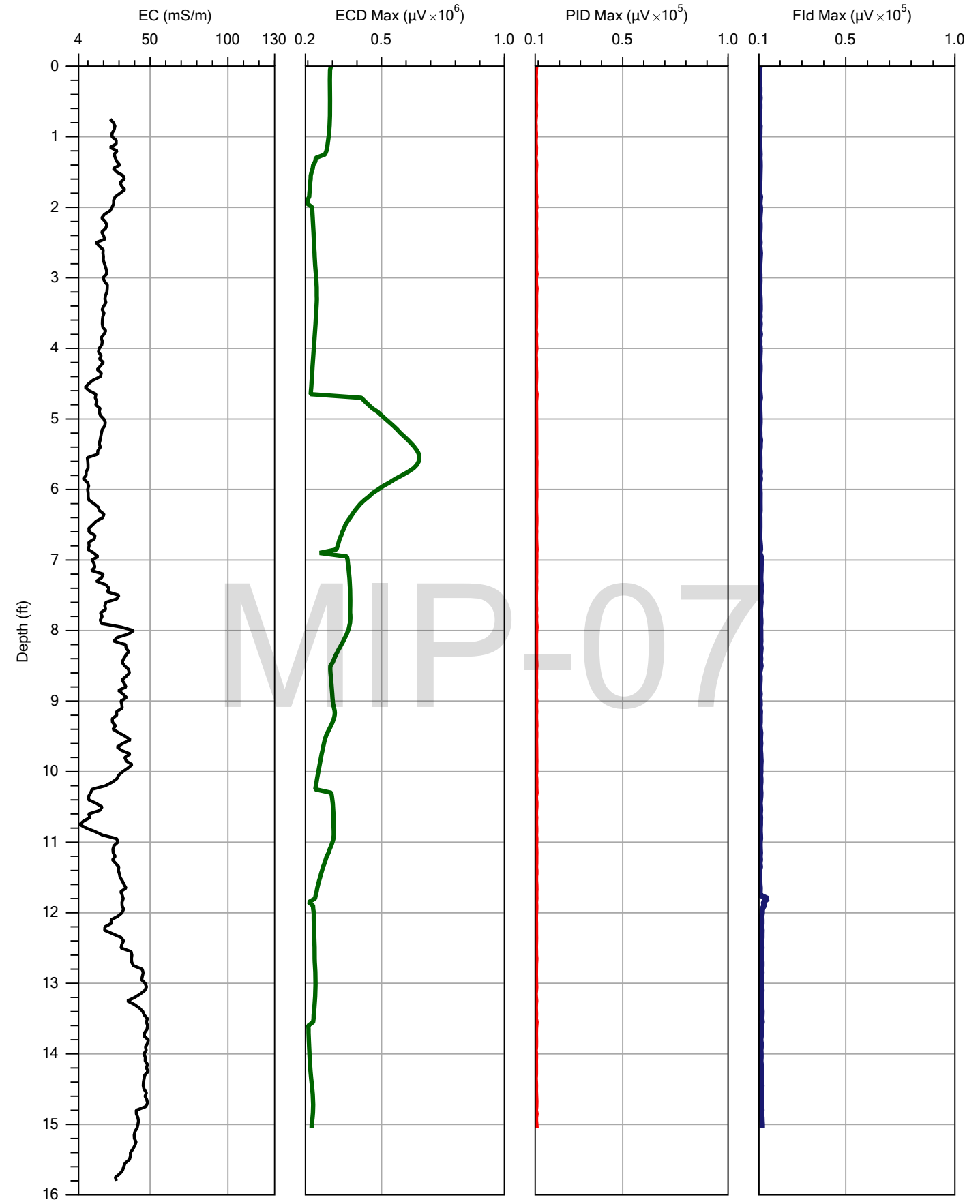

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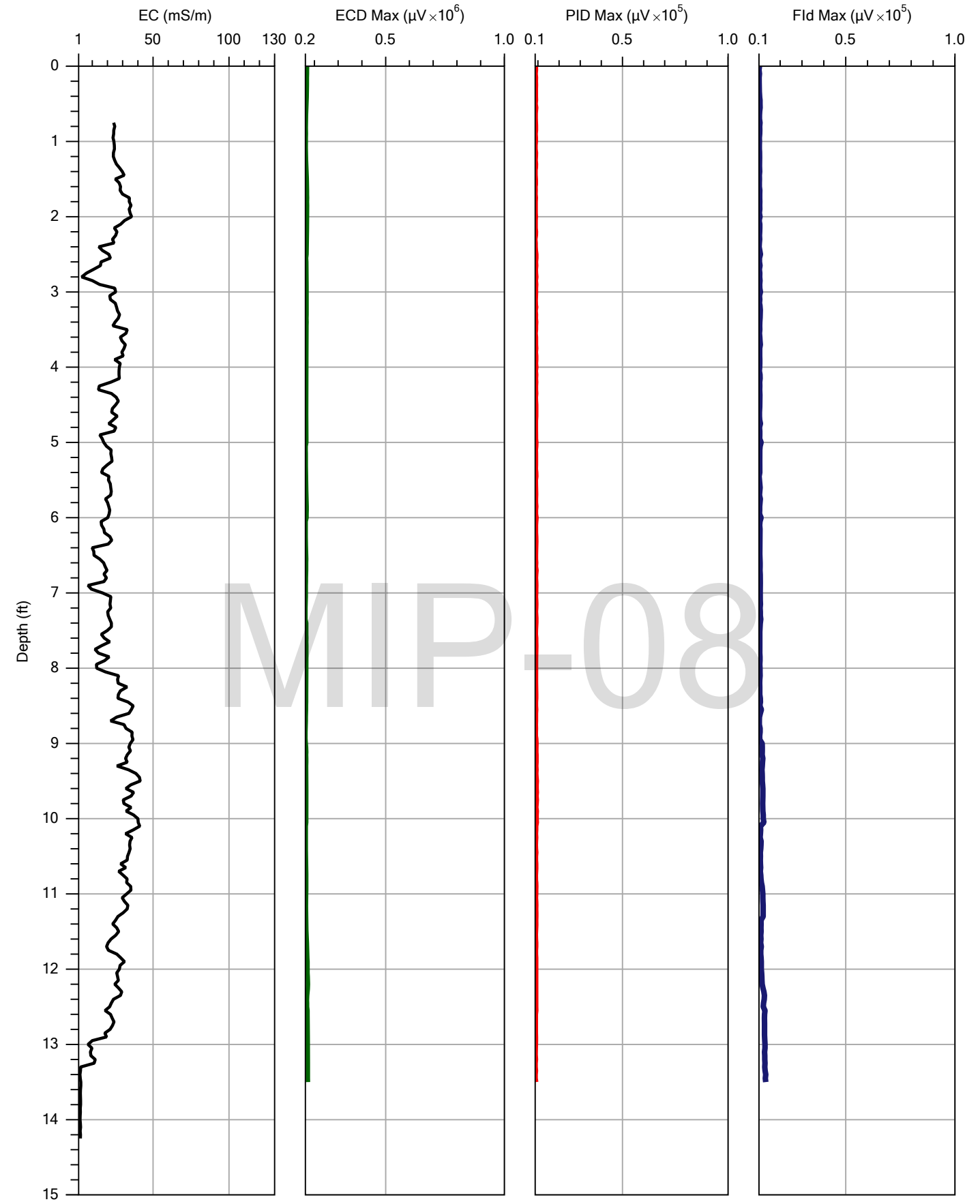

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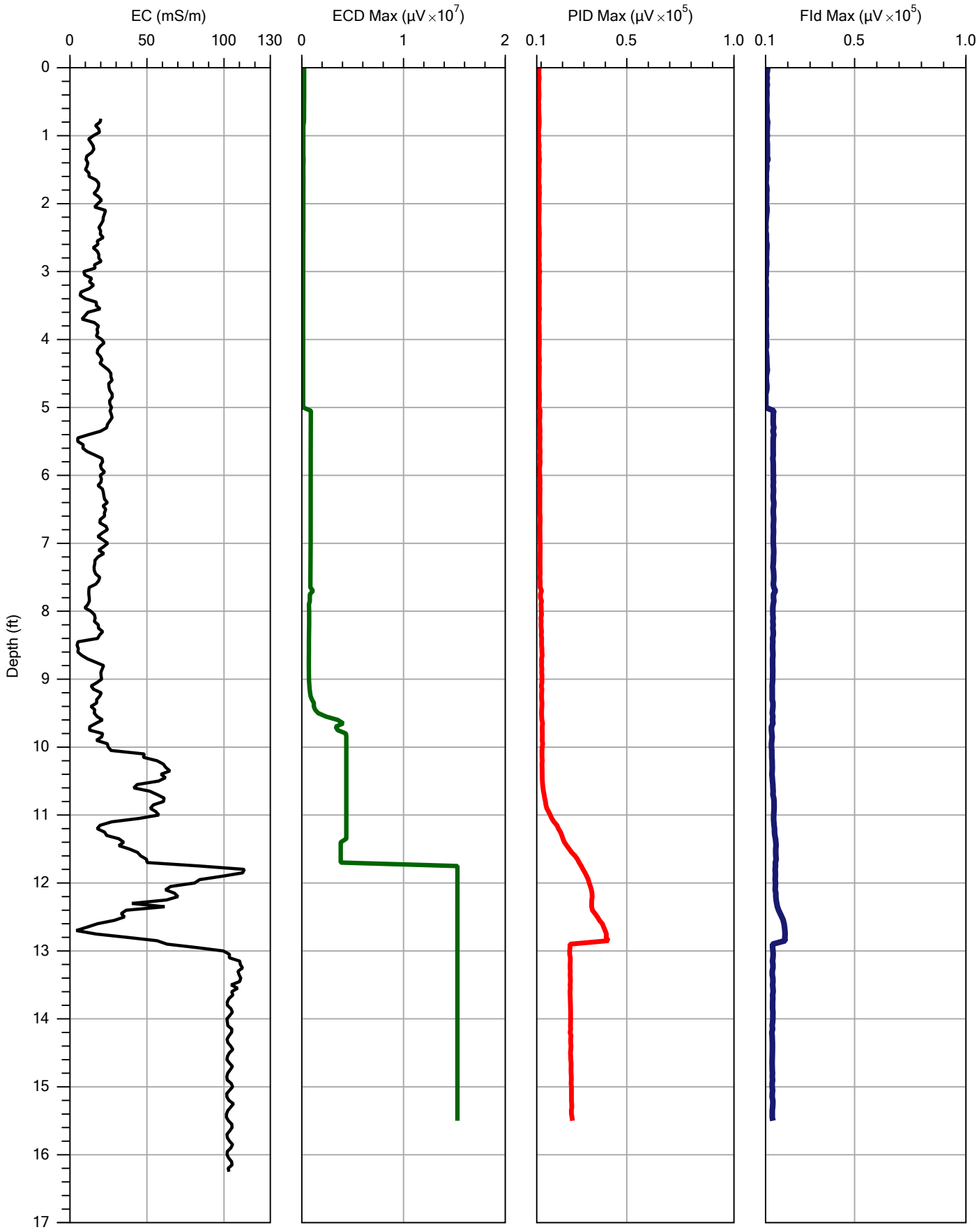

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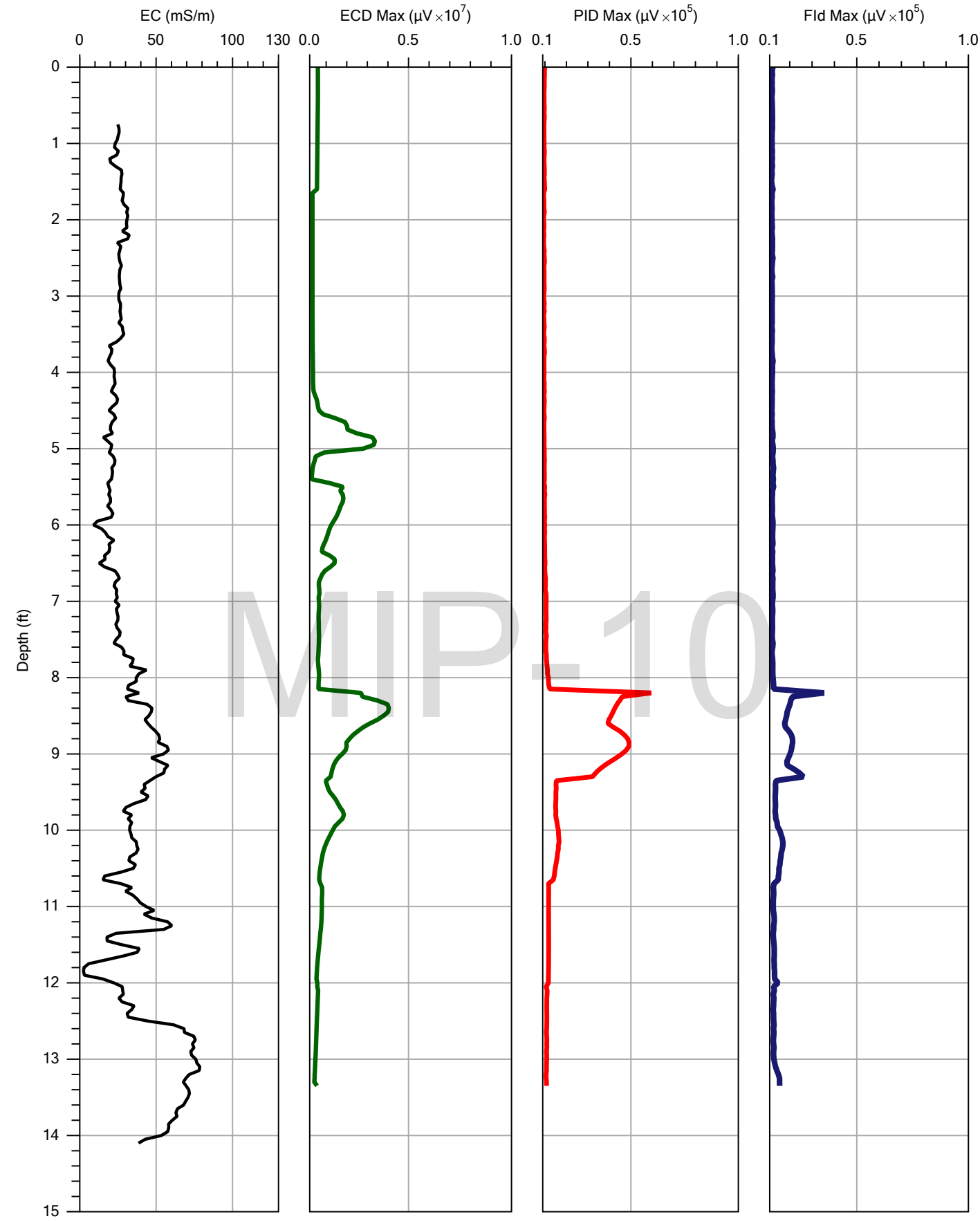

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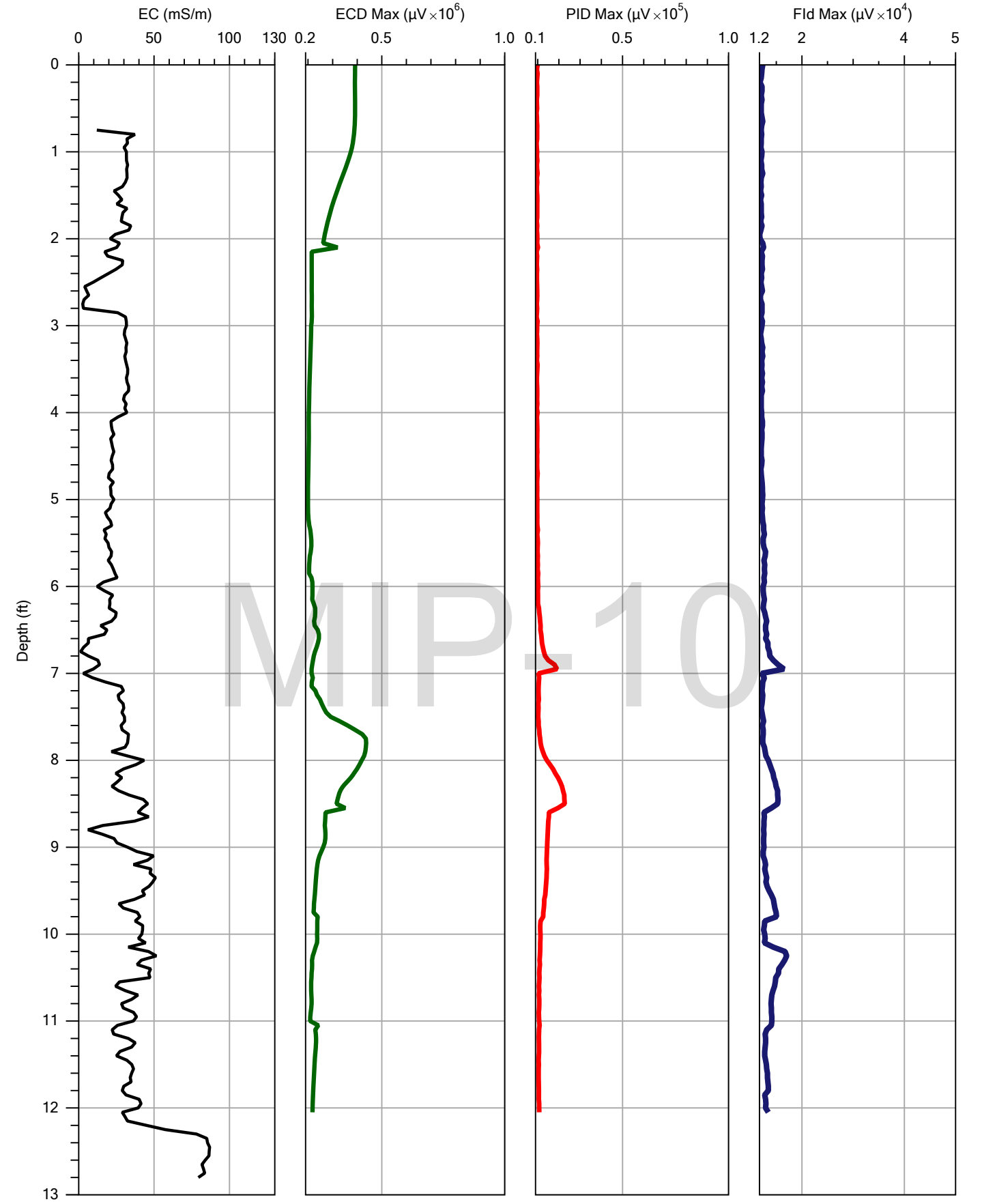

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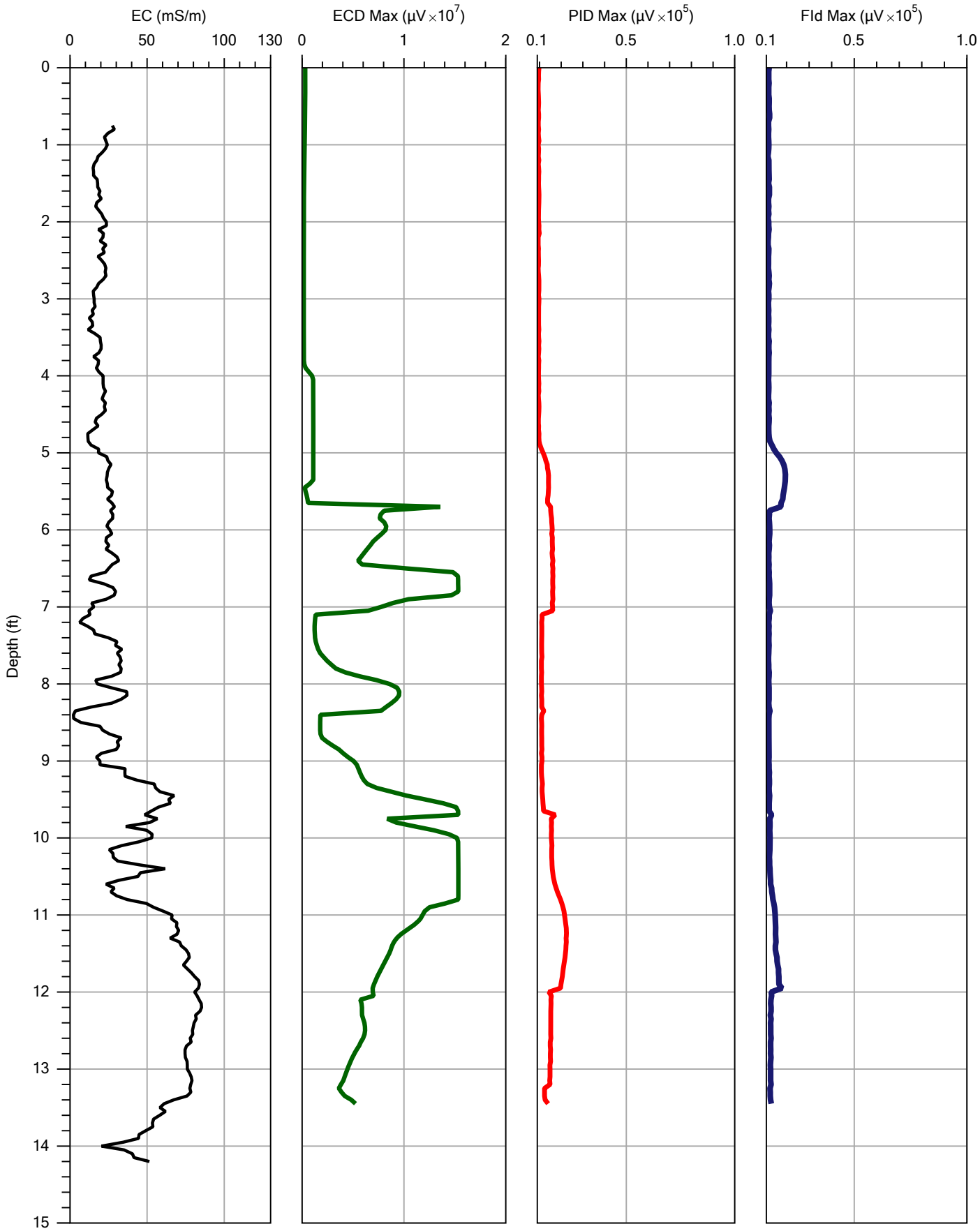

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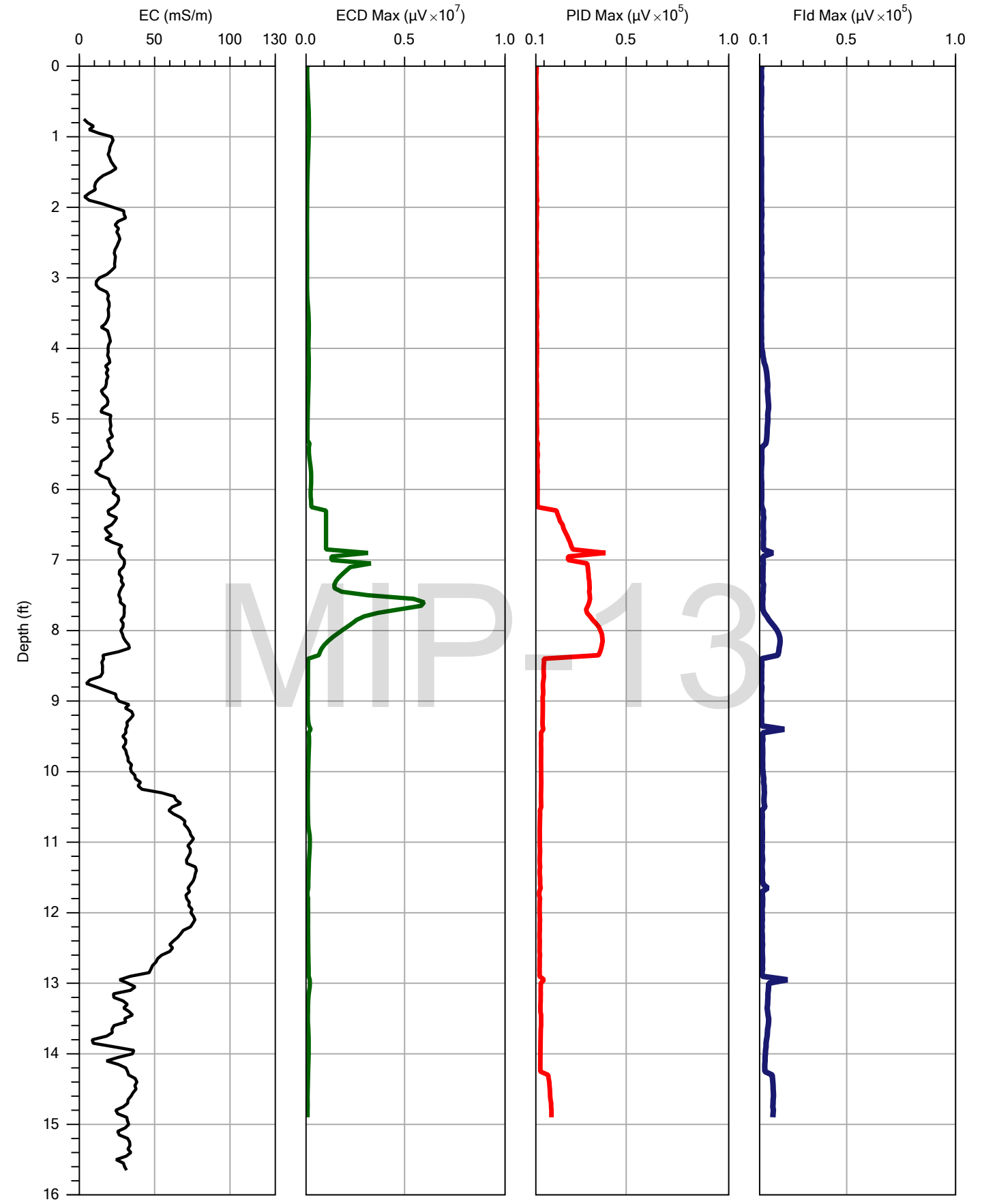

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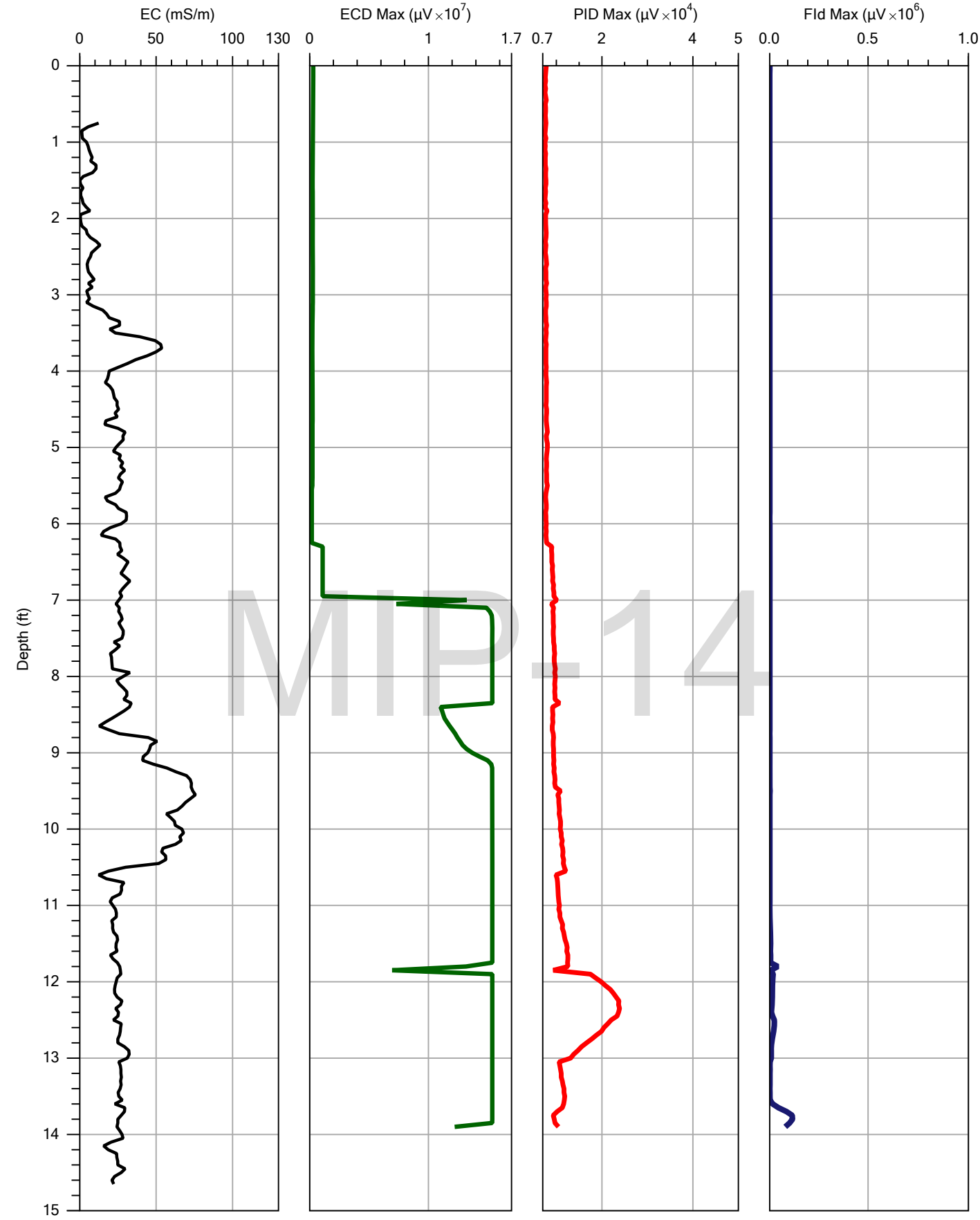

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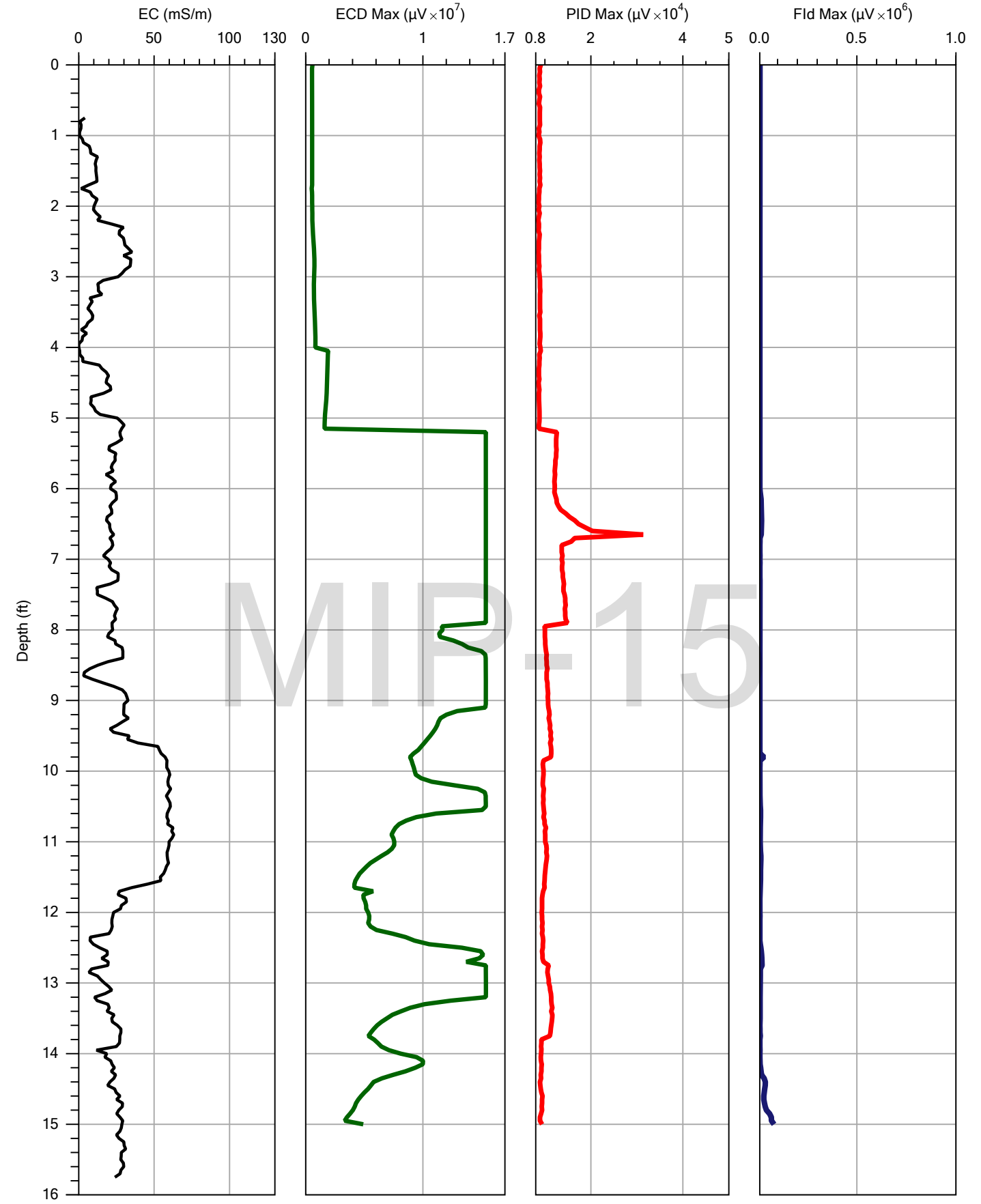

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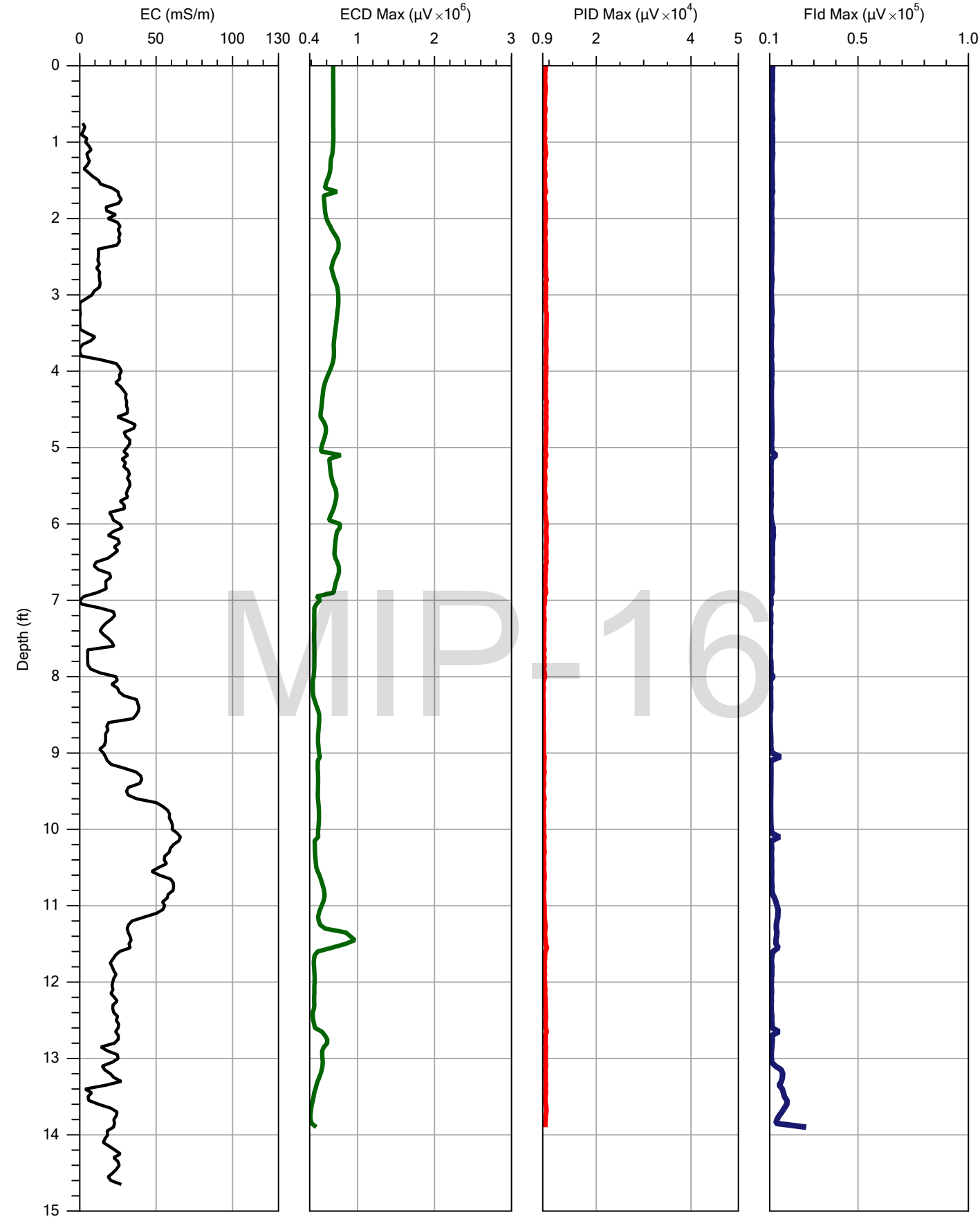
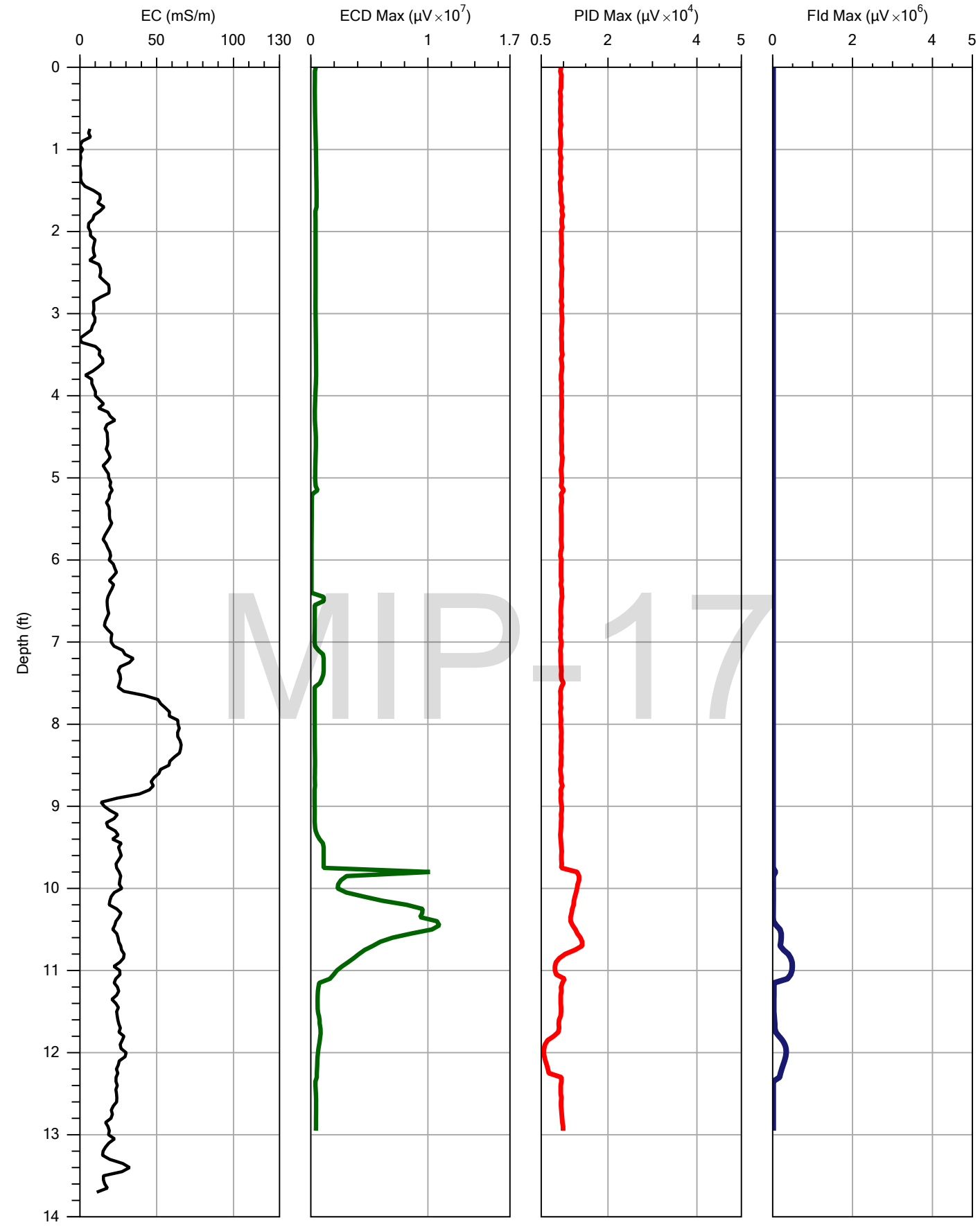
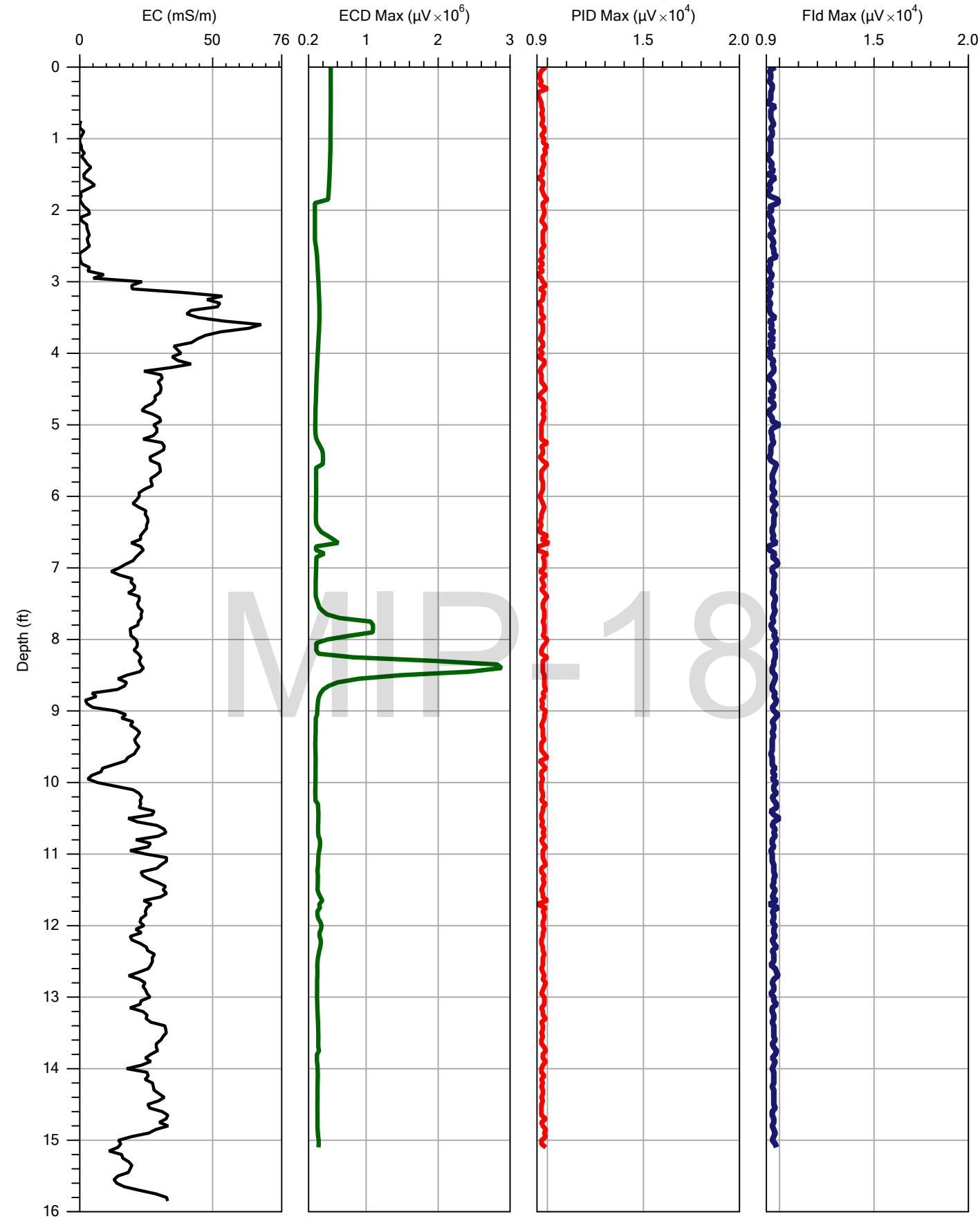


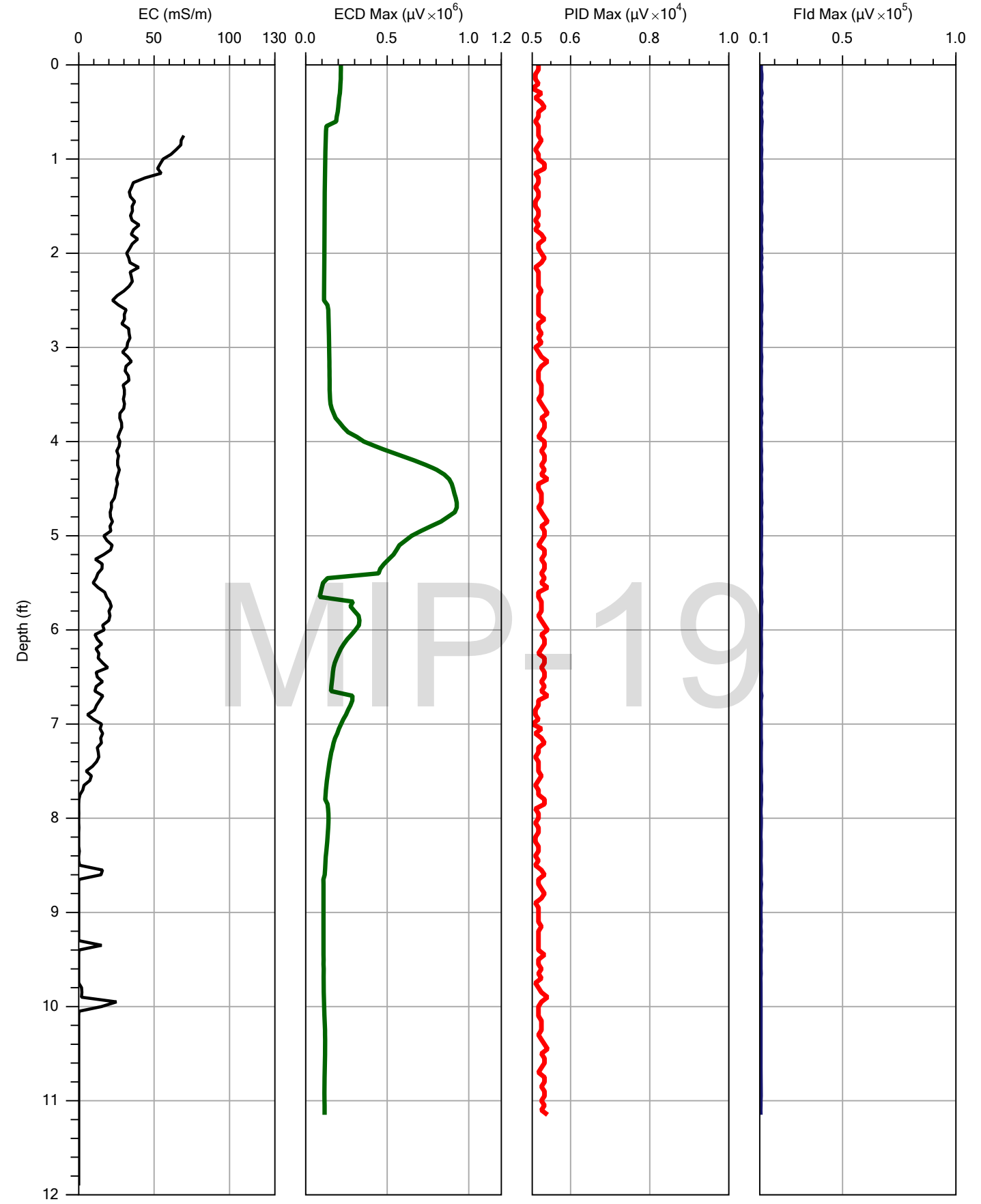
			File: MIP-16.MIP
Company: Zebra	Operator: Zach		Date: 11/18/2015
Project ID:	Client: Stantec		Location:



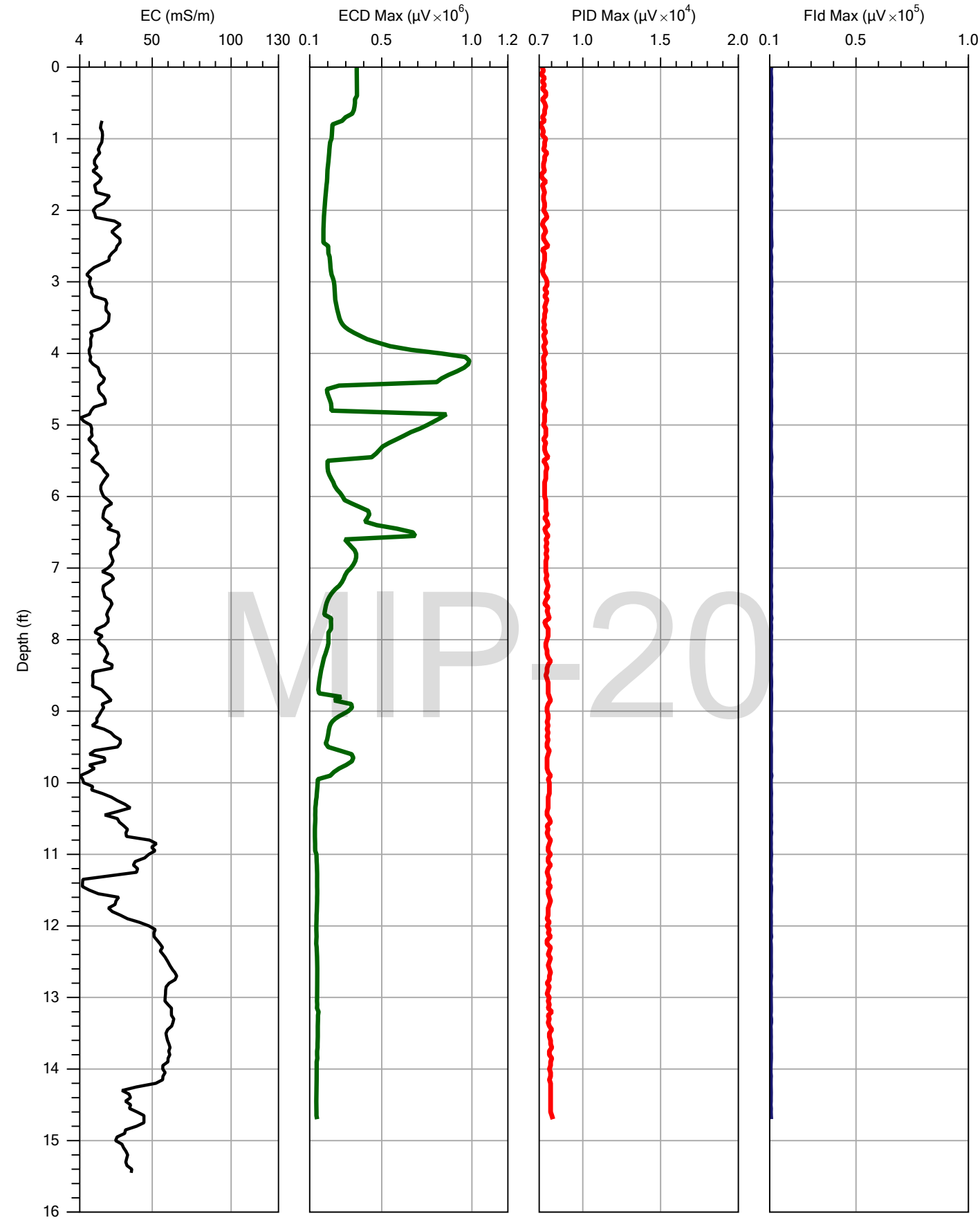
			File: MIP-17.MIP
Company: Zebra	Operator: Zach		Date: 11/18/2015
Project ID:	Client: Stantec		Location:



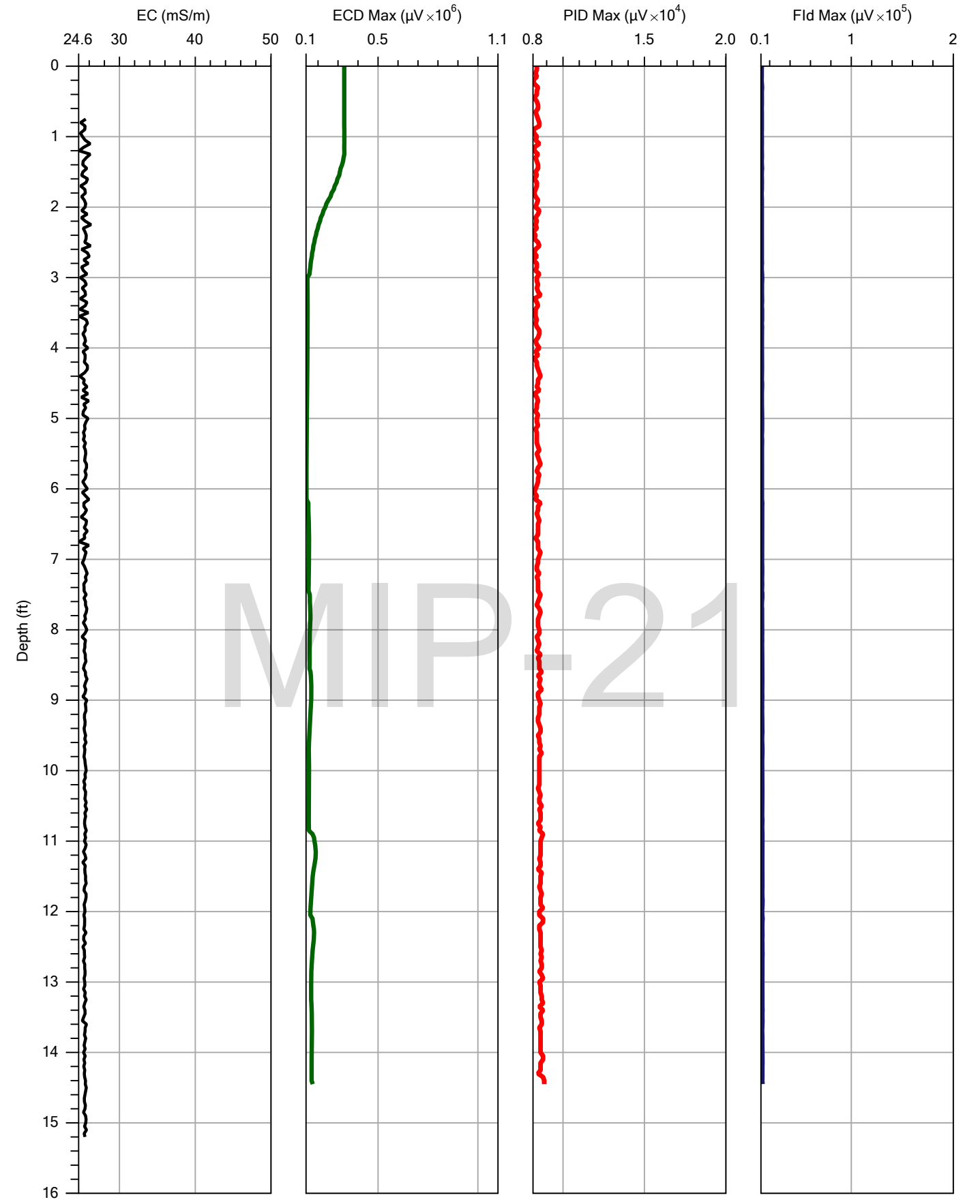
			File: MIP-18.MIP
Company: Zebra	Operator: Zach		Date: 11/18/2015
Project ID:	Client: Stantec		Location:



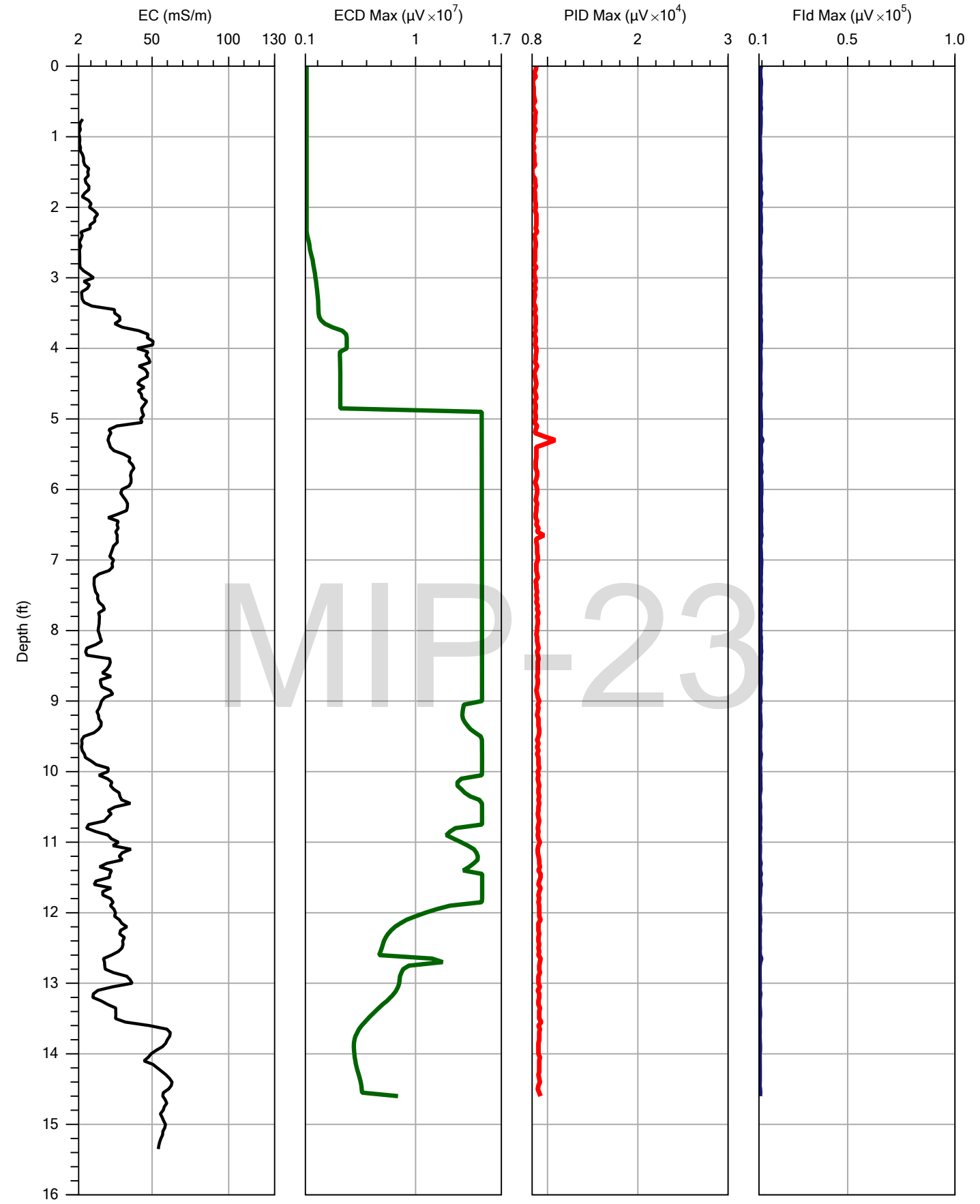
			File: MIP-19.MIP
Company: Zebra	Operator: Zach		Date: 11/19/2015
Project ID:	Client: Stantec		Location:



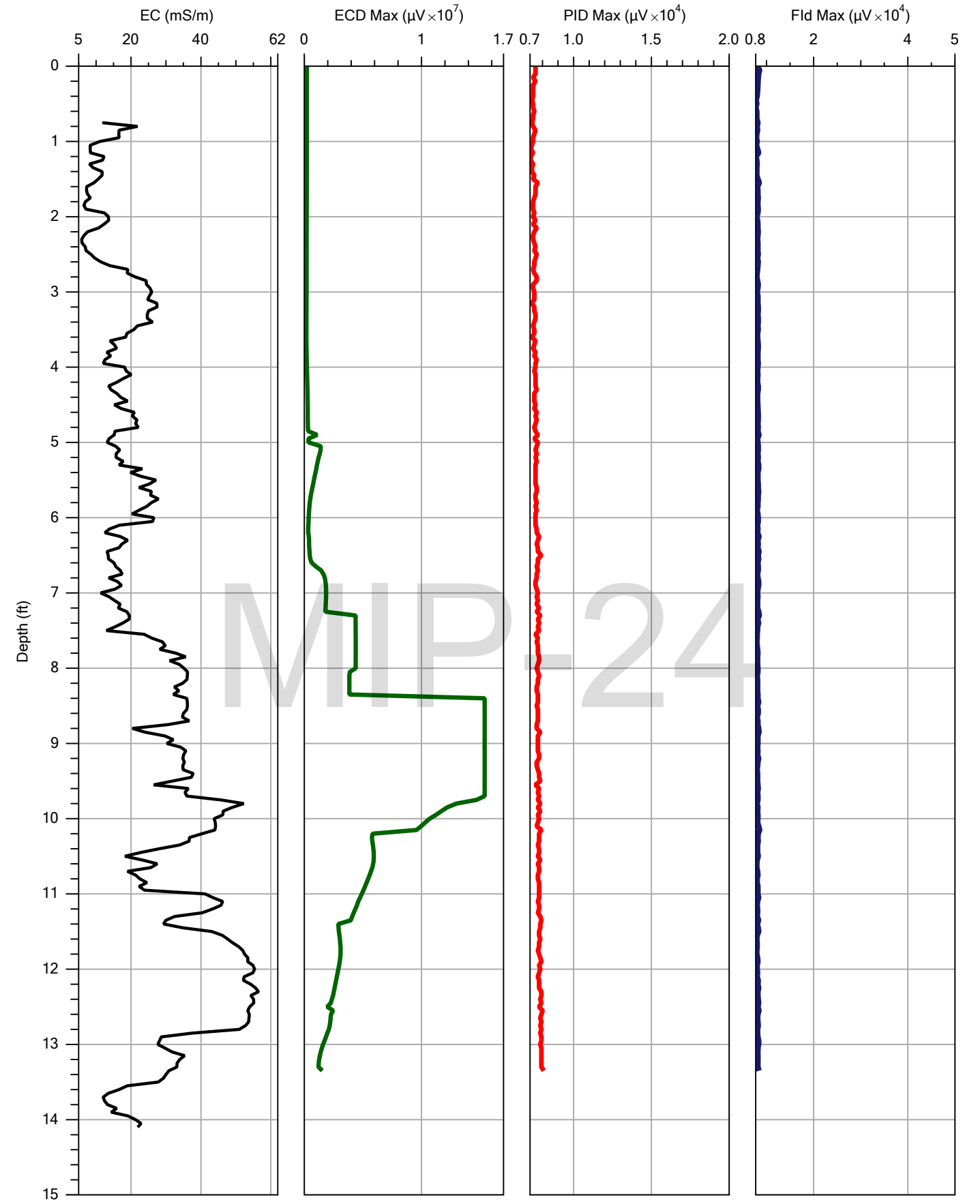
			File: MIP-20.MIP
Company: Zebra	Operator: Zach		Date: 11/19/2015
Project ID:	Client: Stantec		Location:



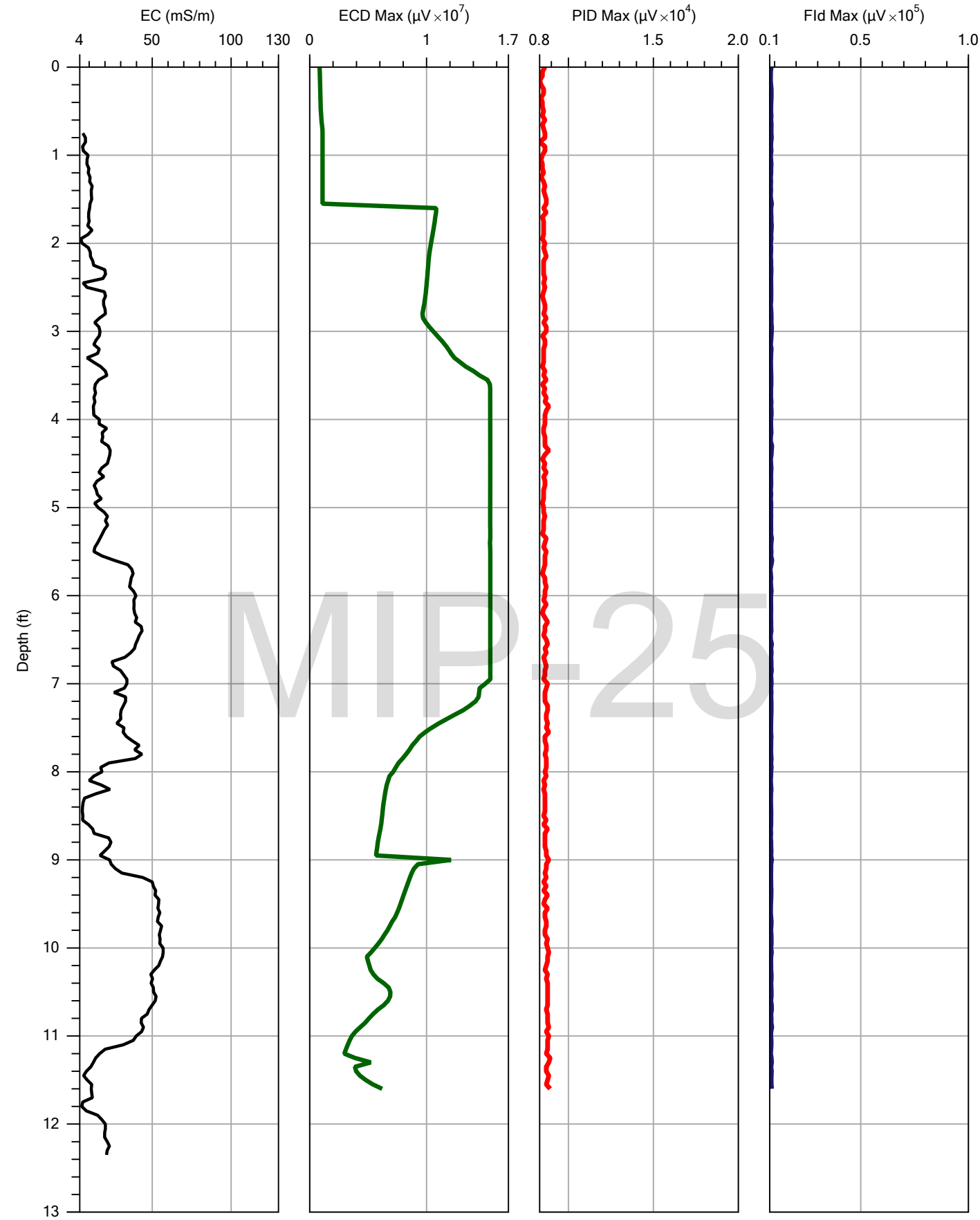
Company: Zebra	Operator: Zach	File: MIP-21.MIP	
Project ID:	Client: Stantec	Date: 11/19/2015	Location:



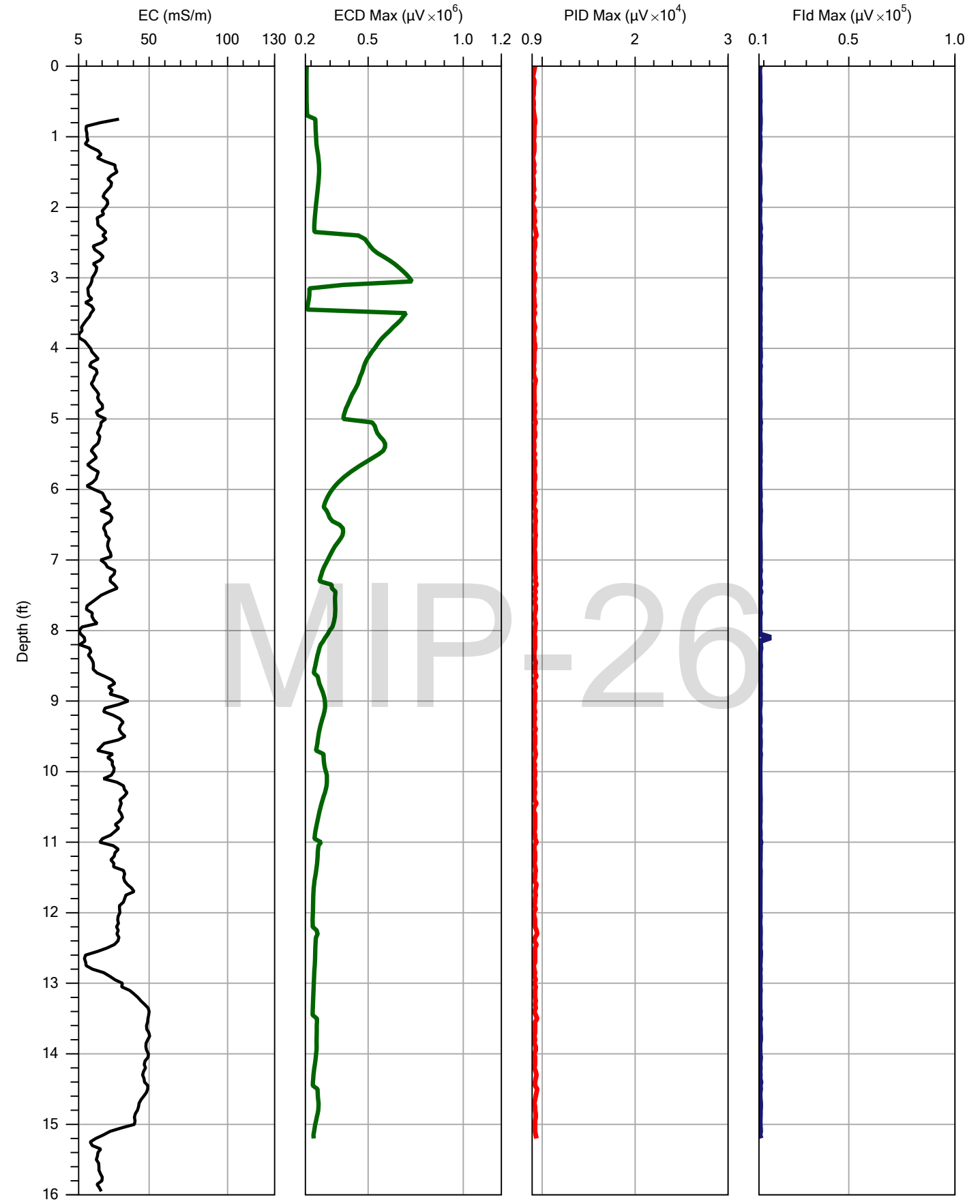
			File: MIP-23.MIP
Company: Zebra	Operator: Zach		Date: 11/19/2015
Project ID:	Client: Stantec		Location:



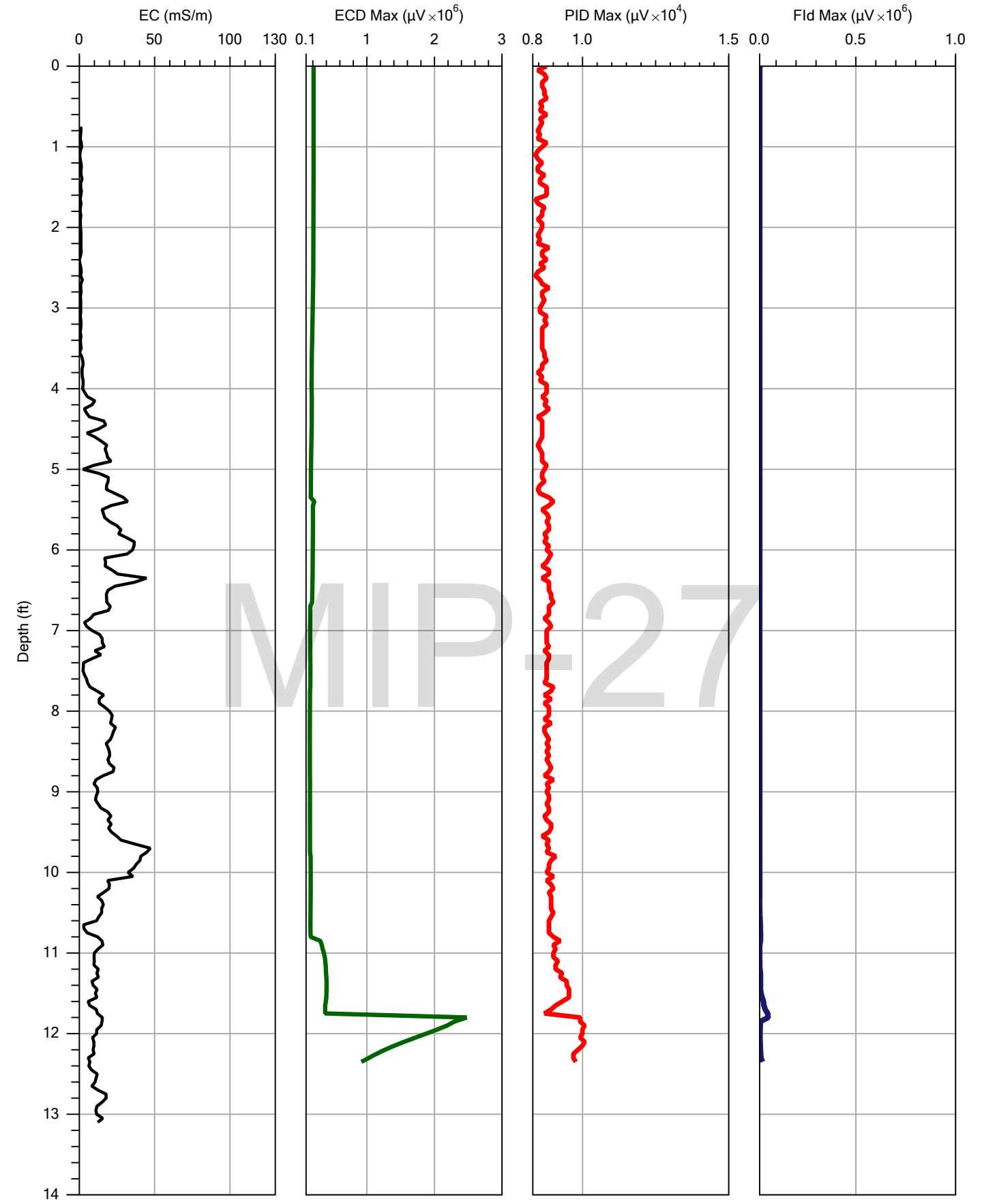
			File: MIP-24.MIP
Company: Zebra	Operator: Zach		Date: 11/19/2015
Project ID:	Client: Stantec		Location:



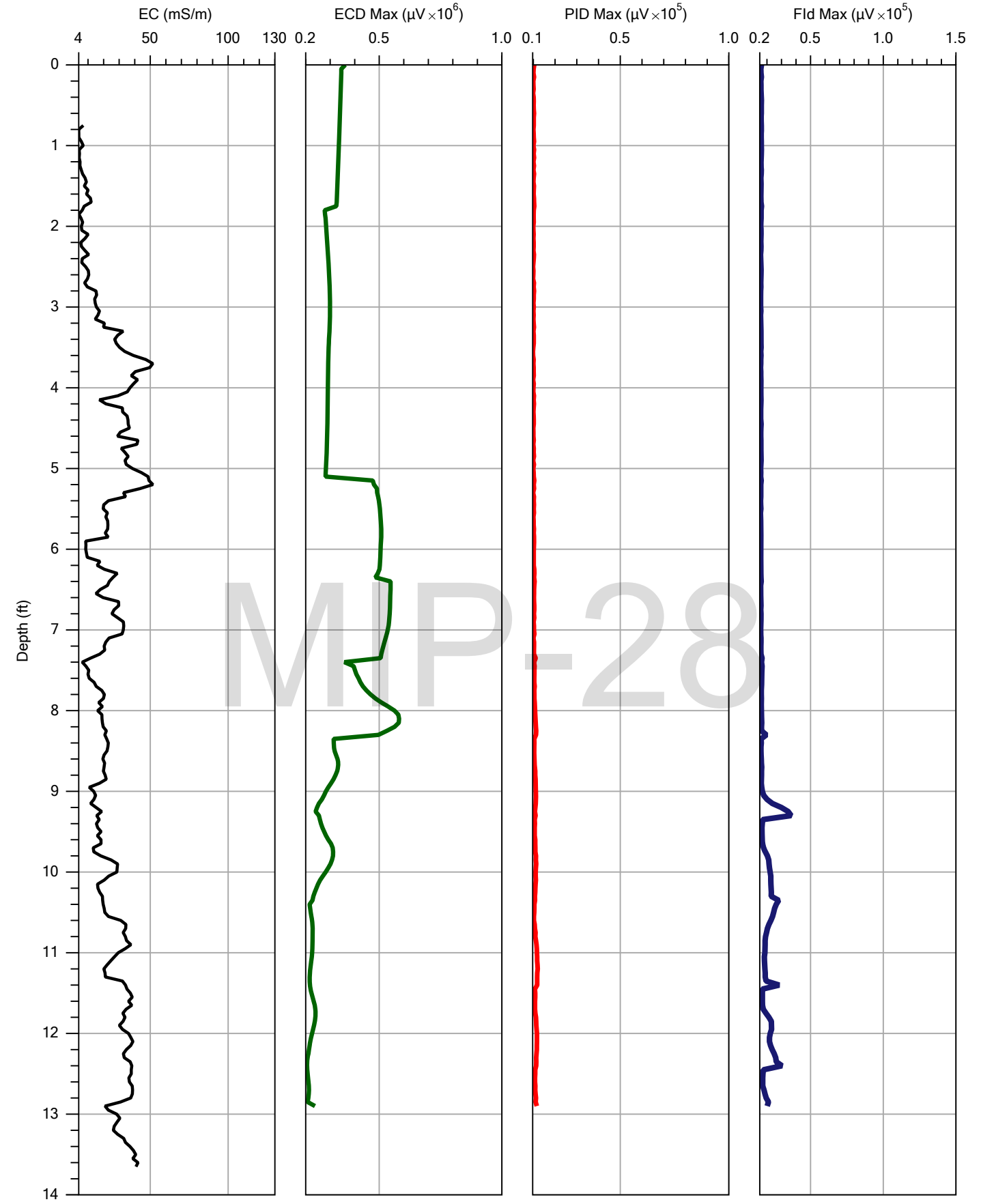
			File: MIP-25.MIP
Company: Zebra	Operator: Zach		Date: 11/19/2015
Project ID:	Client: Stantec		Location:



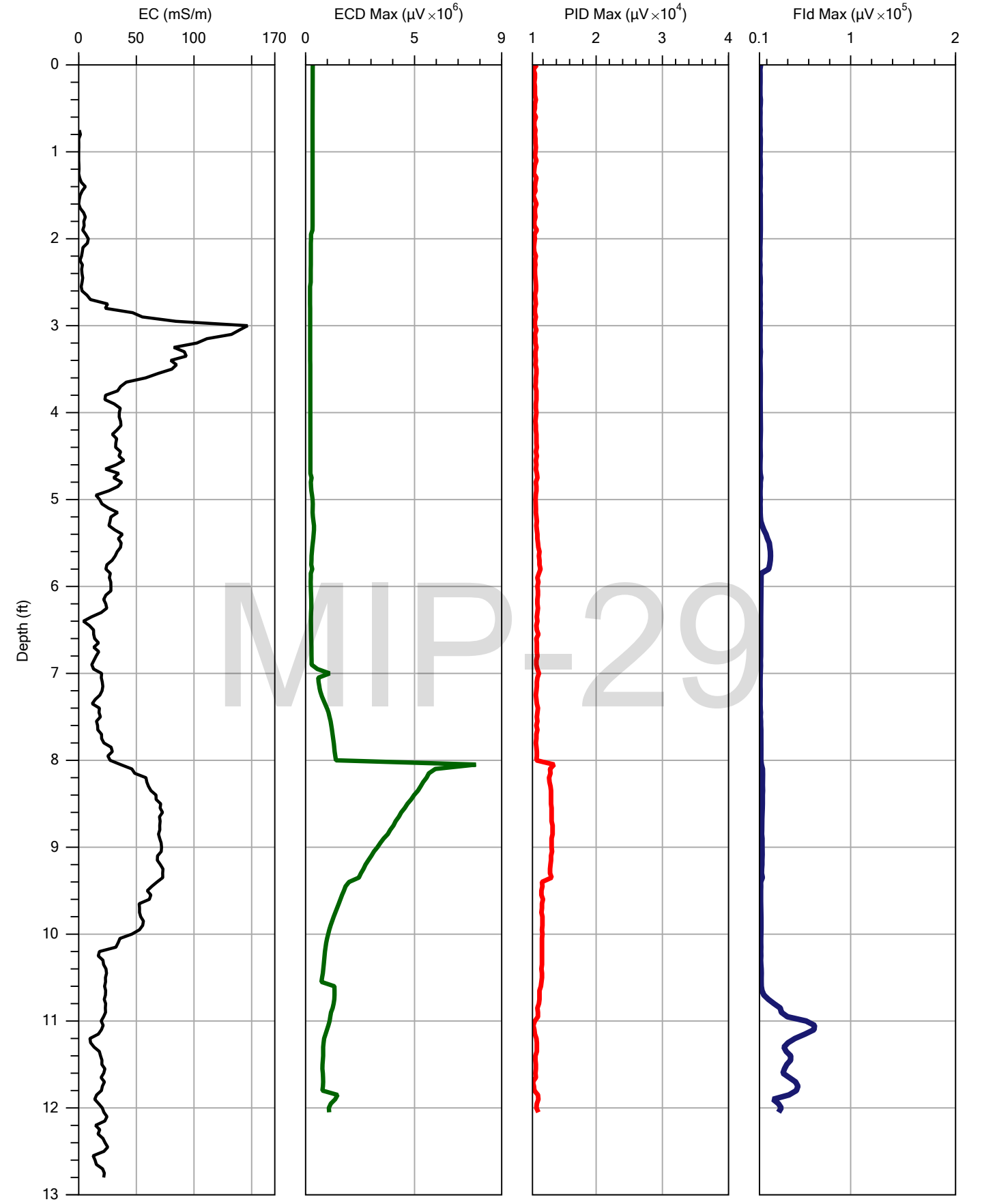
Company: Zebra	Operator: Zach	File: MIP-26.MIP	
Project ID:	Client: Stantec	Date: 11/19/2015	Location:



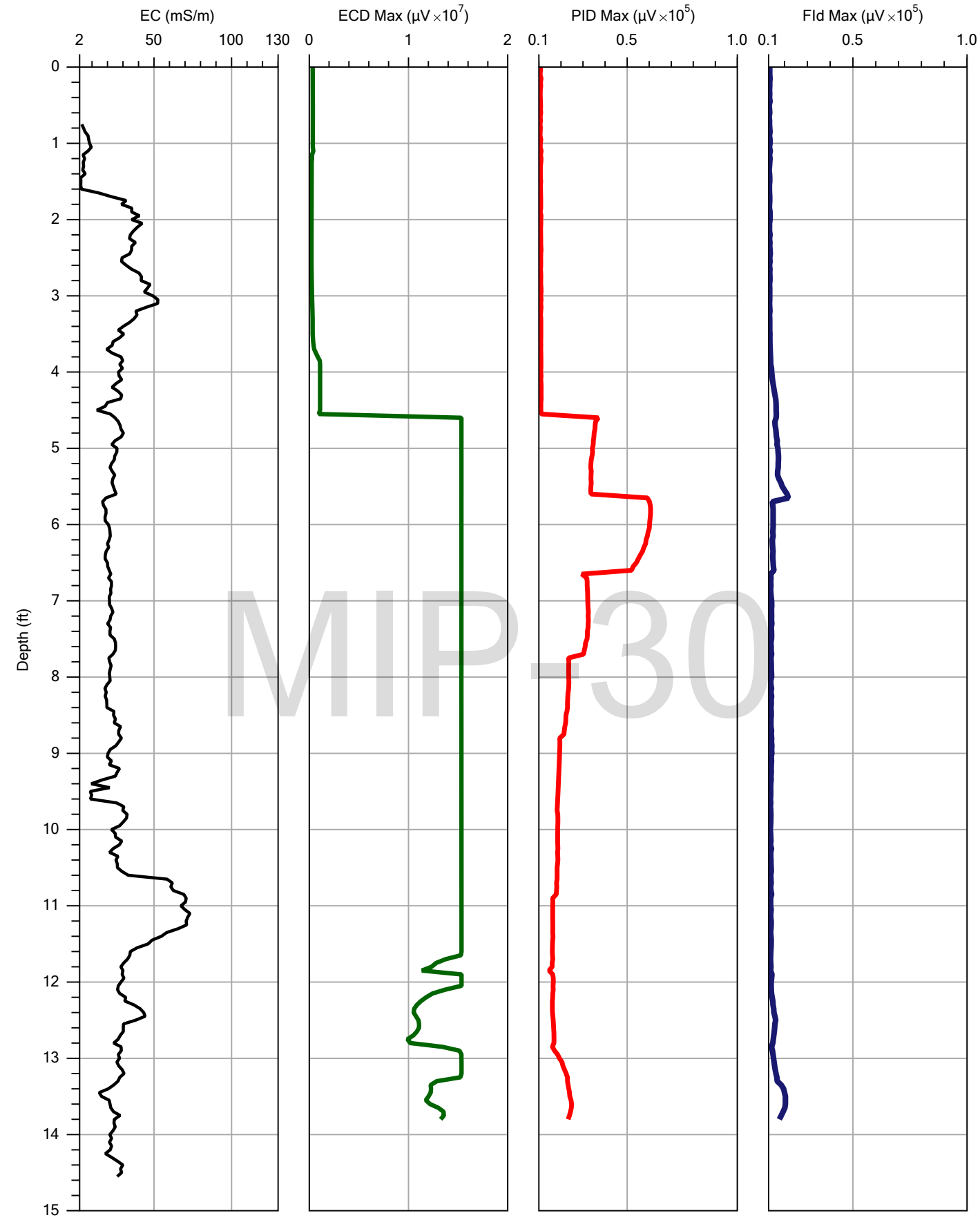
			File: MIP-27.MIP
Company: Zebra	Operator: Zach		Date: 11/23/2015
Project ID:	Client: Stantec		Location:



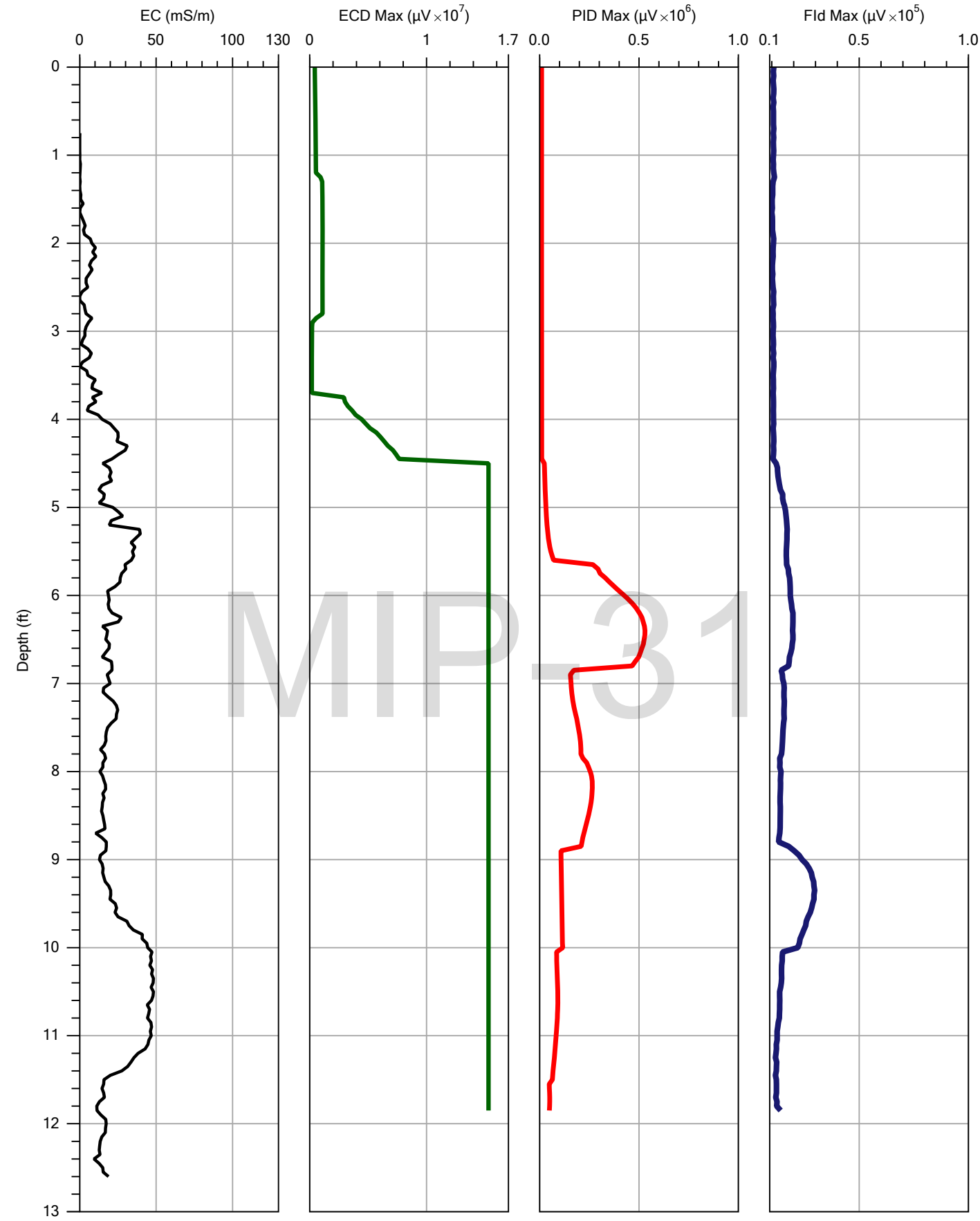
			File: MIP-28.MIP
Company: Zebra	Operator: Zach		Date: 11/23/2015
Project ID:	Client: Stantec		Location:



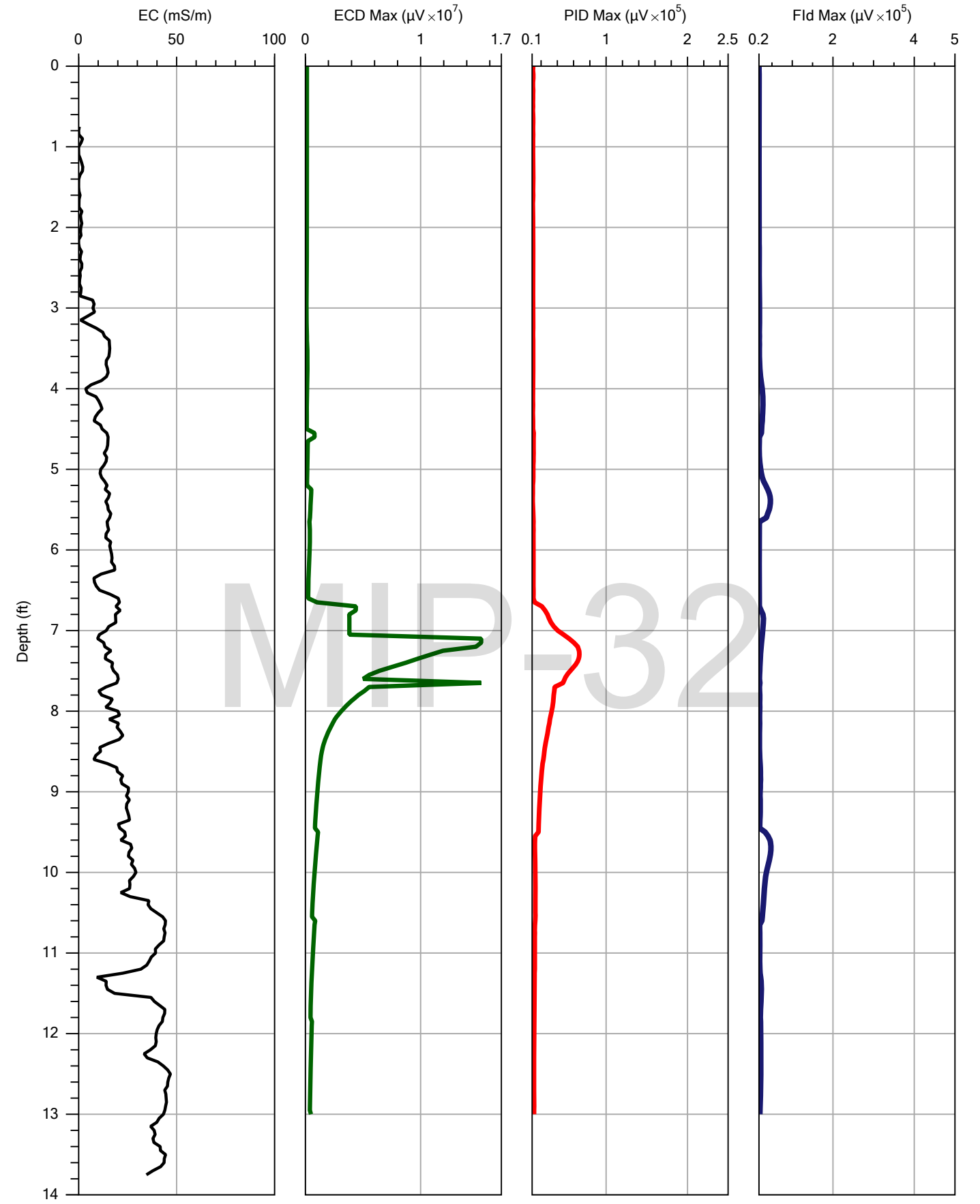
			File: MIP-29.MIP
Company: Zebra	Operator: Zach		Date: 11/23/2015
Project ID:	Client: Stantec		Location:



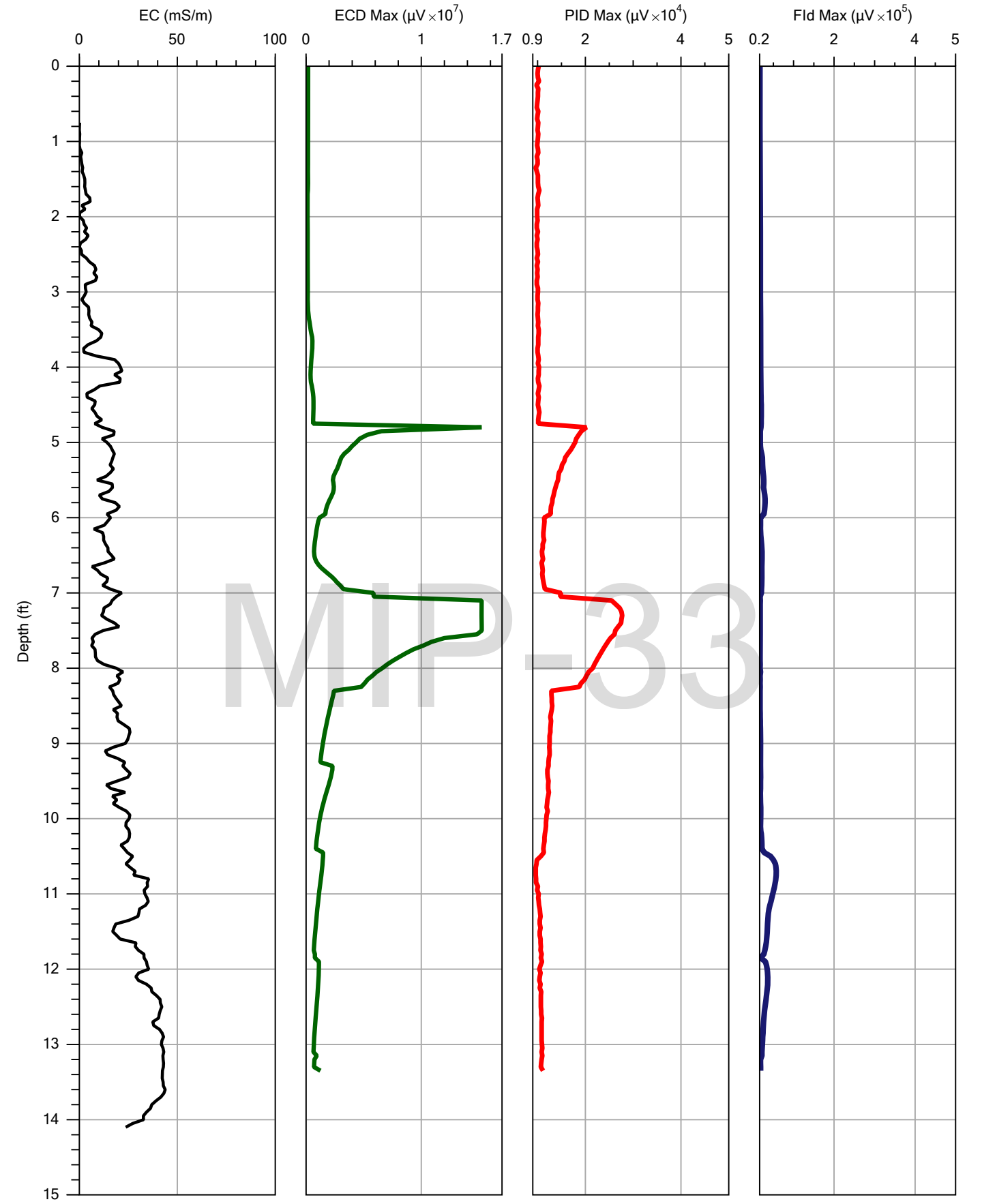
			File: MIP-30.MIP
Company: Zebra	Operator: Zach		Date: 11/23/2015
Project ID:	Client: Stantec		Location:



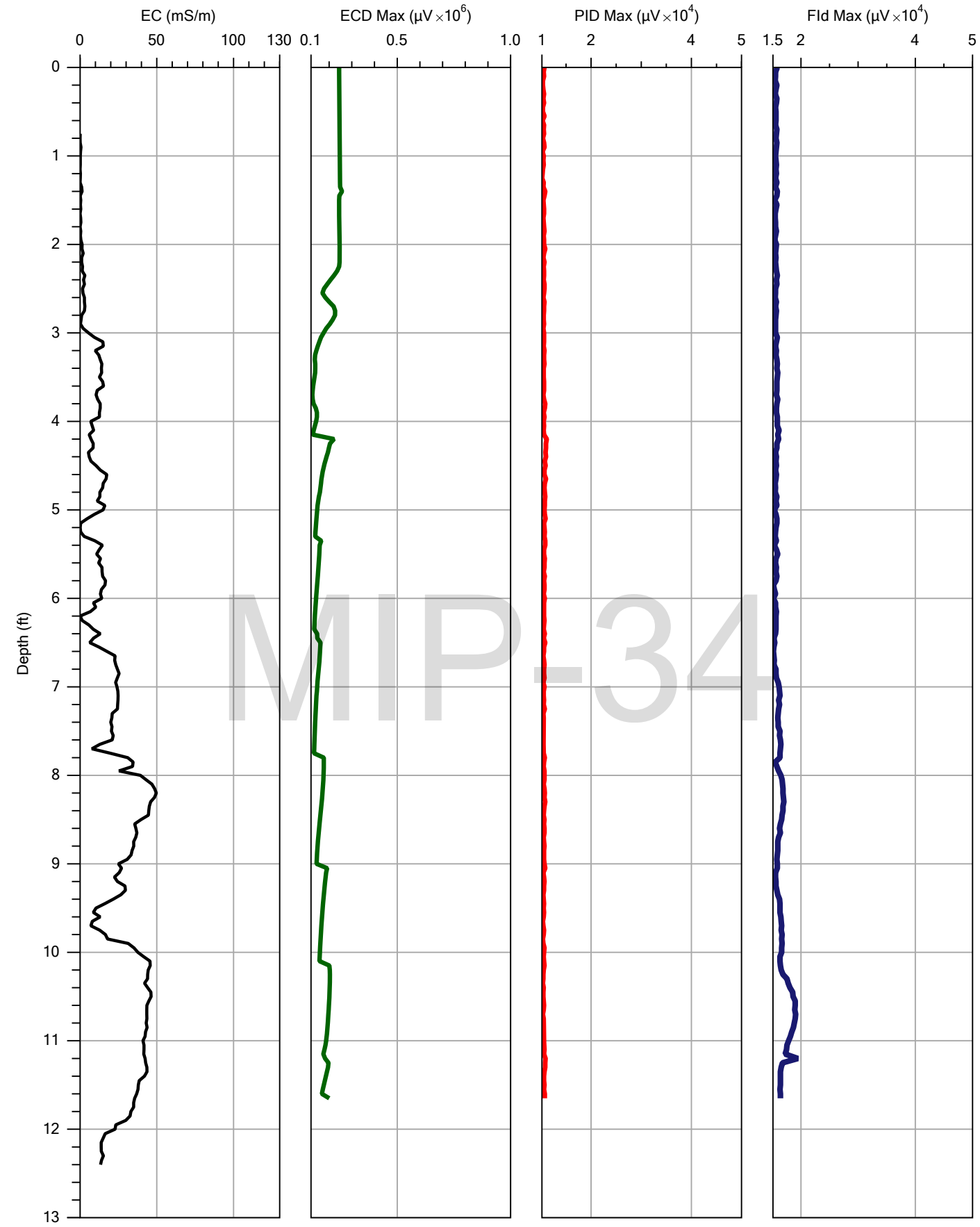
			File: MIP-31.MIP
Company: Zebra	Operator: Zach		Date: 11/23/2015
Project ID:	Client: Stantec		Location:



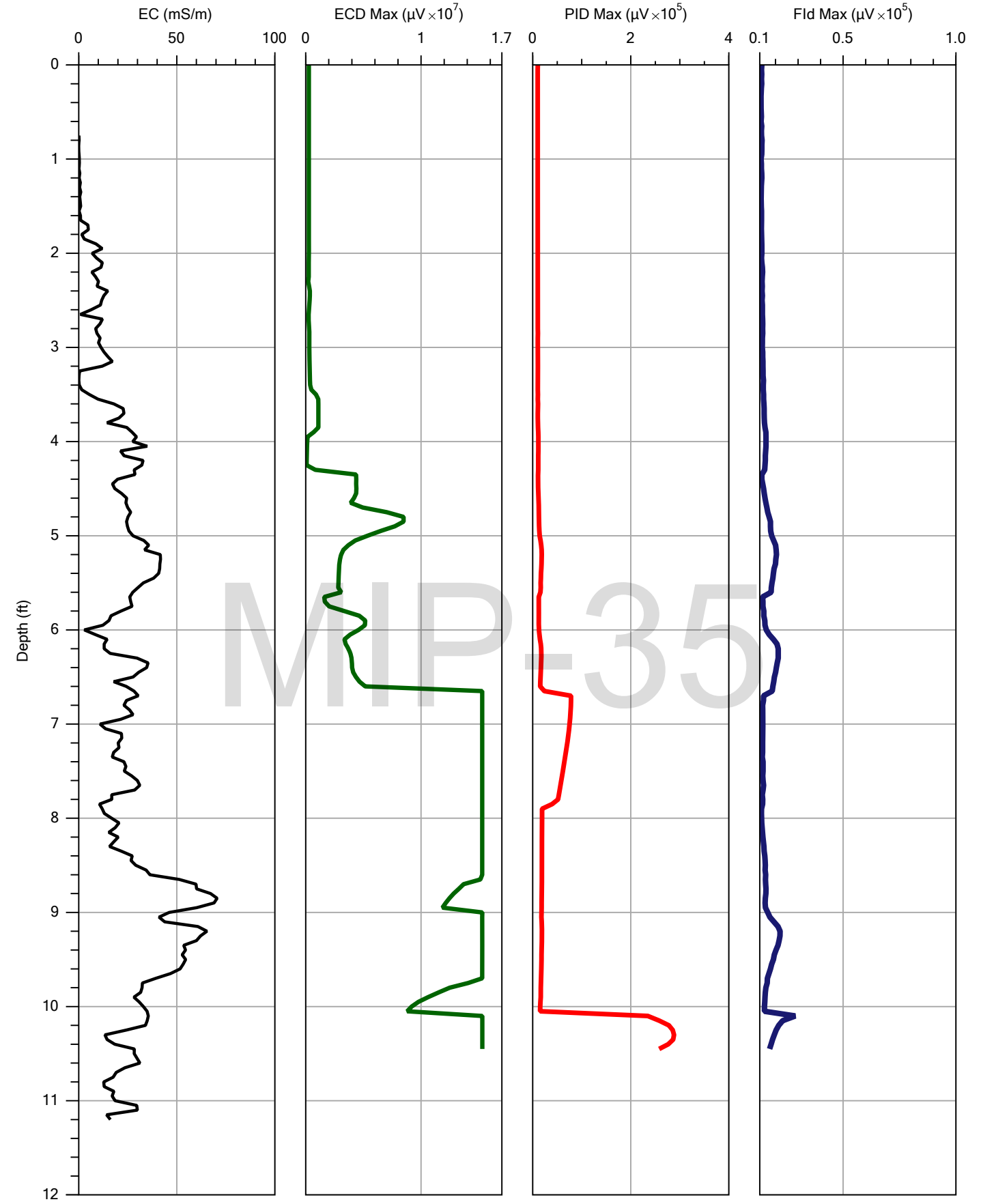
			File: MIP-32.MIP
Company: Zebra	Operator: Zach		Date: 11/24/2015
Project ID:	Client: Stantec		Location:



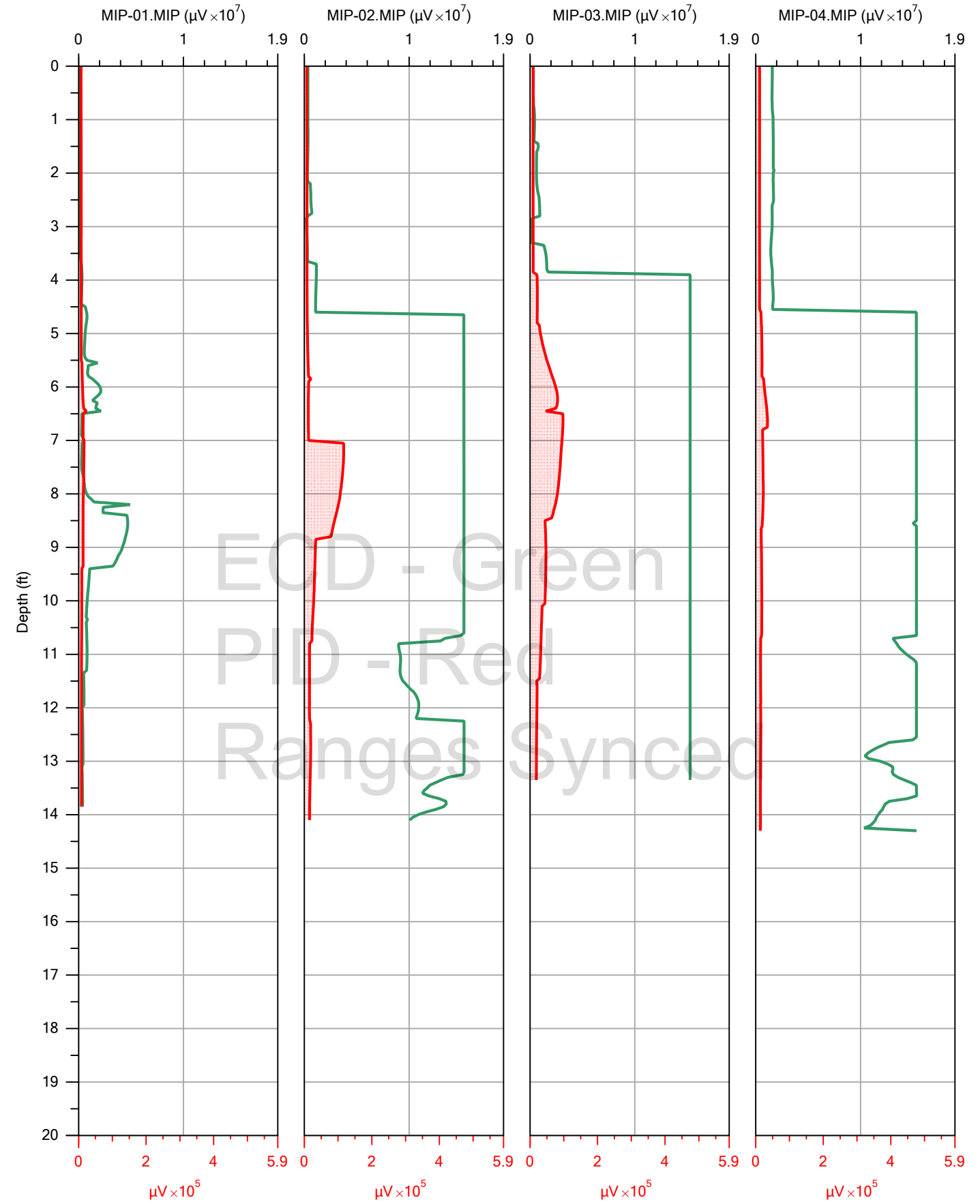
			File: MIP-33.MIP
Company: Zebra	Operator: Zach		Date: 11/24/2015
Project ID:	Client: Stantec		Location:



			File: MIP-34.MIP
Company: Zebra	Operator: Zach		Date: 11/24/2015
Project ID:	Client: Stantec		Location:



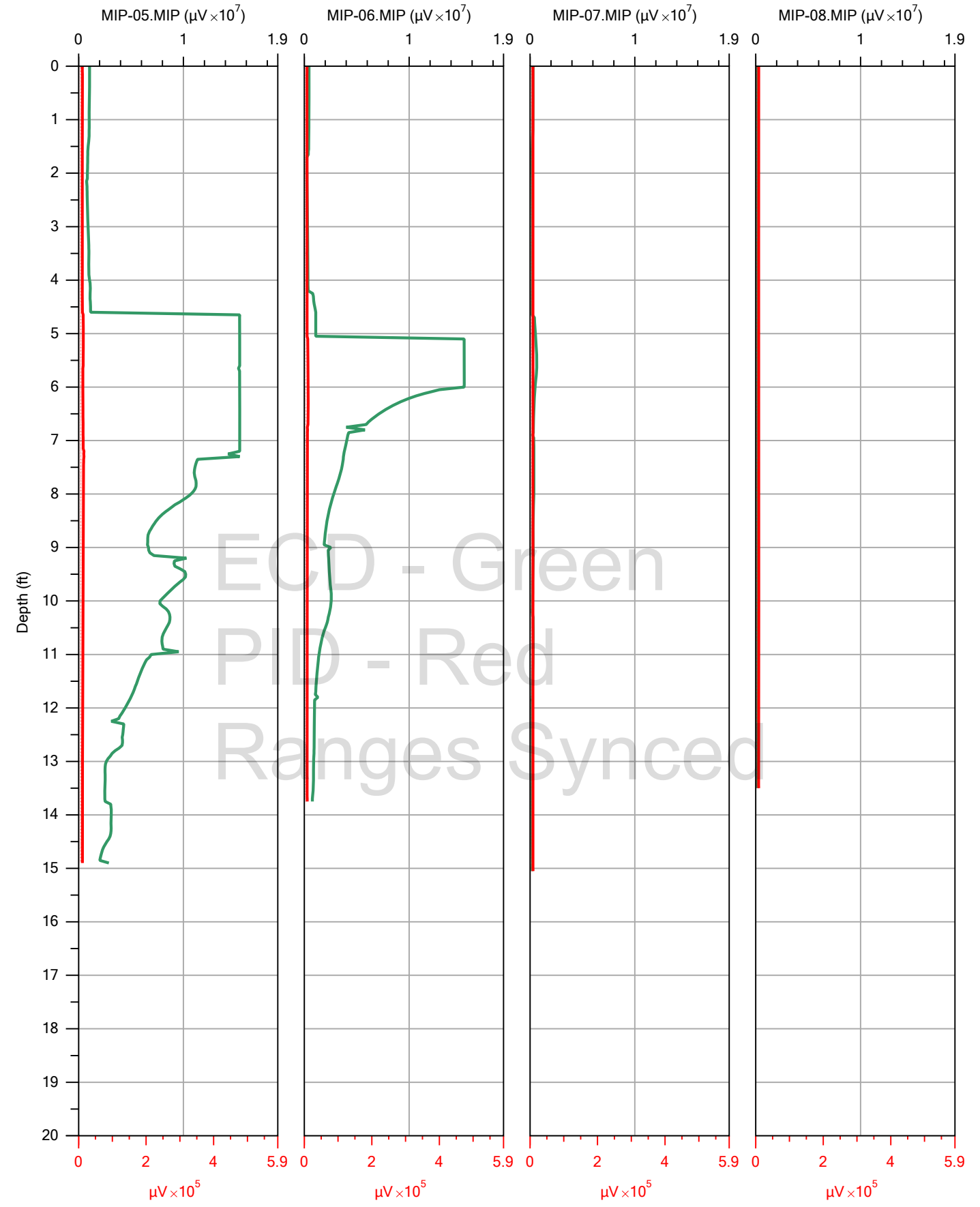
			File: MIP-35.MIP
Company: Zebra	Operator: Zach		Date: 11/24/2015
Project ID:	Client: Stantec		Location:



ECD Max / PID Max

Company: Zebra	Operator: Zach
Project ID:	Client: Stantec

MIP-01.MIP	11/17/2015
MIP-02.MIP	11/17/2015
MIP-03.MIP	11/17/2015
MIP-04.MIP	11/17/2015

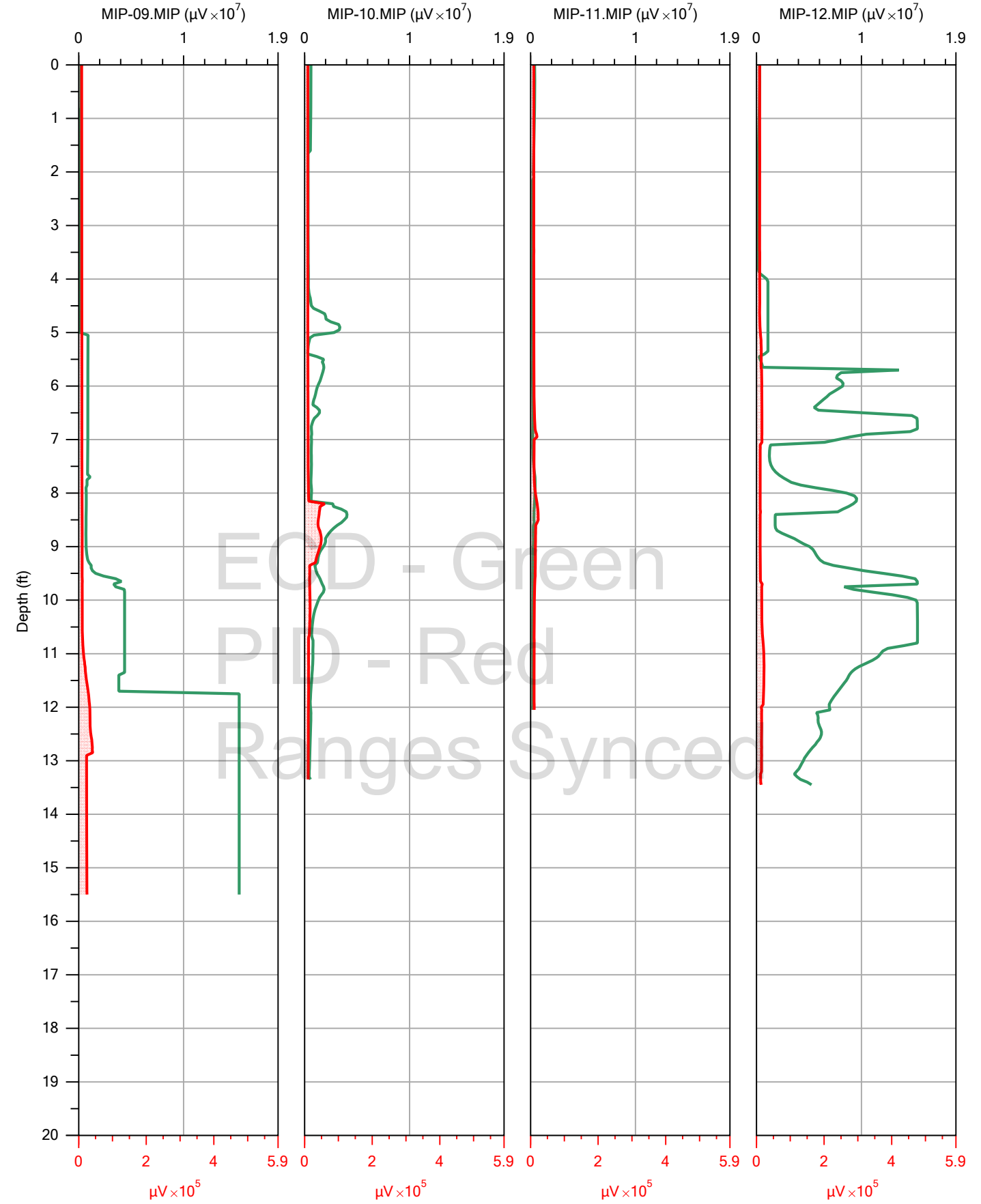


ZEBRA

ECD Max / PID Max

Company: Zebra	Operator: Zach
Project ID:	Client: Stantec

MIP-05.MIP	11/17/2015
MIP-06.MIP	11/17/2015
MIP-07.MIP	11/17/2015
MIP-08.MIP	11/17/2015

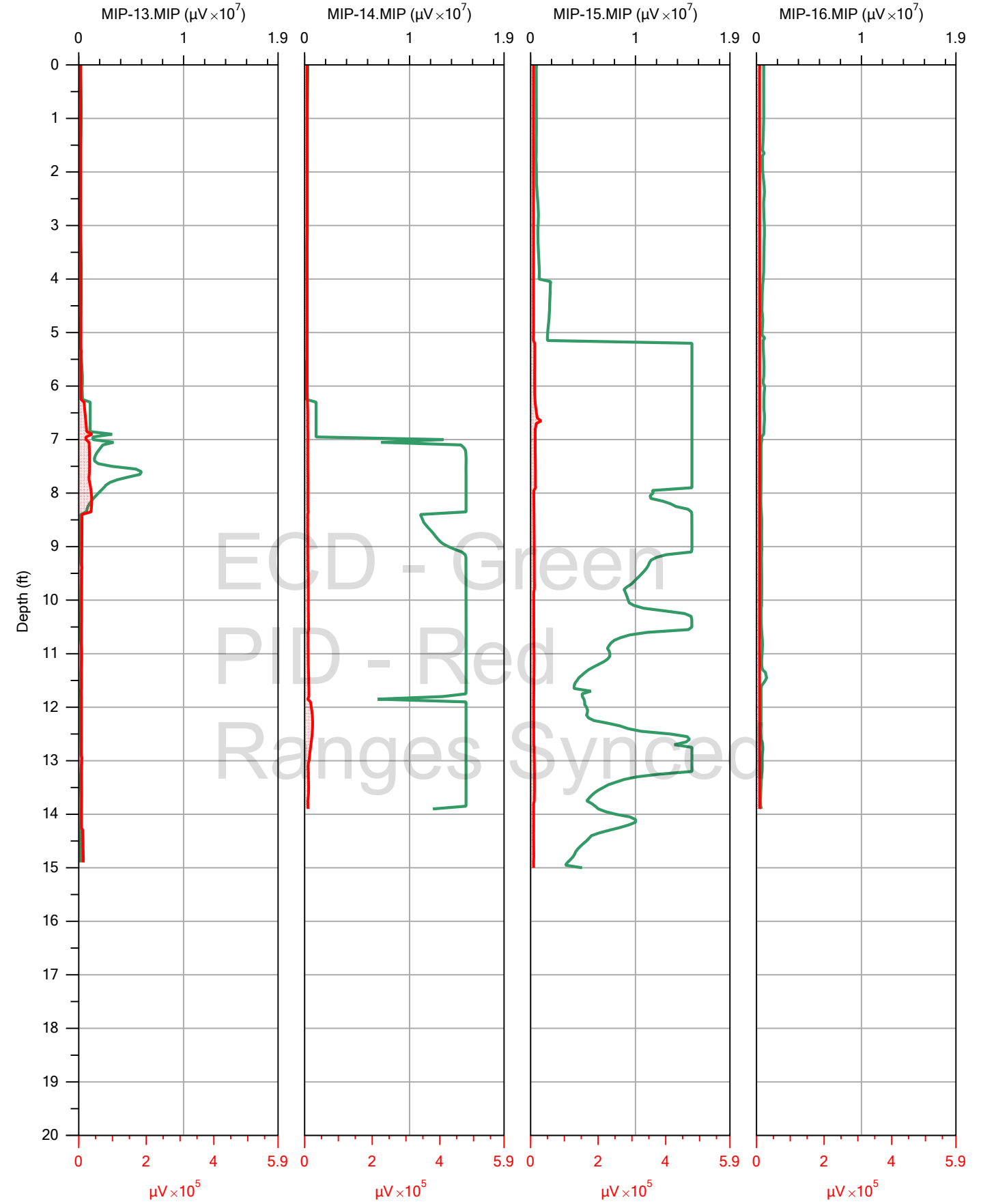


ZEBRA

ECD Max / PID Max

Company: Zebra	Operator: Zach
Project ID:	Client: Stantec

MIP-09.MIP	11/17/2015
MIP-10.MIP	11/17/2015
MIP-11.MIP	11/17/2015
MIP-12.MIP	11/17/2015

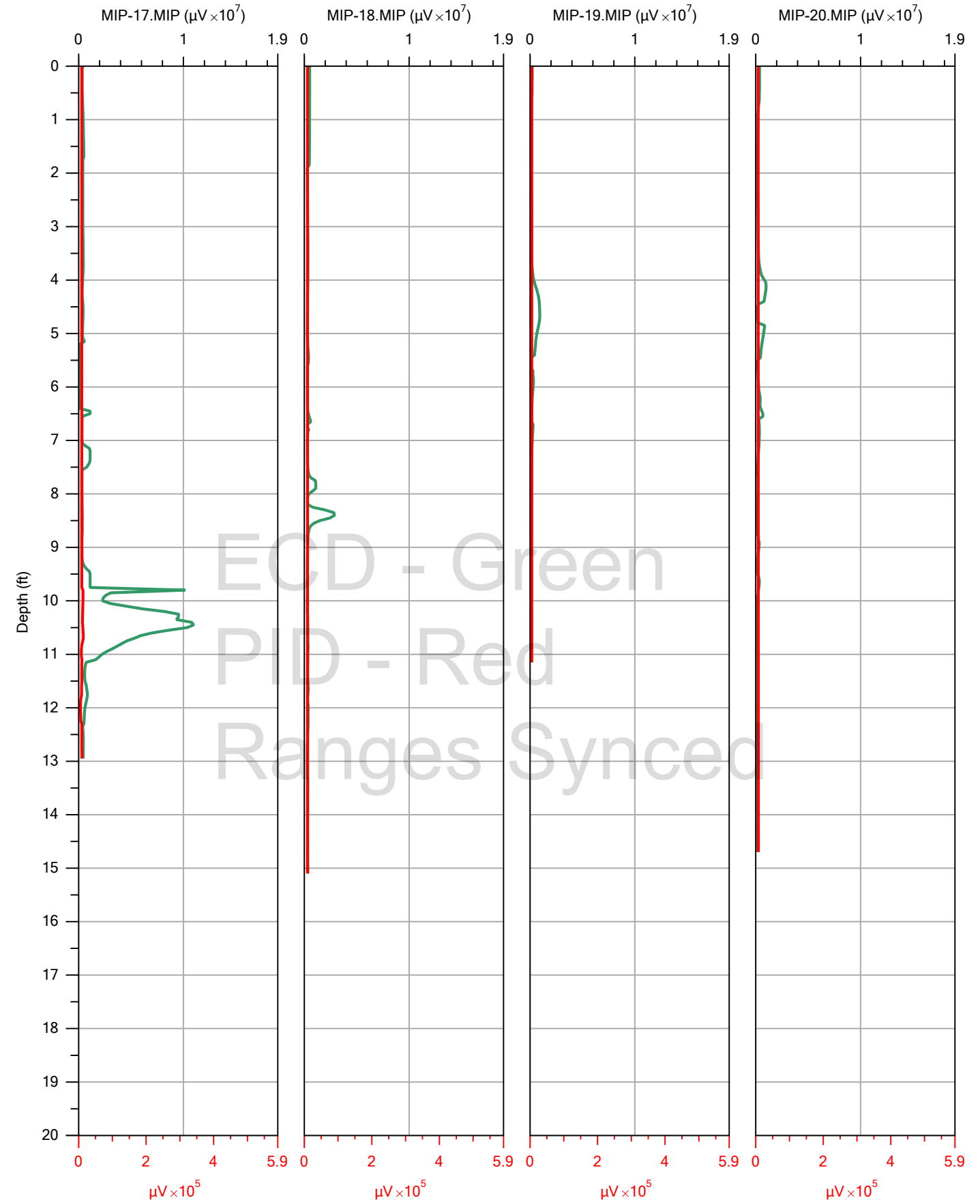


ZEBRA

ECD Max / PID Max

Company: Zebra	Operator: Zach
Project ID:	Client: Stantec

MIP-13.MIP	11/18/2015
MIP-14.MIP	11/18/2015
MIP-15.MIP	11/18/2015
MIP-16.MIP	11/18/2015

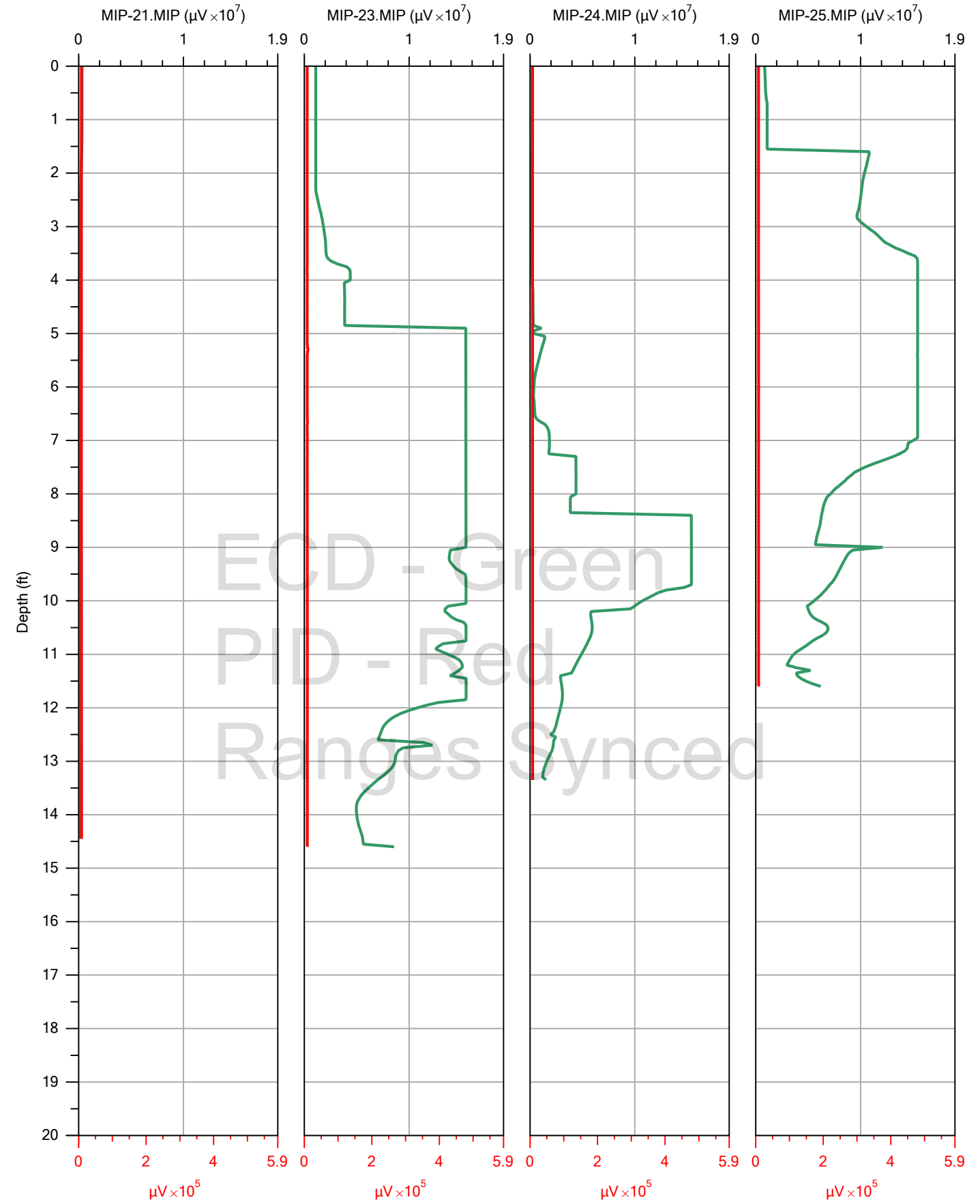


ZEBRA

ECD Max / PID Max

Company: Zebra	Operator: Zach
Project ID:	Client: Stantec

MIP-17.MIP	11/18/2015
MIP-18.MIP	11/18/2015
MIP-19.MIP	11/19/2015
MIP-20.MIP	11/19/2015

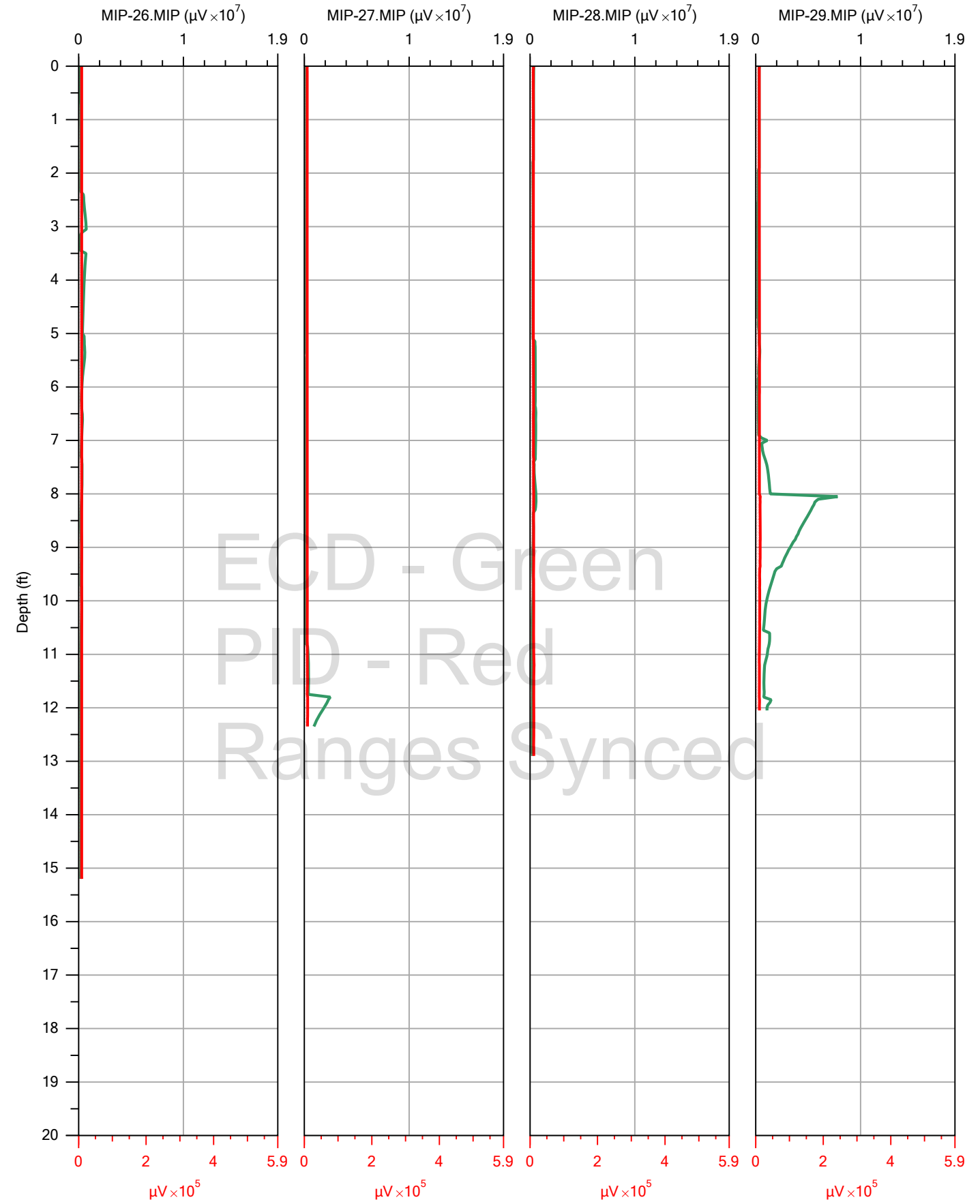


ZEBRA

ECD Max / PID Max

Company: Zebra	Operator: Zach
Project ID:	Client: Stantec

MIP-21.MIP	11/19/2015
MIP-23.MIP	11/19/2015
MIP-24.MIP	11/19/2015
MIP-25.MIP	11/19/2015

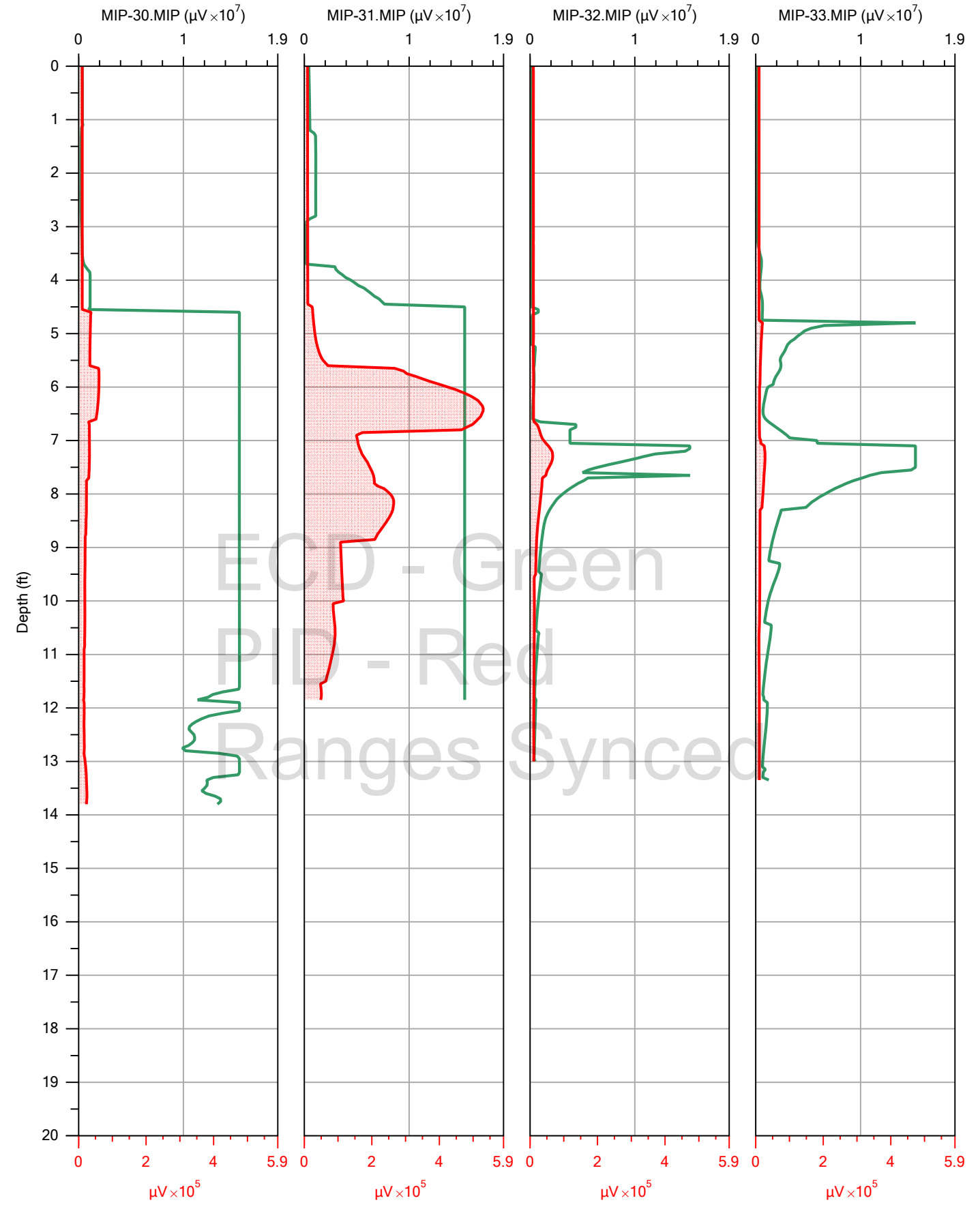


ZEBRA

ECD Max / PID Max

Company: Zebra	Operator: Zach
Project ID:	Client: Stantec

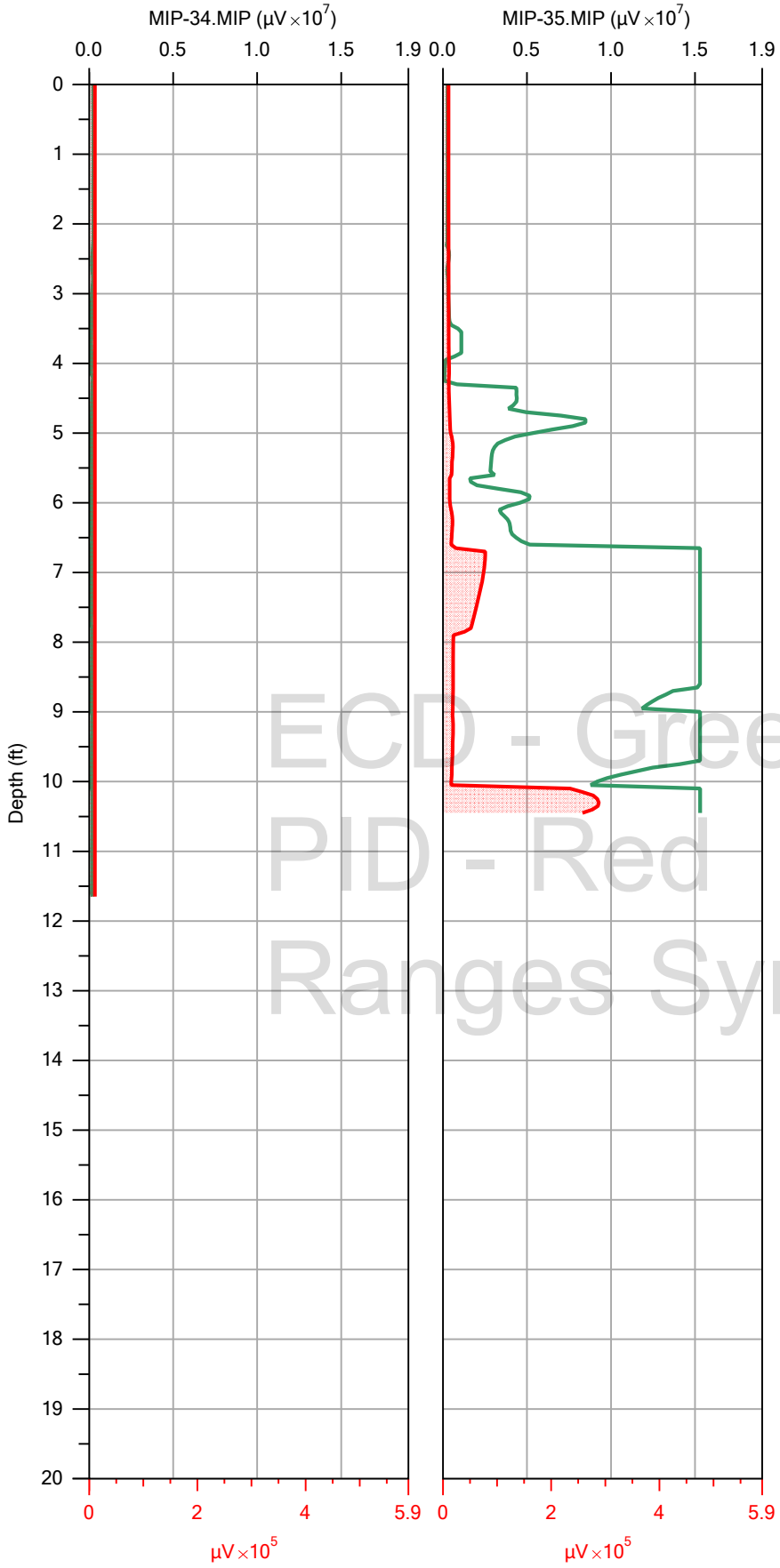
MIP-26.MIP	11/19/2015
MIP-27.MIP	11/23/2015
MIP-28.MIP	11/23/2015
MIP-29.MIP	11/23/2015



ECD Max / PID Max

Company: Zebra	Operator: Zach
Project ID:	Client: Stantec

MIP-30.MIP	11/23/2015
MIP-31.MIP	11/23/2015
MIP-32.MIP	11/24/2015
MIP-33.MIP	11/24/2015



ECD Max / PID Max

Company: Zebra	Operator: Zach	MIP-34.MIP 11/24/2015
Project ID:	Client: Stantec	MIP-35.MIP 11/24/2015

APPENDIX B
Soil Boring Logs

Stantec

61 Commercial St
Rochester, NY 14614
(585) 475-1440

Test Boring No.: **B1**
Page: **1 of 1**

Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/10/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/10/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road Utica, NY	Weather:	40s, sunny	Supervisor:	L. Best, C. Yarrington

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	0.8	0		Hand-cleared (with air knife/hand auger) to 4.5'
5				5	5.0	No in-situ soil recovered
	22.0	2	3.5			Grayish brown fine SAND AND SILT, some clay and fine to coarse gravel, few puverized rock fragments, dry
	37					
	85.6					- NATIVE -
	0.8					
10	0.3			10		
		3	3.1			
	0.0				12.5	
						Gray CLAY, little silt, trace fine gravel, dry
	0.0					
15	0.0			15		
						End of boring at 15'
						Samples: B1-AREA2-s1: 9.7-10.0' at 11:05 B-AREA2-DUP3: 9.7-10.0' at 11:10
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

Stantec

61 Commercial St
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Test Boring No.: B2
Page: 1 of 1

Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/10/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/10/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road Utica, NY	Weather:	40s, sunny	Supervisor:	L. Best, C. Yarrington

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	1.6	0		Hand-cleared (with air knife/hand auger) to 3.9'
5	98.8			5		Brown fine SAND AND GRAVEL, some silt and clay, dry
	3050	2	4.2			same, with strong sweet odor [solvent?]
	256.5					same, with increasing clay and decreasing sand and gravel content [fining downwards]
	103.4					
	119.2					- NATIVE -
					8.5	
	13.9					Gray CLAY, some fine sand and silt, little fine to medium gravel, dry
10	1.8			10		
		3	4.2		11.1	
	0.0					Gray fine to medium SAND, some fine to coarse gravel, little clay, dry
	0.0				12.5	
	0.0					Gray CLAY, little silt, trace fine gravel, dry
	0.0				13.9	
15	0.0			15		Gray fine to medium SAND, some fine to coarse gravel, little clay, dry
						End of boring at 15'
						Sample: B2-AREA2-s1: 9.7-10.0' at 09:20
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

Stantec

61 Commercial St
Rochester, NY 14614
(585) 475-1440

Test Boring No.: B3
Page: 1 of 1

Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/2/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/3/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	30s-40s, overcast	Supervisor:	L. Best,
	Utica, NY		with rain		

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
		1	1.6	0		Hand-cleared (with air knife/hand auger) to 4'
				4		
	1647	2	2.4			Gray fine to coarse SAND and fine to coarse GRAVEL, dry
5						
	201.0					
	29.5					
				8		- NATIVE -
	23.0	3	3.2			
					8.8	
	13.8				9.2	Brownish gray fine SAND AND SILT, some clay, trace fine gravel, moist
10						Gray fine to coarse SAND and fine to coarse GRAVEL, dry
	0.5				10.5	
						Brownish gray CLAY, some fine sand and silt, few fine gravel, moist
	0.5					
				12		
	0.8	4	2.3			
					12.9	
	0.1					Gray fine to medium SAND, some silt and fine to medium gravel, few clay, dry
	0.1					
15						
				16		
						End of boring at 16'
						Samples:
						B3-AREA2-s1: 4.4-6.0' at 14:30
						B3-AREA2-s2: 10.3-10.4' at 14:40
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

Stantec

61 Commercial St
Rochester, NY 14614
(585) 475-1440

Test Boring No.: B4
Page: 1 of 1

Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/2/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/2/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	30s-40s, overcast	Supervisor:	L. Best
	Utica, NY		with rain		

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	2.1	0		Hand-cleared (with air knife/hand auger) to 4'
5	107.4			5		Grayish brown fine to medium SAND, some fine to coarse gravel, dry
	180.6	2	3.5			- NATIVE -
	90.8					
	0.5				7.1	
						Gray (with some red coloration) CLAY, some fine to medium gravel, moist
	0.2					Large pulverized rock fragments 8.2-8.5'
10				10	10.0	
		3	0.0			Sample core 10.0-15.0' not recovered
15		4	3.3	15	15.0	
	0.2					Gray fine SAND AND SILT, some clay, trace fine to medium gravel, moist
					16.1	- NATIVE -
						Gray fine to medium SAND AND SILT, few clay, trace fine gravel, dry
	0.2					**Samples:**
						B4-AREA2-s1: 5.3-5.5' at 09:35
	0.2					B4-AREA2-s2: 8.0-8.1' at 09:45
				19		B4-AREA2-s3: 15.2-15.4' at 14:10
20						End of boring at 19'

Notes:

1. PID Model Mini-Rae 3000 with 10.6eV lamp.

Stantec

61 Commercial St
Rochester, NY 14614
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Test Boring No.: B5
Page: 1 of 1

Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/10/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/10/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road Utica, NY	Weather:	40s, sunny	Supervisor:	L. Best, C. Yarrington

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
		1	2.4	0		Hand-cleared (with air knife/hand auger) to 4'
5	45.6			5		Brown very fine SAND AND SILT, some clay, little fine to coarse gravel, dry
	10.0	2	2.3			
	85.0					Same, faint odor [solvent?]
	80.7					- NATIVE -
10	10.9			10		
		3	4.0			Same, with pulverized rock fragmeents at 10.0'
	0.5					
	0.0					
	0.0				13.8	
15	0.0			15		Gray CLAY, little silt, coarse sand, and fine gravel, dry
						End of boring at 15'
						Sample: B5-AREA2-s1: 13.2-13.5' at 10:40
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

Stantec

61 Commercial St
Rochester, NY 14614
(585) 475-1440

Test Boring No.: **B6**
Page: **1 of 1**

Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/3/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/3/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road Utica, NY	Weather:	40s, partly sunny	Supervisor:	L. Best

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
		1	0.9	0		Hand-cleared (with air knife/hand auger) to 4'
				4		
	2.0	2	2.9			Gray fine to medium SAND, some fine to coarse gravel, little red coloration, trace silt and clay, dry
5						
	0.2					
	0.2					- NATIVE -
				8	8.0	
	0.0	3	2.8			Grayish brown fine SAND AND SILT, some clay, trace fine gravel, moist
					8.8	
	0.0				9.2	Gray fine to medium SAND, some fine to coarse gravel, trace silt and clay, dry
10	0.0					Grayish brown very fine SAND, SILT, and CLAY, trace fine gravel, dry
				12		
	0.1	4	2.6		12.4	
						Brownish gray CLAY, few very fine to fine sand and silt towards bottom, moist
	0.0					
	0.0					
15						
				16		
						End of boring at 16'
						Samples:
						B6-AREA2-s1: 6.4-6.5' at 11:10
						B6-AREA2-s2: 13.5-13.7' at 11:50
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: B7
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/7/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/7/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road Utica, NY	Weather:	30s, overcast	Supervisor:	L. Best

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
		1	0.6	0		Hand-cleared (with air knife/hand auger) to 3.5'
	0.0					Brownish gray very fine SAND AND SILT, some clay, little fine to medium gravel, moist
	0.0					
5	0.0			5		
	0.0	2	3.5			
	0.0				7.0	
	0.0				7.5	Pulverized ROCK FRAGEMENTS, with coarse, loose sand and gravel, dry
						Gray SILT AND CLAY, some fine to coarse gravel, dry
	0.0					
						- NATIVE -
10	0.0			10		
		3	2.5			Same, with little fine to coarse sand
	0.0					
	0.0				13.5	
						Grayish brown CLAY, dry
15	0.0			15		
						End of boring at 15'
						Sample:
						B7-AREA2-s1: 5.2-5.5' at 14:20
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B8**
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/4/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/4/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/split spoon
Location:	525 French Road	Weather:	mid-30s, overcast	Supervisor:	L. Best
	Utica, NY				

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
		1	0.2	0		Hand-cleared to 3.5'
				2		
		2	1.5			
	0.0			4		Gray fine SAND, some fine to medium gravel, trace clay, moist
		3	1.1			Same, but dry with few coarse gravel, granular coarse sand and gravel 4.0-4.1'
5	0.0					
	0.1			6		
	0.0	4	1.8			
	2.1					- NATIVE -
	1.8			8		
	1.2	5	1.5			
	0.1					
10	0.2			10		
	0.0	6	2.0			
	0.0					
	0.0					
	0.0			12		
	0.0	7	1.9		12.4	
					13.0	Gray, SANDY GRAVEL with pulverized rock fragements, dry
	0.0					Gray fine SAND, some fine to medium gravel, few coarse gravel, trace clay, moist
	0.0			14		Same, with few clay and no coarse gravel
	0.0	8	2.0		14.8	
15					15.0	Pulverized ROCK FRAGMENTS
	0.0					Brownish gray CLAY, some silt, few fine sand, trace fine gravel, moist
	0.0			16		
						End of boring at 16'
						Samples:
						B8-AREA2-s1: 7.4-8.0' at 10:50
						B-AREA2-DUP1: 7.4-8.0' at 10:55
20						

Notes:

1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: B9
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/4/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/4/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/split spoon and macrocore
Location:	525 French Road Utica, NY	Weather:	40s	Supervisor:	L. Best, B. Haravtich

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	0.2	0		Hand-cleared (with air knife/hand auger) to 3.5'
				2		
		2	2.0			
	5.0			4	4.0	Gray fine to coarse SAND AND fine GRAVEL, "clean" odor, wet
		3	1.5			Gray [dense] fine SAND AND SILT, some clay, trace fine gravel, "clean" odor, dry
5	14.3					
	7.8			6		
		4	1.2			
	1.4					- NATIVE -
	16.8			8		
	46.8	5	1.7			Same, with very fine sand component and puverized rock fragments at top 8.0-8.2'
	162.0					
10	1492			10		
		6			10.5	
	94.2					Gray fine SAND AND SILT, some fine to coarse gravel, few clay, dry
	61.6					
	8.7				12.4	
	2.5					Brownish gray CLAY, some silt, little fine gravel, dry
	0.7					
15	0.0			15		
						End of boring at 15'
						Samples:
						B9-AREA2-s1: 7.8-8.0' at 13:15
						B9-AREA2-s2 (MS/MSD): 12.8-13.2' at 14:10
20						

Notes:

1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: B10
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/7/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/7/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	30s, overcast	Supervisor:	L. Best, B. Haravtich
	Utica, NY				

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	2.5	0		Hand-cleared (with air knife/hand auger) to 3'
	0.0					Brown fine SAND AND SILT, some fine to medium gravel, little clay, dry
	0.0					
5	0.0			5		
	3.4	2	4.3			Same, but gray with fine to coarse gravel component, "cleaning product"/chlorine[?] odor
						5.5-9.0'
	7.8					
						- NATIVE -
	95.1					
	13.7				9.0	
10	0.4			10		Gray SILT AND CLAY, little fine to medium gravel, dry
	0.5	3	2.1			
	0.0				13.0	
						Gray CLAY, dry
15	0.0			15		
						End of boring at 15'
						Samples:
						B10-AREA2-s1: 5.2-5.5' at 13:35
						B10-AREA2-s2: 8.0-8.5' at 13:30
20						B10-AREA2-s3: 9.7-10.0' at 13:55

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: B11
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/7/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/7/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road Utica, NY	Weather:	30s, overcast	Supervisor:	L. Best, B. Haravtich

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
		1	1.8	0		Hand-cleared (with air knife/hand auger) to 3'
	0.0					Grayish brown fine SAND AND SILT, some fine to medium gravel, little clay, dry
	0.0					
5	0.0			5		
		2	3.5			Same, with some clay and very fine sand, little gravel component
	0.2				6.0	
	0.0					Gray fine to medium SAND AND fine to coarse GRAVEL, with pulverized rock fragments, dry
	0.5					- NATIVE -
	51.9					"Clean"/chlorine-like odor 8.0-8.5'
					9.0	
	0.3					Gray fine SAND and fine to medium GRAVEL, some silt and clay, dry
10	0.0			10		
		3	3.1		10.7	
	0.0					Gray fine to medium SAND AND fine to coarse GRAVEL, with pulverized rock fragments, dry
	0.0				12.5	
	0.0				13.0	Gray fine SAND AND SILT, some clay, little fine to medium gravel, dry
	0.0					Gray CLAY, little silt and fine sand, dry
15	0.0			15		
						End of boring at 15'
						Sample:
						B11-AREA2-s1: 8.4-8.8' at 13:05
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: B12
Page: 1 of 1

Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/7/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/7/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	30s, overcast	Supervisor:	L. Best, B. Haravtich
	Utica, NY				

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	1.5	0		Hand-cleared (with air knife/hand auger) to 3.5'
5	5.0			5		Brown fine SAND AND SILT, some fine to medium gravel, little clay, "cleaning product"/chlorine-like odor, moist
		2	3.6			Same, with few gravel component
					6.0	
	67.2					Brown very fine SAND AND SILT, some clay and fine to coarse gravel, "clean"/chlorine-like odor, dry
	67.1					
	94.1					- NATIVE -
	4.0				9.5	
10	3.1			10		Brown SILT AND CLAY, some fine to medium gravel, "clean"/chlorine-like odor, dry
	0.2	3	4.7			Same, but gray with little medium to coarse sand
	0.1				11.6	
	0.0					Gray CLAY, trace fine to medium gravel, dry
	0.0					
15	0.0			15		
						End of boring at 15'
						Samples:
						B12-AREA2-s1: 4.6-4.9' at 08:45
						B12-AREA2-s2: 6.5-7.0' at 09:05
						B12-AREA2-s3: 11.1-11.3' at 09:15
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: B13
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/7/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/7/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	30s, overcast	Supervisor:	L. Best, B. Haravtich
	Utica, NY				

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	1.5	0		Hand-cleared (with air knife/hand auger) to 3.5'
						Brown fine to medium SAND AND SILT, some fine to medium gravel, little clay, moist
5	0.0			5		
		2	3.5			
	9.7				6.0	
						Gray fine SAND AND SILT, some clay, trace fine gravel, moist
	23.4					- NATIVE -
	42.0				8.0	
	35.8					Brown fine to medium SAND, some fine to coarse gravel, few clay, dry
	0.3					
10	0.3			10		
	0.3	3	4.3		10.5	
						Gray CLAY, dry
	0.2					
	0.1					
					14.0	
	1.1					Gray fine to medium SAND AND GRAVEL, some silt, few clay, moist
15	1.1			15		
						End of boring at 15'
						Samples:
						B13-AREA2-s1: 7.7-8.0' at 09:40
						B13-AREA2-s2: 14.0-14.5' at 09:55
						B-AREA2-DUP2: 14.0-14.5' at 10:00
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: B14
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/7/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/7/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	30s, overcast	Supervisor:	L. Best, B. Haravtich
	Utica, NY				

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	1.1	0		Hand-cleared (with air knife/hand auger) to 4'
5	8.4			5		Brown fine to medium SAND, some fine to medium gravel, little silt, dry
	32.9	2	3.3			
	25.3				6.5	
	30.4				7.5	Gray fine SAND, some silt, little clay, moist
					8.0	Gray fine SAND, some fine to medium gravel, little silt, trace clay, dry
	30.8					Gray CLAY, few fine to medium gravel, dry
	2.2					
10	0.5			10		- NATIVE -
	0.1	3	2.5		11.0	
	0.0					Gray very fine SAND AND SILT, little clay and fine to medium gravel, dry
	0.1					
15	0.1			15		
						End of boring at 15'
						Samples:
						B14-AREA2-s1: 4.5-5.0' at 10:55
						B14-AREA2-s2: 10.0-10.5' at 11:05
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: B15
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/7/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/7/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road Utica, NY	Weather:	30s, overcast	Supervisor:	L. Best, B. Haravtich

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
0		1	2.0	0		Hand-cleared (with air knife/hand auger) to 3.5'
	11.5				4.5	Brown fine SAND AND SILT, some clay, little medium to coarse gravel, dry
5	24.7			5	5.0	Brown fine SAND AND fine to medium GRAVEL, few clay, dry
		2	4.1			Gray fine SAND AND SILT, some fine to coarse gravel, trace clay, dry
	36.9					
	32.2					
	5.1					- NATIVE -
	0.2					
	0.3				9.5	
10	0.3			10	10.0	Gray CLAY, trace fine gravel, dry
	1.6	3	2.5		10.5	Brown very fine SAND AND SILT, some clay, few fine to medium gravel, moist
						Gray CLAY, trace fine gravel, dry
	0.3					
	0.5					
	0.1					
						Coarsening at bottom with some medium to coarse sand and little fine to medium gravel
15	0.1			15		
						End of boring at 15'
						Samples:
						B15-AREA2-s1: 4.5-4.8' at 10:15
						B15-AREA2-s1: 8.0-8.5' at 10:30
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: B16
Page: 1 of 1

Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/7/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/7/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	30s, overcast	Supervisor:	L. Best, B. Haravtich
	Utica, NY				

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	2.5	0		Hand-cleared (with air knife/hand auger) to 4'
5	0.1			5		Brownish gray fine SAND AND SILT, some fine gravel, little clay, dry
		2	3.8			Pulverized rock fragments 5.1-5.4'
	0.0					
	0.0					Fining downward
	0.0				8.0	
	0.0					Gray CLAY, some silt, little coarse gravel, dry
10	0.0			10		- NATIVE -
	0.0	3	3.2			
	0.0					Coarsening to bottom with some fine sand and silt
	0.0				14.0	
15	0.0			15		Gray fine SAND AND SILT, some clay, little fine to coarse gravel, dry
						End of boring at 15'
20						**Samples:** B16-AREA2-s1: 5.4-5.7' at 11:30 B16-AREA2-s2 (MS/MSD): 11.0-11.5' at 11:40

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: B17
Page: 1 of 1

Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/8/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/8/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	30s, partly sunny	Supervisor:	L. Best
	Utica, NY				

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
		1	1.0	0		Hand-cleared (with air knife/hand auger) to 3.5'
	0.2					Brown medium to coarse SAND AND fine GRAVEL, some silt, little clay, wet
5	0.2			5	5.0	
	0.2	2	4.2			Gray very fine SAND AND SILT, some clay and fine to medium gravel, little coarse gravel, dry
	0.2					- NATIVE -
	0.2					Increasing clay content
	0.2					
	0.2				8.2	
						Gray CLAY, trace fine gravel, dry
10	0.2			10		
		3	0.0			No recovery
15	0.0			15		Soil at bottom of sleeve appears sandy
						End of boring at 15'
						Samples:
						B17-AREA2-s1: 7.3-7.6' at 13:10
						B17-AREA2-s2: 9.6-9.9' at 13:20
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B18**
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/14/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/14/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	Indoors	Supervisor:	L. Best
	Utica, NY		(50s, partly sunny)		

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	1.1	0		Hand-cleared (with air knife/hand auger) to 4.8'
5	0.2			5	5.0	Brown fine SAND, some clay, moist
		2	4.5			Gray very fine SAND AND SILT, some clay and fine gravel, little medium to coarse gravel, dry; brown and moist 5.0-5.5'
	0.2					
						- NATIVE -
	0.2					
	0.2					
	0.5					
	0.3					Intermittent layers (0.2-0.3' thickness) of gravelly sand
10	0.1			10		
	0.3	3	4.6			
	0.2					
	0.1					
	0.2					
15	0.2			15		
						End of boring at 15'
						Samples:
						B18-POLEBARN-s1: 8.1-8.4' at 12:00
						B18-POLEBARN-s2: 12.4-12.7' at 12:15
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B19**
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/14/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/14/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	Indoors	Supervisor:	L. Best
	Utica, NY		(50s, partly sunny)		

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	0.8	0		Hand-cleared (with air knife/hand auger) to 4.3'
5	0.1			5	5.0	Brownish gray fine SAND AND SILT, some clay, little fine to medium gravel, dry
		2	4.6			Gray fine SAND AND SILT, some fine to medium gravel, little clay, dry
	0.1					
	0.1					- NATIVE -
						Fining downward
	0.2					
	0.1					
	0.1					
10				10	10.0	
	0.2	3	4.7			Gray fine SAND AND SILT, some clay, little fine to medium gravel, trace coarse gravel, dry
	0.1					
	0.2					
	0.1					
	0.1					
15	0.2			15		
						End of boring at 15'
						Samples:
						B19-POLEBARN-s1: 4.7-5.0' at 11:20
						B19-POLEBARN-s2 (MS/MSD): 8.0-8.5' at 11:30
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B20**
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/14/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/14/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	Indoors	Supervisor:	L. Best
	Utica, NY		(50s, partly sunny)		

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	2.5	0		Hand-cleared with air knife to 2'
						Gray GRAVEL, some brown sand, wet
						- FILL -
					4.0	
	0.2					Brownish gray very fine SAND AND SILT, some clay, few fine to medium gravel, dry
5				5		
	0.5	2	4.0			- NATIVE -
	0.1					
					7.2	
	9.6					Gray fine to medium SAND, little clay and fine to medium gravel, dry
	13.2					
	4.5					Fining downward
10	1.6			10	10.0	
		3	3.1			Gray SILT AND CLAY, some fine sand, little fine gravel, dry
	0.5					
	0.4					
	0.6				13.0	
						Gray CLAY, dry
	0.4					
15	0.4			15		
						End of boring at 15'
						Samples:
						B20-POLEBARN-s1: 4.0-4.5' at 13:35
						B20-POLEBARN-s2: 8.1-8.4' at 13:50
						B20-POLEBARN-s3: 12.5-12.8' at 14:00
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: B21
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/14/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/14/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	Indoors	Supervisor:	L. Best
	Utica, NY		(50s, partly sunny)		

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
		1	1.2	0		Hand-cleared with air knife to 4.5'
5	0.7			5	5.0	Brownish gray very fine SAND AND SILT, some clay, little fine to medium gravel, dry
		2	3.2			Gray fine to medium SAND AND SILT, little clay and fine to medium gravel, dry
	0.5					
	0.3					
	0.4					
						- NATIVE -
	0.3					
10	0.3			10		
		3	4.6			
	0.3					Increasing clay content
	0.2					
	0.4					
					12.9	
	0.3					Gray CLAY, trace silt and fine gravel, dry
15	0.2			15		
						End of boring at 15'
						Samples:
						B21-POLEBARN-s1: 5.5-6.0' at 12:30
						B21-POLEBARN-s2: 11.1-11.4' at 12:45
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: B22
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Project:	LMC Utica	Drill Contractor:	Zebra	Start Date:	11/24/2015
Project #:	190500800	Driller:	R. Reagan	Completion Date:	11/24/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	Indoors	Supervisor:	L. Best, B. Haravitch
	Utica, NY		(30s, overcast)		

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
		1	1.1	0		Hand-cleared (with air knife/hand auger) to 2.5'
						Gray gravel, wet
				4		- FILL -
	0.1	2	1.3		4.5	
5						Grayish brown GRAVEL, some fine sand, few clay
	9.6				5.5	
	117.0			6		Grayish brown CLAY, some silt, fine sand, and gravel, chlorine-like odor, wet
		3.0	0.4			
						Same, with few silt and fine sand, some fine to medium gravel, dry
	118.6			8		
		4	0.4			
						- NATIVE -
10	700.1			10		
		5	0.3			Same, becoming moist with strong soap/chlorine-like odor
	448.0			12		
		6	0.3			
	45.6			14		
		7.0	0.3			
15						
	4.5			16		
						End of boring at 16'
						Samples:
						B22-POLEBARN-s1: 5.9-6.0' at 13:20
						B22-POLEBARN-s2: 9.8-9.9' at 13:40
						B22-POLEBARN-s3: 15.9-16.0' at 15:00
20						

Notes:
1. PID Model MultiRAE with 10.6eV lamp.

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Test Boring No.: B23
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Project:	LMC Utica	Drill Contractor:	Zebra	Start Date:	11/23/2015
Project #:	190500800	Driller:	R. Reagan	Completion Date:	11/23/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road Utica, NY	Weather:	30s, sunny	Supervisor:	L. Best, B. Haravitch

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	3.6	0		Hand-cleared (with air knife/hand auger) to 3.75'
	2.8					Brown medium to coarse SAND, some silt, trace clay and roots, moist
	9.6				4.2	
						Brown fine to medium SAND, some clay, trace silt and fine to medium gravel
5	8.1			5		
		2	4.9		5.3	
						Brownish gray fine SAND AND SILT, some fine to coarse gravel, dry
	54.0					- NATIVE -
						Large pulverized rock 7.6-7.9'
	76.1					
	2.9					
10				10		
		3	5.0		10.5	
						Brown (slightly red) fine SAND AND fine to coarse GRAVEL, DRY
	0.0					
	0.0				13.9	Large pulverized rock 13.7-13.9'
						Brown CLAY, trace silt, dry
15	0.0			15	15.0	
		4	4.8			Brown SILT AND CLAY, some fine to medium sand, trace fine to coarse gravel, dry
	0.0					
	0.0					
20	0.0			20		
						End boring at 20'
						Samples:
						B23-AREA2-s1: 8.3-8.5' at 12:15
						B23-AREA2-s2: 19.3-19.4' at 12:40

Notes:
1. PID Model MultiRAE with 10.6eV lamp.

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Test Boring No.: **B24**
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Project:	LMC Utica	Drill Contractor:	Zebra	Start Date:	11/23/2015
Project #:	190500800	Driller:	R. Reagan	Completion Date:	11/23/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	30s, sunny	Supervisor:	B. Haravitch, L. Best
	Utica, NY				

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
		1		0		Hand-cleared (with air knife/hand auger) to 4'
	0.0				4.5	Brown fine to medium SAND AND SILT, little gravel, trace clay - FILL -
5	0.0			5		Gray-brown friable fine SAND AND SILT, some gravel, dry
		2	5.0			- NATIVE -
	0.0					
	46.1					
	62.8					
	0.3				9.0	
						Dark gray fine SAND, SILT, AND CLAY, some gravel, dry
10	0.0			10	10.0	
		3	4.5			Dark gray fine to medium SAND, some gravel, little silt, loose, moist
	1.1				12.5	
	0.0					Dark gray fine SAND AND SILT, some clay, trace gravel, wet
	0.0			14		
						Refusal at 14'
15						
						Samples:
						B24-AREA2-s1: 8.1-8.4' at 15:05
						B24-AREA2-s2: 13.8-13.9' at 15:30
20						

Notes:
1. PID Model MultiRAE with 10.6eV lamp.

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Test Boring No.: **B25**
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/3/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/3/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road Utica, NY	Weather:	30s-40s, overcast	Supervisor:	L. Best

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
		1	3.9	0		Hand-cleared (with air knife/hand auger) to 3.5'
				4	4.0	Brown coarse SAND AND GRAVEL, dry - FILL -
	59.2	2	3.3			Gray fine to coarse SAND AND fine to coarse GRAVEL, dry
5	56.7					
	6.7					- NATIVE -
					7.7	
	0.6			8		Gray fine to medium SAND, some fine to coarse gravel, few silt and clay, dry
	1.5	3	3.6		8.4	
	0.5				9.0	Gray SILT AND CLAY, few coarse sand, dry
10	0.5					Gray fine to coarse SAND, some fine to coarse gravel, few clay, dry
					10.7	
	0.6			12		Gray CLAY, some very fine sand and silt, trace fine gravel, moist
	0.7	4	2.7			
					12.8	Large pulverized rock 12.6-12.8'
	0.7					Gray fine to medium SAND, some fine gravel, few clay, dry
15	0.6					
				16		
						End of boring at 16'
						Samples:
						B25-AREA2-s1: 4.3-4.6' at 10:10
						B25-AREA2-s2: 8.6-8.7' at 10:30
						B25-AREA2-s3: 12.1-12.3' at 10:40
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B26**
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/4/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/4/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/split spoon
Location:	525 French Road	Weather:	high 30s, overcast	Supervisor:	L. Best
	Utica, NY				

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	0.0	0		Hand-cleared (with air knife/hand auger) to 4'
				2		
		2	0.8			Gray fine to medium SAND, some silt, some fine gravel, trace clay, dry
	0.1			4		
	0.2	3	0.8			
5						
	0.0					- NATIVE -
				6		
	0.1	4	1.7			Same, with some medium gravel
	0.0					
	0.0			8		
		5	2.0		8.6	
	0.0					Gray fine to coarse SAND AND fine to medium GRAVEL, dry
	0.0				9.4	
10	0.0			10		Gray fine to medium SAND, some silt, some fine to medium gravel, trace clay, dry
		6	1.2			
	0.0					
	0.0			12		
		7	0.8			
	0.0					Same, with pulverized rock fragments at ~13' and ~14'
	0.0			14		
						End of boring at 14'
15						
						Sample:
						B26-AREA2-s1: 5.5-5.6' at 09:20
20						

Notes:

1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: B27
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/8/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/8/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	30s, partly sunny	Supervisor:	L. Best, B. Haravitch
	Utica, NY				

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	1.8	0		Hand-cleared (with air knife/hand auger) to 3'
	0.0					Brown SILT AND CLAY, some very fine sand, little fine gravel, moist
	0.0					
5	0.0			5	5.0	
		2	4.7			Brownish gray SILT AND CLAY, some fine to coarse gravel, little pulverized rock fragments, dry
	0.0					
	0.0					- NATIVE -
	0.0					
	0.0				9.2	
						Gray CLAY, few fine to medium gravel, dry
10	0.0			10		
	0.0	3	4.3			
	0.0					
					11.4	
	0.0					Gray fine to medium SAND AND SILT, some fine to coarse gravel, little clay, dry
	0.0					
	0.0					
15	0.0			15		
						End of boring at 15'
						Samples:
						B27-AREA2-s1: 10.7-11.0' at 15:10
						B27-AREA2-s2: 14.5-14.8' at 15:15
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B28**
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/8/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/8/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road Utica, NY	Weather:	30s, overcast	Supervisor:	L. Best, B. Haravitch

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	1.4	0		Hand-cleared (with air knife/hand auger) to 4.5'
	0.0					
5	0.0			5		Brown fine SAND AND SILT, some clay, little fine gravel, moist
	0.0	2	2.0			
						- NATIVE -
	0.0					Same, becoming gray at 7.5'
	0.0					
10	0.0			10	10.0	
	0.2	3	4.4			Gray fine to medium SAND AND SILT, some fine to medium gravel, little clay, dry
	0.2					
	0.1					
	0.1					
15	0.1			15		
						End of boring at 15'
						Samples: B28-AREA2-s1: 8.0-8.5' at 10:55 B28-AREA2-s2: 10.5-10.8' at 10:50
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B29**
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/8/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/8/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	30s, overcast	Supervisor:	L. Best, B. Haravitch
	Utica, NY				

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	2.2	0		Hand-cleared (with air knife/hand auger) to 3.5'
	0.0					Brown fine to medium SAND, some fine to medium gravel, little silt and clay, dry
	0.0					
5	0.0			5		
	0.2	2	3.8			- NATIVE -
	39.7					
	1.8				7.5	
						Brownish gray CLAY, little fine gravel, dry
	0.0					
10	0.1			10	10.0	
	0.1	3	4.0			Gray fine SAND AND SILT, some fine to coarse gravel, little clay, dry
	0.0					
	0.0					Decreasing gravel content and increasing clay content to bottom
	0.1					
15	0.0			15		
						End of boring at 15'
						Samples:
						B29-AREA2-s1: 6.3-6.6' at 10:25
						B29-AREA2-s2: 9.7-10.0' at 10:30
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: B30
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/8/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/8/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road Utica, NY	Weather:	30s, partly sunny	Supervisor:	L. Best, B. Haravitch

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
		1	2.9	0		Hand-cleared (with air knife/hand auger) to 3'
	23.0					Brown fine SAND AND SILT, little clay and fine to medium gravel, dry
	41.5					
5	20.9			5		
	29.8	2	4.7			Same, with trace pulverized rock fragments
	1.0					
					6.5	
	0.5					Gray fine SAND AND SILT, some clay, little fine to medium gravel, dry
						- NATIVE -
	0.2					
	0.1					
					9.4	
10	0.0			10		Gray fine to medium SAND, some silt, moist
	1.0	3	3.7			
	0.3				11.5	
						Gray CLAY, little coarse sand, trace fine gravel, dry
	0.5					
					13.0	
	0.7					Gray fine to medium SAND AND SILT, little clay and fine to medium gravel, moist
15	0.1			15		
						End of boring at 15'
						Samples:
						B30-AREA2-s1: 6.5-6.8' at 15:40
						B30-AREA2-s2: 14.4-14.7' at 16:00
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: B31
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/8/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/8/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	30s, overcast	Supervisor:	L. Best, B. Haravitch
	Utica, NY				

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	2.6	0		Hand-cleared (with air knife/hand auger) to 3'
	0.3					Brown fine to coarse SAND, some fine to medium gravel, dry
	34.7					
5	93.1			5		
	62.9	2	4.6			Same, with little clay and silt
						- NATIVE -
	91.8					
	94.9					Fining downward and becoming less friable
	106.0					
						Possible paint odor noted at 8.4'
10	49.4			10	10.0	
		3	2.3			Gray CLAY, little silt, trace fine to medium gravel, dry
	1.7					
	0.1					
	0.0					
15				15		
						End of boring at 15'
						Samples:
						B31-AREA2-s1: 3.5-4.0' at 09:15
						B31-AREA2-s2: 11.0-11.3' at 09:35
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: B32
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/10/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/10/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	40s, sunny	Supervisor:	L. Best, C. Yarrington
	Utica, NY				

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	1.0	0		Hand-cleared (with air knife/hand auger) to 4'
5	0.0			5		Grayish brown fine SAND AND SILT, some clay, little fine to coarse gravel, dry
		2	3.3			Same, with little medium to coarse sand
	0.5					
						Increasing clay content towards bottom
	13.8					
	12.7					- NATIVE -
	0.5					
	0.1					
10	0.0			10	10.0	
		3	4.7			Brownish gray SILT AND CLAY, little fine sand and gravel, dry
	0.0					
					11.7	
	0.0					Gray CLAY, little fine sand and fine gravel, dry
	0.0					
15	0.0			15		
						End of boring at 15'
						Samples:
						B32-AREA2-s1: 6.0-6.5' at 11:25
						B32-AREA2-s2 (MS/MSD): 9.5-10.0' at 11:30
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: B33
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/10/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/10/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	40s, sunny	Supervisor:	L. Best, C. Yarrington
	Utica, NY				

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	2.0	0		Hand-cleared (with air knife/hand auger) to 3.5'
5	0.0			5		Brown fine SAND AND SILT, some clay, little medium to coarse gravel, moist
		2	4.2			Brown very fine SAND AND SILT, some clay and fine to coarse gravel, moist
	0.0					
						- NATIVE -
	2.0					Same, but dry
	14.9					
	0.5					Increasing clay content towards bottom
10	0.0			10	10.0	
		3	4.1			Gray CLAY, little silt, fine sand, and fine gravel, dry
	0.0					
	0.0					
	0.0					
15	0.0			15		
						End of boring at 15'
						Samples:
						B33-AREA2-s1: 7.5-7.8' at 11:50
						B33-AREA2-s2: 9.3-9.6' at 11:55
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B34**
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/10/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/10/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	40s, mostly sunny	Supervisor:	L. Best, C. Yarrington
	Utica, NY				

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	2.8	0		Hand-cleared (with air knife/hand auger) to 3'
						Brownish gray fine SAND AND SILT, little clay and fine to coarse gravel, dry
	0.0					
5	0.0			5		
		2	4.7			Same, with increasing clay content, and fining downward (of gravel component)
	0.0					
	0.0					
	0.0					- NATIVE -
	0.0					
					8.4	
	0.0					Gray CLAY, little silt, trace fine gravel, dry
10	0.0			10		
		3	4.8			
					13.6	
						Gray very fine SAND AND SILT, some clay, little medium to coarse gravel, dry
15				15		
						End of boring at 15'
						Sample: B34-AREA2-s1: 6.0-6.3' at 08:50
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B35**
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/8/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/8/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	30s, overcast	Supervisor:	L. Best, B. Haravitch
	Utica, NY				

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	2.2	0		Hand-cleared (with air knife/hand auger) to 3.5'
						Brown fine SAND, some silt and clay, little fine gravel, moist
5	1.0			5		
	1.0	2	2.9		5.5	Same, with pulverized rock fragment 5.4-5.5'
	1.3					Grayish brown fine SAND, some fine to coarse gravel and clay, dry
	56.9					
	2.2					- NATIVE -
	0.9					
10	1.0			10	10.0	
	5.9	3	3.3			Gray fine SAND AND SILT, some medium to coarse sand and fine to medium gravel, little clay, dry
	2.8					Pulverized rock fragments 11.0-11.3'
	0.0					Increasing clay content and decreasing gravel content to bottom
	0.0					
15	0.0			15		Moist at bottom
						End of boring at 15'
						Samples:
						B35-AREA2-s1: 5.7-6.0' at 09:50
						B35-AREA2-s2: 12.5-12.8' at 10:00
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B36**
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/15/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/15/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	Indoors	Supervisor:	L. Best
	Utica, NY		(40s, overcast)		

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	2.5	0		Hand-cleared with air-knife to 3.5'
	0.4					Gray fine SAND AND SILT, some clay, little fine to medium gravel, dry
	8.9					
5	23.5			5		
	65.0	2	4.8			- NATIVE -
	152.3					Same, slight chlorine (?) odor
	126.0					
					8.1	
	234.6				8.5	Gray fine to medium SAND, some silt and fine to medium gravel, little clay, moist
	105.8					Gray fine SAND AND SILT, some clay, little fine to medium gravel, dry
10	115.1			10	10.0	
	3.0	3	4.5			Gray fine SAND AND SILT, some clay and fine to medium gravel, dry
	3.5					
	1.1					Increasing clay content towards bottom
	3.2				12.9	
	4.1					Gray CLAY, few fine gravel, moist
15	3.9			14.75		
						Refusal at 14.75'
						Samples:
						B36-POLEBARN-s1: 4.0-4.5' at 09:15
						B36-POLEBARN-s2: 8.0-8.4' at 10:05
						B36-POLEBARN-s3: 14.4-14.7' at 10:20
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: B37
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/14/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/14/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	Indoors	Supervisor:	L. Best
	Utica, NY		(60s, partly sunny)		

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	3.2	0		Hand-cleared with air knife to 2.5'
	0.4					
	0.5					Brown fine SAND AND SILT, some clay, little fine to medium gravel, dry
	0.5					
5	1.0			5		
	0.3	2	4.7			Same, moist
	0.6					
						- NATIVE -
	0.8					
	6.2					
	310.8				7.7	
	184.3					Gray fine to medium SAND, some silt and fine gravel, little clay, trace coarse gravel, dry
	112.5					
	156.0					Becoming moist towards bottom
10	198.7			10		
		3	3.2			
					12.0	
	19.1					Gray CLAY, little silt, fine sand and gravel, moist
	0.9					
15	1.4			15		
						End of boring at 15'
						Samples:
						B37-POLEBARN-s1: 6.7-7.0' at 16:05
						B37-POLEBARN-s2: 7.7-8.0' at 15:40
						B37-POLEBARN-s3: 14.4-14.9' at 15:55
20						B-POLEBARN-DUP4: 14.4-14.9' at 16:00

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: B38
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	12/14/2015
Project #:	190500800	Driller:	B. Guyette	Completion Date:	12/14/2015
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	Indoors	Supervisor:	L. Best
	Utica, NY		(60s, partly cloudy)		

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
0		1	1.9	0		Hand-cleared with air knife to 1.5'
						Grayish brown fine SAND AND SILT, some clay, little fine gravel, chlorine (?) odor, dry
	1.9					
	1.2					
						- NATIVE -
5	36.5			5		
		2	3.4			Same, but gray
	98.8					
	169.1					
	396.6				8.2	
						Gray fine SAND AND SILT, little clay and fine gravel, chlorine (?) odor, dry
	927.7					
10				10	10.0	
	1.6	3	4.7			Gray CLAY, little medium to coarse sand and fine gravel, chlorine (?) odor, moist
	2.5					
	1.6					
					12.9	
						Gray CLAY, some fine to coarse sand and fine gravel, slight chlorine (?) odor, moist
	10.9					
15	78.7			15	15.0	
		4	2.5			Gray fine to medium SAND AND SILT, some fine to medium gravel, little clay, moist
	1.7					
	1.5					
	29.4					
	3.4					
	2.7			19.5		
20						Refusal at 19.5'
						Samples:
						B38-POLEBARN-s1: 3.8-4.0' at 14:15
						B38-POLEBARN-s2: 9.0-9.3' at 14:40
						B38-POLEBARN-s3: 19.1-19.4' at 15:10

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: B101
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	6/7/2016
Project #:	190500800	Driller:	B. Guyette	Completion Date:	6/7/2016
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	60s, overcast	Supervisor:	L. Best
	Utica, NY				

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	3.0	0		Hand-cleared with hand auger to 3.5' (6/7/16)
	0.0					Brown SILT AND CLAY, some fine sand and gravel, wet
	0.0					
5	0.0			5	5.0	
	0.0	2	4.1			Gray fine SAND, some clay and fine gravel, little silt, trace medium to coarse gravel, moist
	0.0					
	0.0					- NATIVE -
	0.0					
				9.5		
10						Refusal at 9.5'
15						
						Samples:
						B101-AREA2-s1: 7.0-7.5' at 15:25
						B101-AREA2-s2: 9.0-9.5' at 15:30
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B102**
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	6/7/2016
Project #:	190500800	Driller:	B. Guyette	Completion Date:	6/7/2016
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	70s, sunny	Supervisor:	L. Best
	Utica, NY				

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	3.0	0		Hand-cleared with air knife to 3.5' (6/6/16)
	0.0				4.5	Brown fine SAND AND SILT, some clay and fine gravel, trace medium to coarse gravel, moist
5	0.0			5	5.0	Gray fine SAND AND SILT, some clay, little fine gravel, moist
	38.5	2	4.9			Gray fine SAND AND SILT, some clay and fine gravel, moist
	270.1					
	70.6					- NATIVE -
	46.5					
	2.9					
10				10	10.0	
	3.2	3	4.3			Gray SILT AND CLAY, some fine sand and gravel, moist
	0.7				11.0	
						Gray fine to medium SAND, some silt and fine to medium gravel, trace silt, dry
	0.0					
					13.0	
	0.0					Gray CLAY, trace fine sand, trace red [rust?] staining, moist
	0.0			14		
						Refusal at 14'
15						
						Samples:
						B102-AREA2-s1: 6.0-6.5' at 13:45
						B102-AREA2-s2: 12.0-12.5' at 13:55
						B-AREA2-DUP5: 12.0-12.5' at 14:00
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B103**
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	6/7/2016
Project #:	190500800	Driller:	B. Guyette	Completion Date:	6/7/2016
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	70s, overcast,	Supervisor:	L. Best
	Utica, NY		with light rain		

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	3.5	0		Hand-cleared with air knife to 4' (6/6/16)
	382.4					Wet at 4.5-4.6'; chemical-like odor 4-5'
	457.3				4.5	Brown SILT AND CLAY, some fine gravel, trace medium to coarse gravel, moist
5	481.3			5	5.0	Gray SILT AND CLAY, some fine gravel, trace medium to coarse gravel, moist
	189.3	2	4.5			Gray fine SAND AND SILT, some clay and fine to medium gravel, trace coarse gravel, moist
	466.0					
	195.8					
						- NATIVE -
	9.3					
	0.6			9.6		
10						Refusal at 9.6'
15						
						Samples:
						B103-AREA2-s1: 4.5-5.0' at 13:25
						B103-AREA2-s2: 9.0-9.5' at 13:30
20						

Notes:

1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B104**
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	6/8/2016
Project #:	190500800	Driller:	B. Guyette	Completion Date:	6/8/2016
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	Indoors	Supervisor:	L. Best
	Utica, NY		(50s, overcast)		

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	3.4	0		Hand-cleared with air knife to 1' (6/6/16)
					1.4	Dark gray GRAVEL, wet - FILL -
	0.0					Brown fine to medium SAND, some clay and fine gravel
	0.0				3.5	
	0.0					Gray fine SAND AND SILT, some clay and fine gravel, moist
5	0.0			5		
	0.0	2				Same, with little medium to coarse sand, and trace medium to coarse gravel
	0.0					- NATIVE -
	0.0					
	0.0					
	0.0			9.5		
10						Refusal at 9.5'
15						
						Samples:
						B104-AREA2-s1: 4.5-5.0' at 10:30
						B104-AREA2-s2: 8.5-9.0' at 10:40
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B105**
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	6/8/2016
Project #:	190500800	Driller:	B. Guyette	Completion Date:	6/8/2016
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	Indoors	Supervisor:	L. Best
	Utica, NY		(50s, overcast)		

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	3.2	0		Hand-cleared with air knife to 2' (6/6/16)
					2.5	Dark gray GRAVEL, wet - FILL -
	3.3				3.2	Brown fine to medium SAND, some silt and clay, little fine gravel, wet
						Gray fine SAND AND SILT, some clay, little fine gravel, moist
	10.8					
5	51.3			5		
		2				Same, with some medium sand and trace medium to coarse gravel
	0.2					
						- NATIVE -
	0.0					
	0.0					
	0.2			9		
						Refusal at 9'
10						
15						
						Samples:
						B105-AREA2-s1: 4.5-5.0' at 11:00
						B105-AREA2-s2: 8.5-9.0' at 11:05
						B-POLEBARN-DUP6: 8.5-9.0' at 11:10
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B106**
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	6/8/2016
Project #:	190500800	Driller:	B. Guyette	Completion Date:	6/8/2016
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	Indoors	Supervisor:	L. Best
	Utica, NY		(50s, overcast)		

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	2.0	0		Hand-cleared with air knife to 3' (6/6/16)
	0.0				3.2	Dark gray GRAVEL, wet - FILL -
	0.0					Brown medium to coarse SAND, little silt and clay, trace coarse gravel, wet
	0.2				4.5	
5	0.0			5	4.8	Gray medium to coarse SAND, little silt and clay, trace coarse gravel, moist
	0.0	2	3.8			Gray fine SAND AND SILT, some clay and fine gravel, moist
	0.0					
						- NATIVE -
	0.0					
	0.0			9		
						Refusal at 9'
10						
15						
						Samples:
						B106-AREA2-s1: 4.5-5.0' at 11:30
						B106-AREA2-s2: 8.5-9.0' at 11:35
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B107**
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	6/8/2016
Project #:	190500800	Driller:	B. Guyette	Completion Date:	6/8/2016
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road Utica, NY	Weather:	Indoors (50s, light rain, overcast)	Supervisor:	L. Best

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
		1	2.5	0		Hand-cleared with air knife to 1.5' (6/6/16)
	0.0				1.7	Dark gray GRAVEL, wet - FILL -
	0.0				4.0	Brown fine SAND AND SILT, some clay and fine gravel, trace medium to coarse gravel, wet
5	0.0			5		Gray fine SAND AND SILT, some clay and fine gravel, trace medium to coarse gravel, moist
		2	4.5			- NATIVE -
	0.0					
	0.0					
	0.0					
10	0.0			10		
		3	4.3		11.0	
	0.0					Gray CLAY, trace fine gravel and light-colored coarse sand, moist
	0.0					
	0.0			13.5		
15						Refusal at 13.5'
20						**Samples:** B107-AREA2-s1: 5.5-6.0' at 10:05 B107-AREA2-s2 (MS/MSD): 13.0-13.5' at 10:15

Notes:

1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B108**
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	6/8/2016
Project #:	190500800	Driller:	B. Guyette	Completion Date:	6/8/2016
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	Indoors	Supervisor:	L. Best
	Utica, NY		(50s, overcast)		

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	2.0	0		Hand-cleared with air knife to 2' (6/6/16)
	0.0					Gray fine SAND AND GRAVEL, some silt and clay, cow-like [methane?] odor, wet
						- FILL -
	0.0				4.0	
						Gray fine SAND AND SILT, some clay, few fine to coarse gravel, moist
5	0.0			5		
		2	3.3			Same, with cow-like [methane?] odor at 5-6'
	0.0					
	0.0					
	0.0					
						- NATIVE -
	0.0					
10	0.0			10		
	0.0	3	4.4			
	0.0					
	0.0					
	0.0				13.0	
						Gray CLAY, few fine gravel, moist
	0.0			14		
						Refusal at 14'
15						
						Samples:
						B108-AREA2-s1 (MS/MSD): 7.5-8.0' at 09:30
						B108-AREA2-s2: 13.5-14.0' at 09:45
20						

Notes:

1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B109**
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	6/7/2016
Project #:	190500800	Driller:	B. Guyette	Completion Date:	6/7/2016
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	60s, mostly	Supervisor:	L. Best
	Utica, NY		cloudy		

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	2.6	0		Hand-cleared with air knife to 4' (6/6/16)
5	0.0			5	5.0	Brown SILT AND CLAY, few fine gravel, trace medium to coarse sand, moist
		2	1.5			Gray fine SAND, some clay and fine gravel, trace silt and medium to coarse gravel, moist
	0.0					
	0.0					
	0.0					- NATIVE -
	0.0					
10				10	10.0	
	0.0	3	4.4			Gray fine to medium SAND AND SILT, trace clay and fine gravel, wet
					11.0	
	0.0				11.5	Gray fine to medium SAND AND SILT, some fine to medium gravel, dry
						Gray CLAY, trace coarse sand and fine gravel, moist
	0.0					
	0.0					
					14.0	
	0.0					Gray CLAY, some fine to medium gravel, trace coarse sand, moist
15				15		
						Refusal at 15'
						Samples:
						B109-AREA2-s1: 7.0-7.5' at 13:00
						B109-AREA2-s2: 11.0-11.5' at 13:05
20						

Notes:

1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B110**
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	6/7/2016
Project #:	190500800	Driller:	B. Guyette	Completion Date:	6/7/2016
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	60s, partly	Supervisor:	L. Best
	Utica, NY		cloudy		

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	2.4	0		Hand-cleared with air knife to 4.5' (6/6/16)
5	5.7			5	5.0	Brown SAND AND GRAVEL, wet - FILL -
	33.0	2	4.1			Gray SILT AND CLAY, some fine gravel, moist
	20.3				6.5	
	2.6					Gray fine SAND AND SILT, some clay and fine gravel, moist
	0.3					- NATIVE -
	0.0					
10				10	10.0	
		3	0.0			Sample core 10.0-14.5' not recovered (see B110b)
				14.5		
15						Refusal at 14.5'
						Samples:
						B110-AREA2-s1: 5.0-5.5' at 11:25
						B110-AREA2-s2: 9.0-9.5' at 11:45
20						

Notes:

1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B110b**
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Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	6/8/2016
Project #:	190500800	Driller:	B. Guyette	Completion Date:	6/8/2016
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	50s, rain	Supervisor:	L. Best
	Utica, NY				

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
						Hand-cleared with air knife to 4' (6/8/16) Drilled to 10' (6/8/16)
10						
	0.0	1	4.7	10		Gray fine to medium SAND AND SILT, some clay and fine gravel, moist
	0.0				12.3	
	0.0					Gray CLAY, little medium to coarse sand, moist
	0.0					- NATIVE -
	0.0			14.5		
15						Refusal at 14.5'
20						**Samples:** No samples collected

Notes:

1. PID Model Mini-Rae 3000 with 10.6eV lamp.

Stantec

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(585) 475-1440

Test Boring No.: B111
Page: 1 of 1

Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	6/7/2016
Project #:	190500800	Driller:	B. Guyette	Completion Date:	6/7/2016
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	60s, partly	Supervisor:	L. Best
	Utica, NY		sunny		

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	1.8	0		Hand-cleared with air knife to 3.5' (6/6/16)
	0.1					Brown fine to medium SAND, some clay and fine to medium gravel, trace coarse sand and gravel, moist
5	0.1			5	5.0	
	0.0	2	4.4			Gray fine to medium SAND AND GRAVEL, some silt, few clay, trace coarse gravel, dry
	0.0					
	0.0					Possible cleaning product odor at 8'
	0.0					- NATIVE -
10				10	10.0	
	0.0	3	4.3			Gray CLAY, some fine sand, few fine to medium gravel, moist
	0.0					
	0.1				12.5	
	0.0					Gray fine to medium SAND, some silt and fine gravel, trace clay, moist
	0.1					
15				15	15.0	
	0.1	4	4.6			Gray fine to medium SAND, some fine gravel, few clay, wet
	0.0				16.5	
	0.0					Gray fine to medium SAND, some silt and fine gravel, trace clay and coarse gravel, moist
	0.0					**Samples:**
	0.0					B111-AREA2-s1: 7.8-8.2' at 10:20
20				20		B111-AREA2-s2: 14.0-14.5' at 10:55
						End boring at 20'

Notes:

1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B112**
Page: **1 of 1**

Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	6/7/2016
Project #:	190500800	Driller:	B. Guyette	Completion Date:	6/7/2016
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	60s, mostly	Supervisor:	L. Best
	Utica, NY		cloudy		

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	2.8	0		Hand-cleared with air knife to 4' (6/6/16)
	0.0					Reddish brown fine to medium SAND, some clay and fine gravel, moist
5	0.1			5		
	0.0	2	4.9		5.5	
	0.1					Gray fine SAND, some clay and fine gravel, few medium to coarse sand, trace medium to coarse gravel, dry
	0.0					
	0.0					
						- NATIVE -
	0.0					
10	0.0			10		
	0.0	3	4.5			
					10.9	
	0.1					Gray CLAY, trace fine to medium sand and fine gravel, moist
	0.0					
	0.1				13.2	Pulverized cobble at 13.0-13.2'
						Gray fine to medium SAND, some clay and fine gravel, moist
	0.0			14.5		
15						Refusal at 14.5'
						Samples:
						B112-AREA2-s1: 6.5-7.0' at 09:50
						B112-AREA2-s2: 14.0-14.5' at 09:55
20						

Notes:

1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B113**
Page: **1 of 1**

Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	6/7/2016
Project #:	190500800	Driller:	B. Guyette	Completion Date:	6/7/2016
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	60s, overcast	Supervisor:	L. Best
	Utica, NY				

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	4.3	0		Hand-cleared with air knife to 4' (6/6/16)
	0.1					Reddish brown fine SAND, some silt and clay, few fine to medium gravel, trace coarse
5				5	5.0	sand, moist
	0.1	2	4.8			Gray fine SAND, some fine to medium gravel, few clay, moist
	0.0					
	0.0					
					8.0	
	0.3					Gray medium to coarse SAND, some clay and fine to medium gravel, moist
						Wet at 8.5-9.0'
	0.2					
10	0.2			10	10.0	
	0.1	3	4.7			Gray CLAY, few fine to medium gravel, wet
					11.0	
	0.1					Gray fine to medium SAND, some fine to medium gravel, few clay, moist
	0.1					- NATIVE -
	0.2				14.0	
15	0.0			15		Gray fine to medium SAND, some clay and fine gravel, trace medium to coarse gravel, moist
		4	4.5			
	0.1					
	0.0					
	0.0					**Samples:**
						B113-AREA2-s1: 8.0-8.5' at 09:15
	0.0					B113-AREA2-s2: 19.5-20.0' at 09:20
20	0.0			20		
						End boring at 20'

Notes:

1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B114**
Page: **1 of 1**

Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	6/6/2016
Project #:	190500800	Driller:	B. Guyette	Completion Date:	6/7/2016
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	70s, sunny	Supervisor:	L. Best
	Utica, NY	(6/7/16)	60s, overcast		

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	1.7	0		Hand-cleared with air knife to 4' (6/6/16)
5	0.0			5		Brown fine to medium SAND, some fine to medium gravel, minor red [rust?] staining, dry
		2	3.3			Same, with no red coloration
	0.1					
	0.1					- NATIVE? -
					8.0	
	0.2					Gray fine SAND, some clay and fine gravel, trace medium to coarse gravel, moist
	0.1					Wet at 9.5'
10	0.0			10		
		3	4.5			
	0.0				11.0	
	0.0					Gray fine to medium SAND, some silt and fine to medium gravel, trace clay, dry
	0.0					- NATIVE -
15	0.0			15		
	0.0	4	4.7			
	0.1				16.0	
						Gray fine to medium SAND, some clay, trace fine to medium gravel, moist
	0.1				17.3	
						Gray fine SAND AND SILT, some fine to medium gravel, few clay, dry
	0.0					**Samples:**
						B114-AREA2-s1: 8.0-8.5' at 08:30
	0.0					B114-AREA2-s2: 15.0-15.5' at 08:35
	0.1			19.5		
20						Refusal at 19.5'

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

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Test Boring No.: **B115**
Page: **1 of 1**

Project:	LMC Utica	Drill Contractor:	NYEG	Start Date:	6/7/2016
Project #:	190500800	Driller:	B. Guyette	Completion Date:	6/7/2016
Client:	Lockheed Martin Corporation	Elevation:	NM	Drilling Method:	Direct Push w/macrocore
Location:	525 French Road	Weather:	60s, partly	Supervisor:	L. Best
	Utica, NY		sunny		

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	3.5	0		Hand-cleared with air knife to 3.5' (6/6/16)
	0.2					Brown fine SAND AND SILT, some clay and fine gravel, moist
	4.2					
5	18.3			5	5.0	
	11.0	2	3.8			Gray SILT AND CLAY, some fine sand and gravel, moist
	22.5					
					7.5	Pulverized cobble 7.3-7.5'
	0.0					Gray fine SAND AND SILT, some clay and fine to medium gravel, moist
	0.0					
10				10		- NATIVE -
	0.0	3	4.6			
	0.0					
	0.0					
	0.0				14.1	
15	0.0			15		Gray CLAY, few fine sand and gravel, moist
						Refusal at 15'
						Samples:
						B115-AREA2-s1: 6.0-6.5' at 15:50
						B115-AREA2-s2: 9.0-9.5' at 15:55
20						

Notes:
1. PID Model Mini-Rae 3000 with 10.6eV lamp.

APPENDIX C
Analytical Laboratory Results

APPENDIX D
Data Usability Summary Reports

Stantec Data Usability Summary Report **Report No. 012116-EC-01**

Project Name: Lockheed, Utica, NY	Project Number: 190500800
Stantec Validator: Elizabeth Crowley	Laboratory: Test America, Buffalo, NY
Date Validated: 12/21/15	Laboratory Project Number: 480-91253-1
Sample Start-End Date: 11/17/15	Laboratory Report Date: 11/24/15
Parameters Validated: Poly Chlorinated Biphenyls (Aroclor PCBs) by EPA SW 846 8082A	
Samples Validated: 23 soil samples and 1 Rinse Blank– See Samples Validated Table	

VALIDATION CRITERIA CHECK

Data review based on *Quality Assurance Program Plan, Solvent Deck Area, Former French Road Facility, Utica, NY* October 14, 2009, *USEPA National Functional Guidelines* (USEPA, 1999b), USEPA Region II SOPs and NYSDEC ASP 2005 – Tier III Validation

Validation Flags Applicable to this Review:

U The analyte was analyzed for, but not detected above the reported sample quantitation limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

B The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	
Comments:		
2. Did the laboratory identify any non-conformances related to the analytical result?	Yes X	No
Comments: Case Narrative lists minor issues regarding the analyses. Only issues requiring qualify flags are discussed in this report.		
3. Were sample Chain-of-Custody forms complete?	Yes X	No
Comments:		
4. Were samples received in good condition and at the appropriate temperature?	Yes X	No
Comments:		
5. Were sample holding times met?	Yes X	No
Comments:		
6. Were correct concentration units reported?	Yes X	No
Comments:		

7. Were detections found in laboratory blank samples?	Yes	No X
Comments:		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?	Yes	No X
Comments:		
9. Were instrument calibrations within method criteria?	Yes X	No
Comments:		
10. Were surrogate recoveries within 30 – 150% control limits?	Yes X	No
Comments:		
11. Were laboratory control (LC/LD) sample recoveries within 50-150% control limits?	Yes X	No
Comments:		
12. Were site specific matrix spike (MS/MD) recoveries within 29-135% control limits?	Yes X	No
Comments:		
13. Were RPDs within 20% control limit?	Yes X	No
Comments:		
14. Were dilutions required on any samples?	Yes X	No
Comments: Samples analyzed at multiple dilutions. No qualifying action taken.		
15. Were results reported that are below the reporting limit?	Yes X	No
Comments: Sample results below the reporting limit do not possess the degree of qualitative or quantitative confidence required. The value may be a false positive and is an estimated value and is flagged “NJ”. Reason Code – SQL		
16. Were organic system performance criteria met?	Yes	No X
Comments: The difference between the primary and confirmation columns are above the ±25% limit for Aroclor 1254 for samples: SS20-1 (46%), SS20-4 (50%), SS20-5(56%), SS20-8 (50%), SS21-1 (46%), SS21-2 (49%), SS21-3 (35%), SS21-5 (51%), SS21-6 (40%), SS21-DUP (51%, SS21-7 (34%), SS21-8 (48%), SS7-4 (33%), SS7-6 (30%) and SS7-8 (29%). Associated sample results flagged “J”. Reason Code – COL		
17. Were GC/MS internal standards within method criteria?	Yes NA	No
Comments: Method 8082A is not a GC/MS method.		

18. Were inorganic method performance criteria met?	NA	Yes	No
Comments: No inorganic analyses requested.			
19. Were field duplicates collected? If so, discuss the precision (RPD) of the results. Duplicate Sample Nos. SS21-1 SS21-DUP (Pair 1) SS7-3 SS7-DUP (Pair 2)		Yes X	No
Comments: Pair 1 - All RPDs within ±25% limit. Pair 2 – All results non-detect, RPD within limits.			
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No	Initials EAC
Comments:			
21. Other:		Yes	No X
Comments:			

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT

Data are usable as flagged. See Form 1s for flagged data.

Precision:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Sensitivity:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Representativeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Stantec Data Usability Summary Report **Report No. 012216-EC-01**

Project Name: Lockheed, Utica, NY	Project Number: 190500800
Stantec Validator: Elizabeth Crowley	Laboratory: Test America, Buffalo, NY
Date Validated: 12/28/15	Laboratory Project Number: 480-91550-1
Sample Start-End Date: 11/20/15	Laboratory Report Date: 11/24/15
Parameters Validated: Poly Chlorinated Biphenyls (Aroclor PCBs) by EPA SW 846 8082A	
Samples Validated: 3 soil samples – See Samples Validated Table	

VALIDATION CRITERIA CHECK

Data review based on *Quality Assurance Program Plan, Solvent Deck Area, Former French Road Facility, Utica, NY* October 14, 2009, *USEPA National Functional Guidelines* (USEPA, 1999b), USEPA Region II SOPs and NYSDEC ASP 2005 – Tier III Validation

Validation Flags Applicable to this Review:

U The analyte was analyzed for, but not detected above the reported sample quantitation limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

B The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	
Comments:		
2. Did the laboratory identify any non-conformances related to the analytical result?	Yes X	No
Comments: Case Narrative lists minor issues regarding the analyses. Only issues requiring qualify flags are discussed in this report.		
3. Were sample Chain-of-Custody forms complete?	Yes X	No
Comments:		
4. Were samples received in good condition and at the appropriate temperature?	Yes X	No
Comments:		
5. Were sample holding times met?	Yes X	No
Comments:		
6. Were correct concentration units reported?	Yes X	No
Comments:		

7. Were detections found in laboratory blank samples?	Yes	No X
Comments:		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples? NA	Yes	No
Comments: No blank samples submitted, no qualifying action required.		
9. Were instrument calibrations within method criteria?	Yes X	No
Comments:		
10. Were surrogate recoveries within 30-150% control limits?	Yes X	No
Comments:		
11. Were laboratory control (LC/LD) sample recoveries within 50-150% control limits?	Yes X	No
Comments:		
12. Were site specific matrix spike (MS/MD) recoveries within 29-135% control limits?	Yes X	No
Comments:		
13. Were RPDs within 20% control limit?	Yes X	No
Comments:		
14. Were dilutions required on any samples?	Yes X	No
Comments: Samples analyzed at multiple dilutions. No qualifying action taken.		
15. Were results reported that are below the reporting limit?	Yes X	No
Comments: Sample results below the reporting limit do not possess the degree of qualitative or quantitative confidence required. The value may be a false positive and is an estimated value and is flagged “NJ”. Reason Code – SQL		
16. Were organic system performance criteria met?	Yes	No X
Comments: The difference between the primary and confirmation columns are above the ±25% limit for Aroclor 1254 for samples: SS20-2 (53%) and SS20-3 (26%). Associated sample results flagged “J”. Reason Code – COL		
17. Were GC/MS internal standards within method criteria? NA	Yes	No
Comments: Method 8082A is not a GC/MS method.		
18. Were inorganic method performance criteria met? NA	Yes	No

Comments: No inorganic analyses requested.		
19. Were field duplicates collected? If so, discuss the precision (RPD) of the results. Duplicate Sample Nos.	Yes	No X
Comments:		
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No Initials EAC
Comments:		
21. Other:	Yes	No X
Comments:		

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT

Data are usable as flagged. See Form 1s for flagged data.

Precision:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Sensitivity:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Representativeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Stantec Data Usability Summary Report **Report No. 012216-EC-03**

Project Name: Lockheed, Utica, NY	Project Number: 190500800
Stantec Validator: Elizabeth Crowley	Laboratory: Test America, Buffalo, NY
Date Validated: 12/28/15	Laboratory Project Number: 480-91550-2
Sample Start-End Date: 11/19-11/20/15	Laboratory Report Date: 12/03/15

Parameters Validated: Volatile Organic Compounds by EPA SW 846 8260C

Samples Validated: 1 water sample, 1 sediment sample, 1 Rinse Blank and 1 Trip Blank – See Samples Validated Table

VALIDATION CRITERIA CHECK

Data review based on *Quality Assurance Program Plan, Solvent Deck Area, Former French Road Facility, Utica, NY* October 14, 2009, *USEPA National Functional Guidelines* (USEPA, 1999b), USEPA Region II SOPs and NYSDEC ASP 2005 – Tier III Validation

Validation Flags Applicable to this Review:

U The analyte was analyzed for, but not detected above the reported sample quantitation limit.
J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
B The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	
Comments:		
2. Did the laboratory identify any non-conformances related to the analytical result?	Yes X	No
Comments: Case narrative listed several minor quality issues. Issues requiring qualification are discussed in detail in sections below.		
3. Were sample Chain-of-Custody forms complete?	Yes X	No
Comments:		
4. Were samples received in good condition and at the appropriate temperature?	Yes X	No
Comments:		
5. Were sample holding times met?	Yes X	No
Comments:		
6. Were correct concentration units reported?	Yes	No

	X	
Comments:		
7. Were detections found in laboratory blank samples?	Yes	No X
Comments:		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?	Yes	No X
Comments:		
9. Were instrument calibrations within method criteria?	Yes	No X
Comments: Continuing Calibration for instrument HP5973F dated 11/24/15 batch 276587 - %D below ±20% limit for dichlorodifluoromethane (-28%) and trichlorofluoromethane (-21%) and if positive or "UJ" if non-detect. %Ds above limits for acetone (22%), 2-butanone (29%) and 2-hexanone (27%). Associated sample results flagged "J" Continuing Calibration for instrument HP5973Q dated 11/24/15 batch 276597 - %D above ±20% limit for acetone (22%), 4-methyl-2-pentanone (25%), 2-butanone (29%). Associated sample results non-detect. No qualifying action required. %D below limits for bromomethane (-28%). Associated sample results flagged "J" if positive or "UJ" if non-detect Reason Code – CCAL		
10. Were surrogate recoveries within 70-130% control limits?	Yes X	No
Comments:		
11. Were laboratory control (LC/LD) sample recoveries within 70-130% control limits?	Yes X	No
Comments:		
12. Were site specific matrix spike (MS/MD) recoveries within 70-130% control limits?	Yes X	No
Comments:		
13. Were RPDs within 30% control limit?	Yes X	No
Comments:		
14. Were dilutions required on any samples?	Yes X	No
Comments: Samples analyzed at multiple dilutions. No qualifying action taken.		
15. Were results reported that are below the reporting limit?	Yes X	No
Comments: Sample results below the reporting limit do not possess the degree of qualitative or quantitative confidence required. The value may be a false positive and is an estimated value and is flagged "J". Reason Code – SQL		
16. Were organic system performance/instrument tune criteria met?	Yes	No

		X	
Comments:			
17. Were GC/MS internal standards within method criteria?		Yes X	No
Comments:			
18. Were inorganic method performance criteria met?	NA	Yes	No
Comments: No inorganic analyses requested.			
19. Were field duplicates collected? If so, discuss the precision (RPD) of the results. Duplicate Sample Nos.		Yes	No X
Comments:			
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No	Initials EAC
Comments:			
21. Other:		Yes	No X
Comments:			

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT

Data are usable as flagged. See Form 1s for flagged data.

Precision:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Sensitivity:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Representativeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Stantec Data Usability Summary Report **Report No. 012216-EC-04**

Project Name: Lockheed, Utica, NY	Project Number: 190500800
Stantec Validator: Elizabeth Crowley	Laboratory: Test America, Buffalo, NY
Date Validated: 12/29/15	Laboratory Project Number: 480-91710-1
Sample Start-End Date: 11/23-11/24/15	Laboratory Report Date: 12/07/15

Parameters Validated: Volatile Organic Compounds by EPA SW 846 8260C

Samples Validated: 7 soil samples – See Samples Validated Table

VALIDATION CRITERIA CHECK

Data review based on *Quality Assurance Program Plan, Solvent Deck Area, Former French Road Facility, Utica, NY* October 14, 2009, *USEPA National Functional Guidelines* (USEPA, 1999b), USEPA Region II SOPs and NYSDEC ASP 2005 – Tier III Validation

Validation Flags Applicable to this Review:

U The analyte was analyzed for, but not detected above the reported sample quantitation limit.
J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
B The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	
Comments:		
2. Did the laboratory identify any non-conformances related to the analytical result?	Yes X	No
Comments: Case narrative listed several minor quality issues. Issues requiring qualification are discussed in detail in sections below.		
3. Were sample Chain-of-Custody forms complete?	Yes X	No
Comments:		
4. Were samples received in good condition and at the appropriate temperature?	Yes X	No
Comments:		
5. Were sample holding times met?	Yes X	No
Comments:		
6. Were correct concentration units reported?	Yes	No

	X	
Comments:		
7. Were detections found in laboratory blank samples?	Yes X	No
Comments: Batch277087 – acetone = 23.0 µg/kg and tetrachloroethene = 0.88 µg/kg. Batch 277216 – acetone = 19.3 µg/kg, methylene chloride = 9.1 µg/kg and tetrachloroethene = 0.63 µg/kg. Sample results below the blank concentration are validated to non-detect and flagged "UJB". Sample results greater than the blank concentration are flagged "JB". The detection limit changed to the blank concentration. Sample results greater than 10 times the blank concentration require no qualifying action. Reason Code – MB		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?	Yes	No X
Comments: Rinse blank results reported in data package 480-91710-2.		
9. Were instrument calibrations within method criteria?	Yes	No X
Comments: Continuing Calibration dated 11/26/15 batch 277335 - %D below ±20% limit for chloroethane (-28%) and 2-butanone (-23%) acetone. Associated sample results flagged "J" if positive or "UJ" if non-detect Reason Code – CCAL		
10. Were surrogate recoveries within 70-130% control limits?	Yes X	No
Comments:		
11. Were laboratory control (LC/LD) sample recoveries within 70-130% control limits?	Yes X	No
Comments:		
12. Were site specific matrix spike (MS/MD) recoveries within 70-130% control limits?	Yes X	No
Comments:		
13. Were RPDs within 30% control limit?	Yes X	No
Comments:		
14. Were dilutions required on any samples?	Yes X	No
Comments: Samples analyzed at multiple dilutions. No qualifying action taken.		
15. Were results reported that are below the reporting limit?	Yes X	No
Comments: Sample results below the reporting limit do not possess the degree of qualitative or quantitative confidence required. The value may be a false positive and is an estimated value and is flagged "J". Reason Code – SQL		
16. Were organic system performance/instrument tune	Yes	No

criteria met?		X	
Comments:			
17. Were GC/MS internal standards within method criteria?		Yes	No X
Comments: One of three internal standards %R is below method limits for B23-AREA2-S2, B24-AREA2-S1 and B22-POLEBARN-S3. Associated sample results flagged "J" if positive or "UJ" if non-detect. Reason Code – IS			
18. Were inorganic method performance criteria met?	NA	Yes	No
Comments: No inorganic analyses requested.			
19. Were field duplicates collected? If so, discuss the precision (RPD) of the results. Duplicate Sample Nos.		Yes	No X
Comments:			
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No	Initials EAC
Comments:			
21. Other:		Yes X	No
Comments: Questionable Chromatograms – The chromatogram and/or spectra is questionable for 1,1,1-trichloroethane for B22-POLEBARN-S1 and B22-POLEBARN-S3. Associated sample results flagged "J". Reason Code – ID			

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT

Data are usable as flagged. See Form 1s for flagged data.

Precision:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Sensitivity:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Representativeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC

Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Stantec Data Usability Summary Report **Report No. 012216-EC-05**

Project Name: Lockheed, Utica, NY	Project Number: 190500800
Stantec Validator: Elizabeth Crowley	Laboratory: Test America, Buffalo, NY
Date Validated: 12/31/15	Laboratory Project Number: 480-91710-2
Sample Start-End Date: 11/24/15	Laboratory Report Date: 12/07/15
Parameters Validated: Volatile Organic Compounds by EPA SW 846 8260C	
Samples Validated: 1 Rinse Blank – See Samples Validated Table	

VALIDATION CRITERIA CHECK

Data review based on *Quality Assurance Program Plan, Solvent Deck Area, Former French Road Facility, Utica, NY* October 14, 2009, *USEPA National Functional Guidelines* (USEPA, 1999b), USEPA Region II SOPs and NYSDEC ASP 2005 – Tier III Validation

Validation Flags Applicable to this Review:

U The analyte was analyzed for, but not detected above the reported sample quantitation limit.
J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
B The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	
Comments:		
2. Did the laboratory identify any non-conformances related to the analytical result?	Yes X	No
Comments: Case narrative listed several minor quality issues. Issues requiring qualification are discussed in detail in sections below.		
3. Were sample Chain-of-Custody forms complete?	Yes X	No
Comments:		
4. Were samples received in good condition and at the appropriate temperature?	Yes X	No
Comments:		
5. Were sample holding times met?	Yes X	No
Comments:		
6. Were correct concentration units reported?	Yes	No

		X	
Comments:			
7. Were detections found in laboratory blank samples?		Yes	No X
Comments:			
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?		Yes	No X
Comments:			
9. Were instrument calibrations within method criteria?		Yes X	No
Comments:			
10. Were surrogate recoveries within 70-130% control limits?		Yes X	No
Comments:			
11. Were laboratory control (LC/LD) sample recoveries within 70-130% control limits?		Yes X	No
Comments:			
12. Were site specific matrix spike (MS/MD) recoveries within 70-130% control limits?	NA	Yes	No
Comments: No matrix data reported.			
13. Were RPDs within 30% control limit?	NA	Yes	No
Comments: Sample results non-detect, no precision data required.			
14. Were dilutions required on any samples?		Yes	No X
Comments:			
15. Were results reported that are below the reporting limit?		Yes	No X
Comments:			
16. Were organic system performance/instrument tune criteria met?		Yes X	No
Comments:			
17. Were GC/MS internal standards within method criteria?		Yes X	No
Comments:			
18. Were inorganic method performance criteria met?	NA	Yes	No
Comments: No inorganic analyses requested.			

19. Were field duplicates collected? If so, discuss the precision (RPD) of the results.	Yes	No X
Duplicate Sample Nos.		
Comments:		

20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No	Initials EAC
Comments:			

21. Other:	Yes	No X
Comments:		

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT

Data are usable as flagged. See Form 1s for flagged data.

Precision:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Sensitivity:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Representativeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Stantec Data Usability Summary Report **Report No. 012516-EC-06**

Project Name: Lockheed, Utica, NY	Project Number: 190500800
Stantec Validator: Elizabeth Crowley	Laboratory: Test America, Buffalo, NY
Date Validated: 12/31/15	Laboratory Project Number: 480-92213-1
Sample Start-End Date: 12/02-12/04/155	Laboratory Report Date: 12/21/15
Parameters Validated: Volatile Organic Compounds by EPA SW 846 8260C	
Samples Validated: 15 soil samples and 1 Rinse Blank– See Samples Validated Table	

VALIDATION CRITERIA CHECK

Data review based on *Quality Assurance Program Plan, Solvent Deck Area, Former French Road Facility, Utica, NY* October 14, 2009, *USEPA National Functional Guidelines* (USEPA, 1999b), USEPA Region II SOPs and NYSDEC ASP 2005 – Tier III Validation

Validation Flags Applicable to this Review:

U The analyte was analyzed for, but not detected above the reported sample quantitation limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

B The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	
Comments:		
2. Did the laboratory identify any non-conformances related to the analytical result?	Yes X	No
Comments: Case Narrative lists minor issues regarding the analyses. Only issues requiring qualify flags are discussed in this report.		
3. Were sample Chain-of-Custody forms complete?	Yes X	No
Comments:		
4. Were samples received in good condition and at the appropriate temperature?	Yes X	No
Comments:		
5. Were sample holding times met?	Yes X	No
Comments:		
6. Were correct concentration units reported?	Yes X	No
Comments:		

7. Were detections found in laboratory blank samples?	Yes X	No
Comments: Batch 279063 – acetone = 7.8 µg/kg. Batch 279212 – acetone = 7.1 µg/kg. Batch 279321 – acetone = 8.9 µg/kg. Sample results below the blank concentration are validated to non-detect and flagged "UJB". Sample results greater than the blank concentration are flagged "JB". The detection limit changed to the blank concentration. Sample results greater than 10 times the blank concentration require no qualifying action. Reason Code – MB		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?	Yes	No X
Comments:		
9. Were instrument calibrations within method criteria?	Yes	No X
Comments: Continuing Calibration batch 280176 - %D below ±20% limit for dichlorodifluoromethane (-28%), chloromethane (-34%) and vinyl chloride (-31%). Associated sample results flagged "UJ". Reason Code – CCAL		
10. Were surrogate recoveries within 70-130% control limits?	Yes X	No
Comments:		
11. Were laboratory control (LC/LD) sample recoveries within 70-130% control limits?	Yes X	No
Comments:		
12. Were site specific matrix spike (MS/MD) recoveries within 70-130% control limits?	Yes	No X
Comments: Batch 279212 - %Rs below limits for all analytes. Associated results flagged "J" if positive or "UJ" if non-detect for B9-AREA2-S2 only. Batch 279321 - %Rs below limits for all analytes. Associated results flagged "J" if positive or "UJ" if non-detect for B-AREA2-DUP1 only. Reason Code – MS		
13. Were RPDs within 20% control limit?	Yes X	No
Comments:		
14. Were dilutions required on any samples?	Yes X	No
Comments: Samples analyzed at multiple dilutions. No qualifying action taken.		
15. Were results reported that are below the reporting limit?	Yes X	No
Comments: Sample results below the reporting limit do not possess the degree of qualitative or quantitative confidence required. The value may be a false positive and is an estimated value and is flagged "NJ". Reason Code – SQL		

16. Were organic GC/MS system performance criteria met?	Yes X	No
Comments:		
17. Were GC/MS internal standards within method criteria?	Yes	No X
Comments: One or more internal standards are below limits for B3-AREA2-S2 (2 of 3), B9-AREA2-S2 (2 of 3), B26-AREA2-S1 (1 of 3), B8-AREA2-S1 (2 of 3), B-AREA2-DUP1 (2 of 3), B25-AREA2-S2 (2 of 3), B6-AREA2-S1 (1 of 3) and B6-AREA2-S2 (2 of 3). Associated sample results flagged "J" if positive or "UJ" if non-detect. Reason Code – IS		
18. Were inorganic method performance criteria met?	NA Yes	No
Comments: No inorganic analyses requested.		
19. Were field duplicates collected? If so, discuss the precision (RPD) of the results. Duplicate Sample Nos. B-AREA2-DUP1 B8-AREA2-S1	Yes X	No
Comments: All RPDs within limits except methylene chloride. Associated result flagged "J" for duplicate samples only. Reason Code – FDUP		
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No Initials EAC
Comments:		
21. Other:	Yes	No X
Comments:		

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT

Data are usable as flagged. See Form 1s for flagged data.

Precision:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Sensitivity:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Representativeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Stantec Data Usability Summary Report **Report No. 012516-EC-07**

Project Name: Lockheed, Utica, NY	Project Number: 190500800
Stantec Validator: Elizabeth Crowley	Laboratory: Test America, Buffalo, NY
Date Validated: 01/14/16	Laboratory Project Number: 480-92332-1
Sample Start-End Date: 12/07-12/08/155	Laboratory Report Date: 12/31/15
Parameters Validated: Volatile Organic Compounds by EPA SW 846 8260C	
Samples Validated: 31 soil samples and 1 Rinse Blank– See Samples Validated Table	

VALIDATION CRITERIA CHECK

Data review based on *Quality Assurance Program Plan, Solvent Deck Area, Former French Road Facility, Utica, NY* October 14, 2009, *USEPA National Functional Guidelines* (USEPA, 1999b), USEPA Region II SOPs and NYSDEC ASP 2005 – Tier III Validation

Validation Flags Applicable to this Review:

U The analyte was analyzed for, but not detected above the reported sample quantitation limit.
J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
B The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	
Comments:		
2. Did the laboratory identify any non-conformances related to the analytical result?	Yes X	No
Comments: Case Narrative lists minor issues regarding the analyses. Only issues requiring qualify flags are discussed in this report.		
3. Were sample Chain-of-Custody forms complete?	Yes X	No
Comments:		
4. Were samples received in good condition and at the appropriate temperature?	Yes X	No
Comments:		
5. Were sample holding times met?	Yes X	No
Comments:		
6. Were correct concentration units reported?	Yes X	No
Comments:		

7. Were detections found in laboratory blank samples?	Yes	No
	X	
Comments: Batch 279534 – acetone = 6.6 µg/kg. Batch 279691 – acetone = 5.4 µg/kg. Batch 279989 – acetone = 6.8 µg/kg and toluene = 0.41 µg/kg. Batch 280185 – acetone = 5.9 µg/kg. Batch 280604 – carbon disulfide = 0.31 µg/L. Sample results below the blank concentration are validated to non-detect and flagged "UJB". Sample results greater than the blank concentration are flagged "JB". The detection limit changed to the blank concentration. Sample results greater than 10 times the blank concentration require no qualifying action. Reason Code – MB		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?	Yes	No
	X	
Comments: SB-RINSEBLANK2 – carbon disulfide = 0.45 µg/L. Sample results below the blank concentration are validated to non-detect and flagged "UJB". Sample results greater than the blank concentration are flagged "JB". The detection limit changed to the blank concentration. Sample results greater than 10 times the blank concentration require no qualifying action. Reason Code – EB		
9. Were instrument calibrations within method criteria?	Yes	No
	X	
Comments: Continuing Calibration batch 280176 - %D below ±20% limit for dichlorodifluoromethane (-28%), chloromethane (-34%) and vinyl chloride (-31%). Continuing Calibration batch 281166 - %D below ±20% limit for Chloromethane (-22%). Continuing Calibration batch 280696 - %D below ±20% limit for dichlorodifluoromethane (-27%), chloromethane (-32%), 1,1-dichloroethene (-21%) and vinyl chloride (-27%). Continuing Calibration batch 280772 - %D below ±20% limit for bromomethane (-25%), chloromethane (-28%) and vinyl chloride (-34%). Continuing Calibration batch 280772 - %D below ±20% limit for chloromethane (-29%) and vinyl chloride (-24%). Associated sample results flagged "J" if positive or "UJ" if non-detect. Reason Code – CCAL		
10. Were surrogate recoveries within 70-130% control limits?	Yes	No
	X	
Comments:		
11. Were laboratory control (LC/LD) sample recoveries within 70-130% control limits?	Yes	No
		X

Comments: Batch 280176 - %R below limits for 1,1-dichloroethene. Batch 281166 - %R below limits for bromomethane and dichlorodifluoromethane. Associated result flagged “J” if positive or “UJ” if non-detect. Reason Code – LCS		
12. Were site specific matrix spike (MS/MD) recoveries within 70-130% control limits?	Yes	No X
Comments: Batch 279815 - %Rs below limits for 1,2-dichlorobenzene, 1,2-dichloroethane, chlorobenzene, cis-1,2-dichloroethene, ethylbenzene, tetrachloroethene, toluene, trans-1,2-dichloroethene and trichloroethene. Associated results flagged “J” if positive or “UJ” if non-detect for B16-AREA2-S2 only. Batch 279989 - %Rs below limits for all analytes. Associated results flagged “J” if positive or “UJ” if non-detect for B15-AREA2-S2 only. Batch 280176 - %R below limits for 1,1-dichloroethene. Associated result flagged “J” for B15-AREA2-S1 only. Batch 281166 - %Rs below limits for tetrachloroethene and trichloroethene. Associated results flagged “J” for B29-AREA2-S1 dilution only. Batch 280696 - %Rs below limits for trichlorotrifluoroethane, 1,1-dichloroethene, carbon disulfide, chloroethane and chloromethane. Associated results flagged “J” id positive or “UJ” if non-detect for B15-AREA2-S1 only. Reason Code – MS		
13. Were RPDs within 20% control limit?	Yes	No X
Comments: Batch 279815 – RPD above limits for 1,2-dichlorobenzene and tetrachloroethene. Associated sample results flagged “J” if positive. Batch 279989 – RPD above limits for 1,2-dichlorobenzene, chlorobenzene, ethylbenzene and tetrachloroethene. Associated sample results flagged “J” if positive. Batch 280176 – RPD above limits for tetrachloroethene. Associated sample results flagged “J” if positive. Reason Code – MD		
14. Were dilutions required on any samples?	Yes X	No
Comments: Samples analyzed at multiple dilutions. No qualifying action taken.		
15. Were results reported that are below the reporting limit?	Yes X	No
Comments: Sample results below the reporting limit do not possess the degree of qualitative or quantitative confidence required. The value may be a false positive and is an estimated value and is flagged “NJ”. Reason Code – SQL		
16. Were organic GC/MS system performance criteria met?	Yes	No

		X	
Comments:			
17. Were GC/MS internal standards within method criteria?		Yes	No X
Comments: One or more internal standards are below limits for B16-AREA2-S2 (1 of 3), B15-AREA2-S2 (1 of 3), B17-AREA2-S1 (2 of 3), B28-AREA2-S2 (3 of 3), B30-AREA2-S1 (1 of 3), B15-AREA2-S1 (1 of 3) and B25-AREA2-S2 (3 of 3). Associated sample results flagged "J" if positive or "UJ" if non-detect. Reason Code – IS			
18. Were inorganic method performance criteria met?	NA	Yes	No
Comments: No inorganic analyses requested.			
19. Were field duplicates collected? If so, discuss the precision (RPD) of the results. Duplicate Sample Nos. B-AREA2-DUP2 B13-AREA2-S2		Yes X	No
Comments: All RPDs within limits except 1,1-dichloroethane, cis-1,2-dichloroethene and vinyl chloride. Associated result flagged "J" for duplicate samples only. Reason Code – FDUP			
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No	Initials EAC
Comments:			
21. Other:		Yes	No X
Comments:			

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT

Data are usable as flagged. See Form 1s for flagged data.

Precision:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Sensitivity:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Representativeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC

Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Stantec Data Usability Summary Report **Report No. 012516-EC-08**

Project Name: Lockheed, Utica, NY	Project Number: 190500800
Stantec Validator: Elizabeth Crowley	Laboratory: Test America, Buffalo, NY
Date Validated: 01/18/16	Laboratory Project Number: 480-92542-1
Sample Start-End Date: 12/10/155	Laboratory Report Date: 12/29/15
Parameters Validated: Volatile Organic Compounds by EPA SW 846 8260C	
Samples Validated: 9 soil samples - See Samples Validated Table	

VALIDATION CRITERIA CHECK

Data review based on *Quality Assurance Program Plan, Solvent Deck Area, Former French Road Facility, Utica, NY* October 14, 2009, *USEPA National Functional Guidelines* (USEPA, 1999b), USEPA Region II SOPs and NYSDEC ASP 2005 – Tier III Validation

Validation Flags Applicable to this Review:

U The analyte was analyzed for, but not detected above the reported sample quantitation limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

B The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	
Comments:		
2. Did the laboratory identify any non-conformances related to the analytical result?	Yes X	No
Comments: Case Narrative lists minor issues regarding the analyses. Only issues requiring qualify flags are discussed in this report.		
3. Were sample Chain-of-Custody forms complete?	Yes X	No
Comments:		
4. Were samples received in good condition and at the appropriate temperature?	Yes X	No
Comments:		
5. Were sample holding times met?	Yes X	No
Comments:		
6. Were correct concentration units reported?	Yes X	No
Comments:		

7. Were detections found in laboratory blank samples?	Yes X	No
Comments: Batch 279993 – acetone = 6.3 µg/kg. Sample results below the blank concentration are validated to non-detect and flagged "UJB". Sample results greater than the blank concentration are flagged "JB". The detection limit changed to the blank concentration. Sample results greater than 10 times the blank concentration require no qualifying action. Reason Code – MB		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples? NA	Yes	No
Comments: No blank submitted, no qualifying action required.		
9. Were instrument calibrations within method criteria?	Yes	No X
Comments: Continuing Calibration batch 280912 - %D below ±20% limit for dichlorodifluoromethane (-35%), chloromethane (-25%), 1,1-dichloroethene (-22%), carbon disulfide (-29%), 1,2-dibromo-3-chloropropane (-21%), chloroethane (-22%) and vinyl chloride (-28%). Associated sample results flagged "J" if positive or "UJ" if non-detect. Reason Code – CCAL		
10. Were surrogate recoveries within 70-130% control limits?	Yes X	No
Comments:		
11. Were laboratory control (LC/LD) sample recoveries within 70-130% control limits?	Yes X	No
Comments:		
12. Were site specific matrix spike (MS/MD) recoveries within 70-130% control limits?	Yes	No X
Comments: Batch 279993 - %Rs below limits for all analytes but MTBE. Associated results flagged "J" if positive or "UJ" if non-detect for B32-AREA2-S2 only. Reason Code – MS		
13. Were RPDs within 20% control limit?	Yes	No X
Comments: Batch 279993 – RPD above limits for 1,1-dichloroethene, dichlorodifluoromethane, toluene, trans-1,2-dichloroethene and tetrachloroethene. Associated sample results flagged "J" if positive. Reason Code – MD		
14. Were dilutions required on any samples?	Yes X	No
Comments: Samples analyzed at multiple dilutions. No qualifying action taken.		
15. Were results reported that are below the reporting limit?	Yes X	No
Comments: Sample results below the reporting limit do not possess the degree of qualitative or quantitative confidence required. The value may be a false positive and is an estimated value and is flagged "NJ". Reason Code – SQL		
16. Were organic GC/MS system performance criteria met?	Yes	No

		X	
Comments:			
17. Were GC/MS internal standards within method criteria?		Yes	No X
Comments: Two of three internal standards are below limits for B5-AREA2-S1, B32-AREA2-S1, B32-AREA2-S2, B33-AREA2-S2, B34-AREA2-S1 and B-AREA2-DUP3. Associated sample results flagged "J" if positive or "UJ" if non-detect. Reason Code – IS			
18. Were inorganic method performance criteria met?	NA	Yes	No
Comments: No inorganic analyses requested.			
19. Were field duplicates collected? If so, discuss the precision (RPD) of the results. Duplicate Sample Nos. B-AREA2-DUP3 B1-AREA2-S1		Yes X	No
Comments: All RPDs within limits.			
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No	Initials EAC
Comments:			
21. Other:		Yes	No X
Comments:			

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT

Data are usable as flagged. See Form 1s for flagged data.

Precision:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Sensitivity:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Representativeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Stantec Data Usability Summary Report **Report No. 012516-EC-09**

Project Name: Lockheed, Utica, NY	Project Number: 190500800
Stantec Validator: Elizabeth Crowley	Laboratory: Test America, Buffalo, NY
Date Validated: 01/20/16	Laboratory Project Number: 480-92744-1
Sample Start-End Date: 12/14-12/15/15	Laboratory Report Date: 01/04/16

Parameters Validated: Volatile Organic Compounds by EPA SW 846 8260C

Samples Validated: 19 soil samples - See Samples Validated Table

VALIDATION CRITERIA CHECK

Data review based on *Quality Assurance Program Plan, Solvent Deck Area, Former French Road Facility, Utica, NY* October 14, 2009, *USEPA National Functional Guidelines* (USEPA, 1999b), USEPA Region II SOPs and NYSDEC ASP 2005 – Tier III Validation

Validation Flags Applicable to this Review:

U The analyte was analyzed for, but not detected above the reported sample quantitation limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

B The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	
Comments:		
2. Did the laboratory identify any non-conformances related to the analytical result?	X	
Comments: Case Narrative lists minor issues regarding the analyses. Only issues requiring qualify flags are discussed in this report.		
3. Were sample Chain-of-Custody forms complete?	X	
Comments: Time sampled missing for B26 samples, information obtained from labels. No qualifying action required.		
4. Were samples received in good condition and at the appropriate temperature?	X	
Comments:		
5. Were sample holding times met?	X	
Comments:		
6. Were correct concentration units reported?	X	
Comments:		

7. Were detections found in laboratory blank samples?	Yes X	No
Comments: Batch 280267 – acetone = 6.5 µg/kg and 2-butanone = 2.1 µg/L. Batch 280424 – acetone = 6.4 µg/L. Batch 280926 – acetone = 6.0 µg/L. Sample results below the blank concentration are validated to non-detect and flagged "UJB". Sample results greater than the blank concentration are flagged "JB". The detection limit changed to the blank concentration. Sample results greater than 10 times the blank concentration require no qualifying action. Reason Code – MB		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples? NA	Yes	No
Comments: No blank submitted, no qualifying action required.		
9. Were instrument calibrations within method criteria?	Yes X	No
Comments:		
10. Were surrogate recoveries within 70-130% control limits?	Yes X	No
Comments:		
11. Were laboratory control (LC/LD) sample recoveries within 70-130% control limits?	Yes X	No
Comments:		
12. Were site specific matrix spike (MS/MD) recoveries within 70-130% control limits?	Yes	No X
Comments: Batch 280267 - %Rs below limits for seventeen analytes. Associated results flagged "J" if positive or "UJ" if non-detect for B19-POLEBARN-S2 only. Reason Code – MS		
13. Were RPDs within 20% control limit?	Yes X	No
Comments:		
14. Were dilutions required on any samples?	Yes X	No
Comments: Samples analyzed at multiple dilutions. No qualifying action taken.		
15. Were results reported that are below the reporting limit?	Yes X	No
Comments: Sample results below the reporting limit do not possess the degree of qualitative or quantitative confidence required. The value may be a false positive and is an estimated value and is flagged "NJ". Reason Code – SQL		
16. Were organic GC/MS system performance criteria met?	Yes X	No
Comments:		
17. Were GC/MS internal standards within method criteria?	Yes	No

			X
Comments: One or more internal standards are below limits for B38-POLEBARN-S3, B18-POLEBARN-S2, B19-POLEBARN-S2, B20-POLEBARN-S1, B20-POLEBARN-S3, B21-POLEBARN-S1 and B37-POLEBARN-S1. Associated sample results flagged "J" if positive or "UJ" if non-detect. Reason Code – IS			
18. Were inorganic method performance criteria met?	NA	Yes	No
Comments: No inorganic analyses requested.			
19. Were field duplicates collected? If so, discuss the precision (RPD) of the results. Duplicate Sample Nos. B-POLEBARN-DUP B37-POLEBARN-S3		Yes X	No
Comments: All RPDs within limits.			
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No	Initials EAC
Comments:			
21. Other:		Yes	No X
Comments:			

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT

Data are usable as flagged. See Form 1s for flagged data.

Precision:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Sensitivity:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Representativeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Stantec Data Usability Summary Report **Report No. 070716-EC-01**

Project Name: Lockheed, Utica, NY	Project Number: 190500800
Stantec Validator: Elizabeth Crowley	Laboratory: Test America, Buffalo, NY
Date Validated: 06/27-07/06/16	Laboratory Project Number: 480-101258-1
Sample Start-End Date: 06/06-06/07/16	Laboratory Report Date: 06/17/16
Parameters Validated: Volatile Organic Compounds by EPA SW 846 8260C and PCBs by 8082A	
Samples Validated: 42 soil samples and 1 Rinse Blank - See Samples Validated Table	

VALIDATION CRITERIA CHECK

Data review based on *Quality Assurance Program Plan, Solvent Deck Area, Former French Road Facility, Utica, NY* October 14, 2009, *USEPA National Functional Guidelines* (USEPA, 1999b), USEPA Region II SOPs and NYSDEC ASP 2005 – Tier III Validation

Validation Flags Applicable to this Review:

U The analyte was analyzed for, but not detected above the reported sample quantitation limit.
J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
B The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	
Comments:		
2. Did the laboratory identify any non-conformances related to the analytical result?	Yes X	No
Comments: Case Narrative lists minor issues regarding the analyses. Only issues requiring qualify flags are discussed in this report.		
3. Were sample Chain-of-Custody forms complete?	Yes X	No
Comments:		
4. Were samples received in good condition and at the appropriate temperature?	Yes X	No
Comments:		
5. Were sample holding times met?	Yes X	No
Comments:		
6. Were correct concentration units reported?	Yes X	No
Comments:		

7. Were detections found in laboratory blank samples?	Yes	No X
Comments:		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?	Yes	No X
Comments:		
9. Were instrument calibrations within method criteria?	Yes	No X
Comments: Instrument HP5973F Continuing Calibration batch 306570 - %D above ±20% limit for acetone (27%) and 2-methyl-4-pentanone (26%). Instrument HP5973N Continuing Calibration batch 306675 - %D above ±20% limit for trichlorofluoromethane (27%), trichlorotrifluoroethane (24%), 1,1,1-trichloroethane (23%), carbon tetrachloride (29%) and 2-hexanone (24%). Instrument HP5973N Continuing Calibration batch 306755 - %D above ±20% limit for trichlorofluoromethane (26%), trichlorotrifluoroethane (20%), 4-methyl-2-pentanone (23%), 1,1,1-trichloroethane (20%) and carbon tetrachloride (28%). Associated sample results flagged “J” if positive and are biased high. Reason Code – CCAL		
10. Were surrogate recoveries within control limits?	Yes	No X
Comments: 8260C – multiple samples reported surrogate recoveries, one of three above limits and one of three below limits. No qualifying action taken. 8082A - %R for one of two surrogate recoveries is above 30 to 150% method limits for SS7-10, SS7-11, SS7-12, SS7-13, SS7-14 and SS7-DUP2. Associated sample results flagged “J” if positive. Reason Code – SUR		
11. Were laboratory control (LC/LD) sample recoveries within control limits?	Yes X	No
Comments:		
12. Were site specific matrix spike (MS/MD) recoveries within control limits?	Yes	No X
Comments: 8082A batch 305722 - %Rs above 29-139% limit for Aroclor 1260 (183%). Associated results flagged “J” for SS7-15 only. Reason Code – MS		
13. Were RPDs within 25% control limit?	Yes	No X
Comments: 8082A – RPD between the two GC columns is greater than the 25% limit for Aroclor 1254 for SS7-9 (40%), SS7-10 (74%), SS7-11 (29%), SS7-12 (29%), SS7-13 (53%), SS7-14 (26%) and SS7-DUP2. Associated results flagged “J”. Reason Code – COL		
14. Were dilutions required on any samples?	Yes	No

		X	
Comments: Samples analyzed at multiple dilutions. Sample results which exceed the calibration range of the instrument are flagged "J". Reason Code - EC.			
15. Were results reported that are below the reporting limit?		Yes X	No
Comments: Sample results below the reporting limit do not possess the degree of qualitative or quantitative confidence required. The value may be a false positive, is an estimated value and is flagged "NJ". Reason Code – SQL			
16. Were organic GC/MS system performance criteria met?		Yes X	No
Comments:			
17. Were GC/MS internal standards within method criteria?		Yes	No X
Comments: One or two internal standards are below limits for B111-AREA2-S1, B111-AREA2-S2, B112-AREA2-S1, B112-AREA2-S2, B113-AREA2-S1, B114-AREA2-S1, B101-AREA2-S1, B101-AREA2-S2, B102-AREA2-S1, B102-AREA2-S2, B103-AREA2-S1, B103-AERA2-S2, B109-AREA2-S1, B110-AREA2-S1 and B115-AREA2-S2. Associated sample results flagged "J" if positive or "UJ" if non-detect. Samples B113-AREA2-S2 and B-AREA2-DUP5 report three of three surrogates below limits. Associated sample results flagged "J" if positive or "R" if non-detect. Reason Code – IS			
18. Were inorganic method performance criteria met?	NA	Yes	No
Comments: No inorganic analyses requested.			
19. Were field duplicates collected? If so, discuss the precision (RPD) of the results. Duplicate Sample Nos. SS7-DUP2 SS7-13 (Pair 1) B-AREA2-DUP5 B102-AREA2-S2 (Pair 2)		Yes X	No
Comments: Pair 1 – All RPDs within limits. Pair 2 – All RPDs within limits except methylene chloride. Associated result flagged "J" for duplicate samples only. Reason Code – FDUP			
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?		Yes X	No Initials EAC
Comments:			
21. Other:		Yes	No X
Comments:			

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT Data are usable as flagged. See Form 1s for flagged data.			
Precision:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Sensitivity:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Representativeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Stantec Data Usability Summary Report **Report No. 070716-EC-02**

Project Name: Lockheed, Utica, NY	Project Number: 190500800
Stantec Validator: Elizabeth Crowley	Laboratory: Test America, Buffalo, NY
Date Validated: 06/30-07/06/16	Laboratory Project Number: 480-101358-1
Sample Start-End Date: 06/08/16	Laboratory Report Date: 06/22/16
Parameters Validated: Volatile Organic Compounds by EPA SW 846 8260C	
Samples Validated: 11 soil samples, 1 Rinse Blank and 1 Trip Blank - See Samples Validated Table	

VALIDATION CRITERIA CHECK

Data review based on *Quality Assurance Program Plan, Solvent Deck Area, Former French Road Facility, Utica, NY* October 14, 2009, *USEPA National Functional Guidelines* (USEPA, 1999b), USEPA Region II SOPs and NYSDEC ASP 2005 – Tier III Validation

Validation Flags Applicable to this Review:

U The analyte was analyzed for, but not detected above the reported sample quantitation limit.
J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
B The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	
Comments:		
2. Did the laboratory identify any non-conformances related to the analytical result?	Yes X	No
Comments: Case Narrative lists minor issues regarding the analyses. Only issues requiring qualify flags are discussed in this report.		
3. Were sample Chain-of-Custody forms complete?	Yes X	No
Comments:		
4. Were samples received in good condition and at the appropriate temperature?	Yes X	No
Comments:		
5. Were sample holding times met?	Yes X	No
Comments:		
6. Were correct concentration units reported?	Yes X	No
Comments:		

7. Were detections found in laboratory blank samples?	Yes	No X
Comments:		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?	Yes X	No
Comments: RINSEBLANK4 – Acetone = 1.5 µg/L. Sample results below the blank concentration are validated to non-detect and flagged "UJB". Sample results greater than the blank concentration are flagged "JB". The detection limit changed to the blank concentration. Sample results greater than 10 times the blank concentration require no qualifying action. Reason Code – RB		
9. Were instrument calibrations within method criteria?	Yes	No X
Comments: Instrument HP5973N Continuing Calibration batch 306479 - %D below ±20% limit for dichlorodifluoromethane (-39%). Instrument HP5973F Continuing Calibration batch 306490 - %D below ±20% limit for dichlorodifluoromethane (-26%). Associated sample results flagged "UJ". Reason Code – CCAL		
10. Were surrogate recoveries within control limits?	Yes	No X
Comments: 8260C – multiple samples reported surrogate recoveries, one of three above limits and one of three below limits. No qualifying action taken.		
11. Were laboratory control (LC/LD) sample recoveries within control limits?	Yes X	No
Comments:		
12. Were site specific matrix spike (MS/MD) recoveries within control limits?	Yes	No X
Comments: 8260C batch 306259 - %Rs below ±40% limit for 1,1,2,2-tetrachloroethane (49%), 1,1,2-trichloroethane (52%), 1,2,4-trichlorobenznen(12%), 1,2-dibromo-3-chloropropane (33%), 1,2-dibromomethane (43%), 1,2-dichlorobenzene (34%), 1,2-dichloroethane (56%), 1,2-dichloropropane (58%), 1,3-dichlorobenzene (30%), 1,4-dichlorobenzene (29%), 2-butanone (57%), 2-hexanone (45%), 4-methyl-2-pentanone (50%), Bromoform (42%), carbon disulfide (55%), chlorobenzene (45%), cis-1,3-dichloropropane (48%), cyclohexane (54%), dibromochloromethane (54%), dichlorodifluoromethane (52%), ethylbenzene (45%), Isopropylbenzene (46%), styrene (39%), tetrachloroethene (47%), toluene (52%), trans-1,2-dichloroethene (43%) and trans-1,2-dichloropropane (51%). Associated results flagged "J" if positive or "UJ" if non-detect for B107-AREA2-S2 only. Batch 306479 - %Rs above for multiple analytes. Parent sample positive for trichloroethene (210%) only. Associated result flagged "J" for B103-AREA2-S1 only. Reason Code – MS		
13. Were RPDs within 25% control limit?	Yes X	No
Comments:		

14. Were dilutions required on any samples?	Yes X	No	
Comments: Samples analyzed at multiple dilutions. Sample results which exceed the calibration range of the instrument are flagged "J". Reason Code - EC.			
15. Were results reported that are below the reporting limit?	Yes X	No	
Comments: Sample results below the reporting limit do not possess the degree of qualitative or quantitative confidence required. The value may be a false positive, is an estimated value and is flagged "NJ". Reason Code – SQL			
16. Were organic GC/MS system performance criteria met?	Yes X	No	
Comments:			
17. Were GC/MS internal standards within method criteria?	Yes	No X	
Comments: One or two internal standards are below limits for B104-AREA2-S1, B105-AREA2-S2, B106-AREA2-S1. B107-AREA2-S2 and B106-AREA2-S2. Associated sample results flagged "J" if positive or "UJ" if non-detect. Three of three internal standards are below limits for B104-AREA2-S2. Associated sample results flagged "J" if positive or "R" if non-detect. Reason Code – IS			
18. Were inorganic method performance criteria met?	NA	Yes	No
Comments: No inorganic analyses requested.			
19. Were field duplicates collected? If so, discuss the precision (RPD) of the results. Duplicate Sample Nos. B-POLEBARN-DUP6 B105-AREA2-S2	Yes X	No	
Comments: All RPDs within limits except methylene chloride. Associated result flagged "J" for duplicate samples only. Reason Code – FDUP			
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No	Initials EAC
Comments:			
21. Other: Missing Data	Yes X	No	
Comments: Xylene was not reported in the laboratory control sample data. Xylene results were evaluated using the Level IV packages. The percent recoveries are within limits. No qualifying action required.			

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT Data are usable as flagged. See Form 1s for flagged data.			
Precision:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Sensitivity:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Representativeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Stantec Data Usability Summary Report **Report No. 101716-EC-01**

Project Name: Lockheed, Utica, NY	Project Number: 190500800
Stantec Validator: Elizabeth Crowley	Laboratory: Test America, Buffalo, NY
Date Validated: 10/16/16	Laboratory Project Number: 480-107100-1
Sample Start-End Date: 10/05/16	Laboratory Report Date: 10/12/16
Parameters Validated: Poly Chlorinated Biphenyls (Aroclor PCBs) by EPA SW 846 8082A	
Samples Validated: 13 soil samples and 1 Rinse Blank– See Samples Validated Table	

VALIDATION CRITERIA CHECK

Data review based on *Quality Assurance Program Plan, Solvent Deck Area, Former French Road Facility, Utica, NY* October 14, 2009, *USEPA National Functional Guidelines* (USEPA, 1999b), USEPA Region II SOPs and NYSDEC ASP 2005 – Tier III Validation

Validation Flags Applicable to this Review:

U The analyte was analyzed for, but not detected above the reported sample quantitation limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

B The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	
Comments:		
2. Did the laboratory identify any non-conformances related to the analytical result?	Yes X	No
Comments: Case Narrative lists minor issues regarding the analyses. Only issues requiring qualify flags are discussed in this report.		
3. Were sample Chain-of-Custody forms complete?	Yes X	No
Comments:		
4. Were samples received in good condition and at the appropriate temperature?	Yes X	No
Comments:		
5. Were sample holding times met?	Yes X	No
Comments:		
6. Were correct concentration units reported?	Yes X	No
Comments:		

7. Were detections found in laboratory blank samples?	Yes	No X
Comments:		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?	Yes	No X
Comments:		
9. Were instrument calibrations within method criteria?	Yes X	No
Comments:		
10. Were surrogate recoveries within 30 – 150% control limits?	Yes X	No
Comments:		
11. Were laboratory control (LC/LD) sample recoveries within 50-150% control limits?	Yes X	No
Comments:		
12. Were site specific matrix spike (MS/MD) recoveries within 29-135% control limits?	Yes X	No
Comments:		
13. Were RPDs within 20% control limit?	Yes X	No
Comments:		
14. Were dilutions required on any samples?	Yes	No X
Comments:		
15. Were results reported that are below the reporting limit?	Yes	No X
Comments:		
16. Were organic system performance criteria met?	Yes	No X
Comments: The difference between the primary and confirmation columns are above the ±25% limit for Aroclor 1254 for samples: SS7-16 (50%), SS7-18 (30%), SS7-19 (48%), SS7-21 (55%), SS7-22 (28%), SS7-23 (32%), SS7-24 (51%) and SS7-27 (45%). Associated sample results flagged “J”. Reason Code – COL		
17. Were internal standards within method criteria?	Yes X	No
Comments:		
18. Were inorganic method performance criteria met?	Yes NA	No
Comments: No inorganic analyses requested.		

19. Were field duplicates collected? If so, discuss the precision (RPD) of the results. Duplicate Sample Nos. SS7-16 SS7-DUP	Yes X	No
Comments: The RPD for PCB-1254 is above limits at 50%. Associated duplicate sample results flagged "J". Reason Code – FDUP		
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No / Initials EAC
Comments:		
21. Other:	Yes	No X
Comments:		

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT

Data are usable as flagged. See Form 1s for flagged data.

Precision:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Sensitivity:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Representativeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			